
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
(State or other jurisdiction of incorporation or organization)

45-2952962
(I.R.S. Employer Identification No.)

99 Hayden Avenue, Suite 230
Lexington, Massachusetts
(Address of Principal Executive Offices)

02421
(Zip Code)

2014 Equity Incentive Plan
New Hire Inducement Stock Option Grant
(Full titles of the plans)

James F. Parslow
Chief Financial Officer
Xenetic Biosciences, Inc.
99 Hayden Avenue, Suite 230
Lexington, Massachusetts, 02421
(781) 778-7720
(Name, address, including zip code, and telephone number, including area code, of agent for service)

With a copy to:

Lester Fagen
Miguel J. Vega
Cooley LLP
500 Boylston Street, 14th Floor
Boston, Massachusetts 02116
(617) 937-2300

Joe Laxague
Laxague Law, Inc.
1 East Liberty, Suite 600
Reno, NV 89501
(775) 234-5221

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 ☐ (Do not check if a smaller reporting company)

Emerging growth company ☒

Accelerated filer ☐

Smaller reporting 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. ☒

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock, par value \$0.001 per share	1,478,131 shares	\$3.89 - \$4.80	\$6,869,832.60	\$796.21

- (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 2014 Equity Incentive Plan (the “2014 EIP”) and the New Hire Inducement Stock Option Grant 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 (a) \$4.80, which is the weighted-average exercise price for outstanding options granted under the 2014 EIP, (b) \$3.89, which is the average of the high and low prices of the Registrant’s Common Stock as reported on the NASDAQ Capital Market on May 10, 2017 and (c) \$4.57, which is the exercise price of the stock option granted by the Registrant to its Chief Financial Officer as a material inducement to his acceptance of employment with the Registrant in accordance with NASDAQ Listing Rule 5635(c)(4). The chart below details the calculations of the registration fee.

Securities	Number of Shares	Offering Price Per Share(2)	Aggregate Offering Price
Shares issuable upon the exercise of outstanding options granted under the 2014 EIP	1,101,004	\$4.80 (2)(a)	\$5,284,819.20
Shares reserved for future grant under the 2014 EIP	202,127	\$3.89 (2)(b)	\$785,263.40
New Hire Inducement Stock Option Grant	175,000	\$4.57 (2)(c)	\$799,750.00
Proposed Maximum Aggregate Offering Price			\$6,869,832.60
Registration Fee			\$796.21

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed for the purpose of registering (a) 1,101,004 shares of Common Stock of Xenetic Biosciences, Inc. (the “Registrant”) issuable upon the exercise of outstanding options granted under the Xenetic Biosciences, Inc. 2014 Equity Incentive Plan (the “2014 EIP”), (b) 202,127 shares of Common Stock of the Registrant reserved for future issuance under the 2014 EIP and (c) 175,000 shares of Common Stock of the Registrant underlying an employment inducement award in the form of a stock option award granted to the Registrant’s Chief Financial Officer on April 3, 2017, with an exercise price of \$4.57. The employment inducement award was approved by the Compensation Committee of the Registrant’s Board of Directors in reliance on the employment inducement exception to shareholder approval under NASDAQ Listing Rule 5635(c)(4), and therefore, was not granted under the Registrant’s shareholder-approved 2014 EIP.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information specified in Item 1 and Item 2 of Part I of Form S-8 is omitted from this Registration Statement in accordance with the provisions of Rule 428 under 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.

PART II

INCORPORATION OF DOCUMENTS BY REFERENCE

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE

The following documents filed by the Registrant with the U.S. Securities and Exchange Commission (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, 2016, filed with the Commission on March 31, 2017;
- (b) All other reports filed pursuant to Section 13(a) or 15(d) of 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, 2016; 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 Securities Exchange Act of 1934, as amended (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.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Registrant’s officers and directors are indemnified as provided by the Nevada Revised Statutes and its bylaws.

Under the governing Nevada statutes, director indemnity from liability to a company or its shareholders for monetary liabilities applies automatically unless it is specifically limited by a company's articles of incorporation. The Registrant’s articles of incorporation do not contain any limiting language regarding director immunity from liability. Excepted from this indemnity are:

- a willful failure to deal fairly with the company or its shareholders in connection with a matter in which the director has a material conflict of interest;
- a violation of criminal law (unless the director had reasonable cause to believe that his or her conduct was lawful or no reasonable cause to believe that his or her conduct was unlawful);
- a transaction from which the director derived an improper personal profit; and
- willful misconduct.

Article VII of Registrant's bylaws provide certain provisions regarding indemnification of Directors and officers including rights to indemnification, advancement of expenses and to bring suit. In addition, Section 6 of Article VII provides that the Registrant may enter into indemnity agreements from time to time (i) with the persons who are members of its Board of Directors, (ii) with such officers, employees and agents of the Registrant and (iii) with such officers, directors, employees and agents of subsidiaries or affiliates of the Registrant. Such indemnity agreements may provide in substance that the Registrant will indemnify such persons to the full extent as contemplated by Article VII or permitted by law and the Registrant's Restated Articles of Incorporation, and may include any other substantive or procedural provisions regarding indemnification as are not inconsistent with the laws of the State of Nevada. The provisions of such indemnity agreements shall prevail to the extent that they limit or condition or differ from the provisions of Article VII of the Registrant's bylaws.

The Registrant has entered, and intends to continue to enter, into such indemnification agreements with its current directors and executive officers. These agreements provide for the indemnification of directors and executive officers for all expenses and liabilities incurred in connection with any action or proceeding brought against them by reason of the fact that they are or were agents of the Registrant, subject to certain exceptions.

The Registrant currently carries liability insurance for its directors and officers for securities matters.

The indemnification provisions in the Registrant's bylaws and the indemnification agreements entered into or to be entered into between the Registrant and each of its directors and executive officers is sufficiently broad to permit indemnification of the Registrant's directors and executive officers for liabilities arising under the Securities Act.

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	Bylaws	S-1	11/21/2011	3.2	
4.8	Form of Common Stock Certificate of the Registrant	S-1	07/14/2016	4.1	
5.1	Opinion of Laxague Law, Inc.				X
23.1	Consent of Marcum LLP				X
23.2	Consent of Laxague Law, Inc. (included in Exhibit 5.1)				X
24.1	Power of Attorney (included on signature page)				X
99.1	Form of Xenetic Biosciences, Inc. Equity Incentive Plan, effective January 23, 2014	10-K	04/15/2014	10.7	
99.2	Inducement Award Agreement between the Company and James F. Parslow, dated April 3, 2017	8-K	4/4/2017	10.2	

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.

(d) That, for the purpose of determining liability of the Registrant under the Securities Act to any purchaser in the initial distribution of the securities, the Registrant undertakes that in a primary offering of securities of the Registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the Registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the Registrant or used or referred to by the Registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the Registrant or its securities provided by or on behalf of the Registrant; and

(iv) Any other communication that is an offer in the offering made by the Registrant to the purchaser.

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.

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 Town of Lexington, Commonwealth of Massachusetts, on May 15, 2017.

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 M. Scott Maguire or James F. 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/ MICHAEL SCOTT MAGUIRE Michael Scott Maguire	President, Chief Executive Officer and Director (Principal Executive Officer)	May 15, 2017
/S/ JAMES PARSLow James Parslow	Chief Financial Officer (Principal Financial Officer, Principal Accounting Officer)	May 15, 2017
/S/ EDWARD BENZ, JR. Edward Benz, Jr.	Director	May 15, 2017
/S/ FIRDAUS JAL DASTOOR Firdaus Jal Dastoor	Director	May 15, 2017
/S/ DARLENE DEPTULA-HICKS Darlene Deptula-Hicks	Director	May 15, 2017
/S/ JEFFREY EISENBERG Jeffrey Eisenberg	Director	May 15, 2017
/S/ ROMAN KNYAZEY Roman Knyazev	Director	May 15, 2017
/S/ ROGER KORNBERG Roger Kornberg	Director	May 15, 2017

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LAXAGUE LAW, INC.

1 East Liberty, Suite 600
Reno, NV 89501
(775) 234-5221
Email: joe@laxaguelaw.com

May 15, 2017

Xenetic Biosciences, Inc.
99 Hayden Avenue, Suite 230
Lexington, Massachusetts

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 pursuant to the Securities Act of 1933, as amended (the "Act"), covering the proposed issuance of an aggregate of 1,478,131 shares of the Company's common stock, par value \$0.001 per share, including (a) 1,303,131 shares of the Company's common stock (the "EIP Shares") issuable pursuant to the Xenetic Biosciences, Inc. 2014 Equity Incentive Plan (the "Plan") and (b) 175,000 shares of common stock (the "Inducement Award Shares") issuable pursuant to the Inducement Award Agreement between the Company and its Chief Financial Officer, dated April 3, 2017 (the "Inducement Award Agreement"). This opinion is being furnished pursuant to Item 601(b)(5) of Regulation S-K under the Act.

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 Compensation Committee approving the Inducement Award Agreement and Inducement Award Shares and resolutions of the board of directors approving the Plan and confirming the Inducement Award Agreement and Inducement Award Shares; (e) the Plan and the Inducement Award Agreement; and (f) 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 and the Inducement Award Shares will be duly authorized, 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 or the Inducement Award Agreement, as applicable; and
- (b) the Registration Statement and related prospectuses.

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.

As to certain factual matters, we have relied upon information obtained from officers of the Company 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 our 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 the prospectus constituting a part thereof, and in any amendment, thereto.

Very truly yours,

Laxague Law, Inc.

By: /s/ Joe Laxague
Joe Laxague, Esq.

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Xenetic Biosciences, Inc.:

We consent to the incorporation by reference in this Registration Statement of Xenetic Biosciences, Inc. on Form S-8 of our report dated March 31, 2017, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, with respect to our audits of the consolidated financial statements of Xenetic Biosciences, Inc. as of December 31, 2016 and 2015, and for the years then ended appearing in the Annual Report on Form 10-K of Xenetic Biosciences, Inc. for the year ended December 31, 2016.

/s/ Marcum LLP

Boston, Massachusetts
May 15, 2017