Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

XENETIC BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Nevada

45-2952962

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

40 Speen Street, Suite 102 Framingham, Massachusetts (Address of Principal Executive Offices)

01701 (Zip Code)

Amended and Restated Equity Incentive Plan
(Full title of the plan)
James F. Parslow
Chief Financial Officer
Xenetic Biosciences, Inc.
40 Speen Street, Suite 102

Framingham, Massachusetts, 01701 (781) 778-7720

(Name, address and telephone number, including area code, of agent for service)

With a copy to:

Danielle Price Holland-Knight LLP 701 Brickell Avenue, Suite 3300 Miami, Florida 33131

(305) 374-8500

K. Elisabeth Castro Westward Law, LLC 3273 E. Warm Springs Rd. Las Vegas, NV 89120 (702) 701-3945

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large accelerated filer □

Non-accelerated filer □

Smaller reporting company ⊠

Emerging growth company □

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. \Box

CALCULATION OF REGISTRATION FEE					
		Proposed Maximum	Proposed Maximum		
Title of Securities	Amount to be	Offering	Aggregate	Amount of	
to be Registered	Registered (1)	Price Per Share(2)	Offering Price(2)	Registration Fee	
Common Stock, par value \$0.001 per share	1,500,000 shares	\$1.43	\$2,145,000.00	\$198.84	

- (1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock, par value \$0.001 (the "Common Stock") that become issuable under the Registrant's Amended and Restated Equity Incentive Plan (the "Amended and Restated EIP") by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of the Registrant's outstanding shares of Common Stock.
- (2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) and Rule 457(c) promulgated under the Securities Act. The offering price per share and the aggregate offering price are based upon \$1.43, which is the average of the high and low prices of the Registrant's Common Stock as reported on the Nasdaq Capital Market on December 23, 2021.

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed for the purpose of registering an additional 1,500,000 shares of common stock, par value \$0.001 per share (the "Common Stock") of the Registrant reserved for future issuance under the Xenetic Biosciences, Inc. Amended and Restated Equity Incentive Plan (the "Amended and Restated EIP"). The additional shares of Common Stock being registered pursuant to the Amended and Restated EIP are additional securities under the same class as other securities for which registration statements (File No. 333-218024, File No. 333-222272 and File No. 333-237529) on Form S-8 were filed with the Securities and Exchange Commission (the "Commission") on May 16, 2017, December 22, 2017 and April 1, 2020, respectively (the "Prior Registration Statements"). Pursuant to Instruction E of Form S-8, the contents of the Prior Registration Statements are incorporated herein by reference.

PART I INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

the Securities Act. The documents containing the information specified in Part I of Form S-8 will be delivered to the participants in the plans covered by this Registration Statement as specified by Rule 428(b)(1) under the Securities Act. These documents and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Part II of this Registration Statement, taken together, constitute a Prospectus that meets the requirements of Section 10(a) of the Securities Act.

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PART II INCORPORATION OF DOCUMENTS BY REFERENCE

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE

The following documents filed by the Registrant with the Commission are incorporated by reference to this Registration Statement:

- (a) The Registrant's Annual Report on Form 10-K (File No. 001-37937) for the fiscal year ended December 31, 2020, filed with the Commission on March 16, 2021, as amended by the Form 10-K/A filed with the Commission on April 28, 2021;
- (b) All other reports filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), since the end of the fiscal year covered by the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2020, as amended; and
- (c) The description of the Registrant's Common Stock contained in the Registrant's Registration Statement on Form 8-A/A filed on November 1, 2016 (File No. 001-37937), under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All other reports and documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part of this Registration Statement from the date of the filing of such reports and documents; provided, however, that documents, reports and definitive proxy or information statements, or portions thereof, which are furnished and not filed in accordance with the rules of the Commission shall not be deemed incorporated by reference into this Registration Statement.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document that also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

ITEM 4. DESCRIPTION OF SECURITIES

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL

Not applicable.

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ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Nevada law provides that a Nevada corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed proceeding, except an action by or in the right of the corporation, by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with the proceeding, if such person:

- · is not liable for breach of his or her fiduciary duties to the corporation; or
- acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

In addition, a Nevada corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise against expenses, including amounts paid in settlement and attorneys' fees actually and reasonably incurred by such person in connection with the defense or settlement of the action, if he or she:

- · is not liable for breach of his or her fiduciary duties to the corporation; or
- acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation.

Under Nevada law, indemnification may not be made for any claim as to which such a person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals therefrom, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that a court of competent jurisdiction determines that in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

To the extent that a director, officer, employee or agent of a corporation has been successful on the merits or otherwise in defense of any non-derivative proceeding or any derivative proceeding, or in defense of any claim, issue or matter therein, the corporation shall indemnify such person against expenses, including attorneys' fees, actually and reasonably incurred in connection with the defense.

Further, Nevada law permits a Nevada corporation to purchase and maintain insurance or to make other financial arrangements on behalf of any person who is or was a

director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise for any liability asserted against him or her and liability and expenses incurred by him or her in his or her capacity as a director, officer, employee or agent, or arising out of his or her status as such, whether or not the corporation has the authority to indemnify such person against such liability and expenses.

Under our charter and bylaws, we are obligated to indemnify any director, officer, employee or agent of the company to the fullest extent permitted by the Nevada Revised Statues ("NRS"), as described above. We have entered into separate indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our charter and bylaws. These agreements, among other things, require us to indemnify our directors and executive officers who have met the standards of conduct that make it permissible under the NRS for us to indemnify the claimant for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by such person in any action or proceeding arising out of their services as one of our directors, officers, employees or agents, or any of our subsidiaries or any other company or enterprise to which the person provides services at our request. We believe that these charter and bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors.

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In addition, indemnification is required to continue as to a person who has ceased to be a director or officer and inures to the benefit of his or her heirs, executors and administrators. Subject to the exceptions detailed below, we may indemnify a person seeking indemnification in connection with a proceeding (or part thereof) initiated by the person seeking indemnification only if the proceeding (or part thereof) was authorized by our board of directors. We may indemnify any employee or agent of us to an extent greater than required by law only if and to the extent that our directors, in their discretion, may determine.

If we do not pay a claim for indemnification within 60 days after a written claim has been received by us or pay an advancement of expenses under our bylaws in full within 20 days after a written claim has been received by us, the claimant may bring suit against us to recover the unpaid amount of the claim and, if successful in whole or in part, the claimant also will be entitled to be paid the expense of prosecuting such claim to the fullest extent permitted by applicable law. In any such action, we would have the burden of proving that the claimant is not entitled to the requested indemnification or advancement of expenses.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED

Not applicable.

ITEM 8. EXHIBITS

The following exhibits are filed herewith:

Exhibit No.	Exhibit Index	Form	Filing Date	Exhibit Number	Filed Herewith
4.1	Articles of Incorporation	S-1	11/21/2011	3.1	
4.2	Certificate of Amendment to Articles of Incorporation	8-K	02/12/2013	3.1	
4.3	Certificate of Amendment to Articles of Incorporation	8-K	02/27/2013	3.1	
4.4	Certificate of Amendment to Articles of Incorporation	10-Q	01/10/2014	3.1	
4.5	Certificate of Change Pursuant to NRS 78.209	10-Q	01/10/2014	3.2	
4.6	Certificate of Amendment to Articles of Incorporation	8-K	09/30/2015	3.1	
4.7	Certificate of Change to Articles of Incorporation	8-K	06/24/2019	3.1	
4.8	Certificate of Amendment to Articles of Incorporation	8-K	06/24/2019	3.2	
4.9	Certificate of Amendment to Articles of Incorporation	10-K	03/16/2021	3.12	
4.10	Certificate of Amendment to Articles of Incorporation	10-K	03/16/2021	3.13	
4.11	Amended and Restated Bylaws of Xenetic Biosciences, Inc.	8-K	2/27/2017	3.1	
4.12	Form of Common Stock Certificate of the Registrant	S-1/A	07/14/2016	4.1	
4.13	Form of Amended and Restated Xenetic Biosciences, Inc. Equity Incentive Plan, effective	DEF 14A	10/15/2021	Appendix A	
	December 7, 2021				
5.1	Opinion of Westward Law Group				X
23.1	Consent of Marcum LLP	-			X
23.2	Consent of Westward Law Group (included in Exhibit 5.1)				X
24.1	Power of Attorney (included on signature page)				X

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ITEM 9. UNDERTAKINGS

- 1. The Registrant hereby undertakes:
 - (a) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that paragraphs (a)(i) and (a)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

- (b) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
 - (c) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- 2. The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- 3. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Framingham, Commonwealth of Massachusetts, on December 30, 2021.

XENETIC BIOSCIENCES, INC.

By: /s/ James Parslow

James Parslow

Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Jeffrey Eisenberg or James Parslow, and each of them singly, as his or her true and lawful attorney-in-fact and agent, with the full power of substitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date	
/S/ JEFFREY EISENBERG Jeffrey Eisenberg	Chief Executive Officer and Director (Principal Executive Officer)	December 30, 2021	
/S/ JAMES PARSLOW James Parslow	Chief Financial Officer (Principal Financial Officer, Principal Accounting Officer)	December 30, 2021	
/S/ GRIGORY BORISENKO Grigory Borisenko	Director	December 30, 2021	
/S/ JAMES E. CALLAWAY James E. Callaway	Director	December 30, 2021	
/S/ FIRDAUS JAL DASTOOR Firdaus Jal Dastoor	Director	December 30, 2021	
/S/ ROGER KORNBERG Roger Kornberg	Director	December 30, 2021	
/S/ ADAM LOGAL Adam Logal	Director	December 30, 2021	
/ <u>S/ ALEXEY VINOGRADOV</u> Alexey Vinogradov	Director	December 30, 2021	

WESTWARD LAW, LLC*

3273 E. Warm Springs Las Vegas, NV 89120 Telephone: 702-701-3945 Facsimile: 702-944-7100

Email: keavery@westwardlaw.com

December 30, 2021

Xenetic Biosciences, Inc. 40 Speen Street, Suite 102 Framingham, Massachusetts 01701

Re: Xenetic Biosciences, Inc., Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as Nevada counsel for Xenetic Biosciences, Inc., a Nevada corporation (the "Company"), in connection with the filing of a Registration Statement on Form S-8 (the "Registration Statement") with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Act"), covering the proposed issuance of an aggregate of an additional 1,500,000 shares of the Company's common stock, par value \$0.001 per share (the "EIP Shares"), issuable pursuant to the Xenetic Biosciences, Inc. Amended and Restated Equity Incentive Plan (the "Plan"). This opinion is being furnished pursuant to Item 601(b)(5) of Regulation S-K under the

In rendering the opinion set forth below, we have reviewed (a) the Registration Statement, the related prospectuses and the exhibits thereto; (b) the Company's Articles of Incorporation, as amended; (c) the Company's Amended and Restated Bylaws; (d) certain records of the Company's corporate proceedings as reflected in its minute books, including resolutions of the board of directors approving the Plan and various options granted pursuant to the Plan; (e) the Plan; (f) a certificate of verification of facts provided by the Company's Chief Financial Officer, and (g) such statutes, records and other documents as we have deemed relevant. In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, and conformity with the originals of all documents submitted to us as copies thereof. In addition, we have made such other examinations of law and fact, as we have deemed relevant in order to form a basis for the opinion hereinafter expressed.

Based upon the foregoing, it is our opinion that the EIP Shares have been duly authorized and will be legally and validly issued, fully paid and non-assessable shares of the Company's common stock so long as they are issued and sold in accordance with:

- (a) the Plan; and
- (b) the Registration Statement and related prospectuses (filed with the Commission under the Act).

This opinion is based on Nevada general corporate law, including the statutory provisions, all applicable provisions of the Nevada constitution and reported judicial decisions interpreting those laws. We express no opinion, and none should be inferred, as to any other laws, including, without limitation, laws of any other state.

The opinions set forth herein are subject to the following qualifications: (a) we have made no independent verification of the factual matters as set forth in the documents or certificates reviewed, and (b) our opinion speaks only as of the date hereof and we express no opinion as to, and disclaim any undertaking or obligation to update this opinion in respect of circumstances or events which may occur subsequent to this date. In addition, as to certain factual matters, we have relied upon a certificate of the Company's Chief Financial Officer and have not sought independently to verify such matters.

The opinions set forth herein are limited to the matters expressly set forth in this opinion letter, and no opinion is to be implied or may be inferred beyond the matters expressly so stated. This opinion letter is given as of the date hereof and we assume no obligation to advise you of changes that may hereafter be brought to my attention.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to the use of our name wherever appearing in the Registration Statement, including any related prospectus constituting a part thereof, and in any amendment, thereto.

Very truly yours,

/s/ WESTWARD LAW LLC

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Xenetic Biosciences, Inc. on Form S-8 of our report dated March 16, 2021, with respect to our audits of the consolidated financial statements of Xenetic Biosciences, Inc. as of December 31, 2020 and 2019, and for each of the two years ended December 31, 2020 appearing in the Annual Report on Form 10-K of Xenetic Biosciences, Inc. for the year ended December 31, 2020.

/s/ Marcum llp

Marcum llp Boston, Massachusetts December 30, 2021