

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

Form 10-K/A
Amendment No. 1

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.
For the fiscal year ended December 31, 2016

TRANSITION REPORTS PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF
1934.

For the transition period from _____ to _____

Commission File Number: 001-37937

XENETIC BIOSCIENCES, INC.
(Exact name of registrant as specified in its charter)

Nevada
(State or other jurisdiction of
incorporation or organization)

45-2952962
(IRS Employer
Identification No.)

99 Hayden Ave, Suite 230
Lexington, Massachusetts 02421
(Address of principal executive offices and zip code)

781-778-7720
(Registrant's telephone number, including area code)

Title of Each Class
Common Stock, \$0.001 par value per share

Name of Each Exchange
on Which Registered
The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act: Yes No
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act: Yes No
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days: Yes No
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files): Yes No
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K/A: Yes No
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. (Check one):

| | | | |
|--|-------------------------------------|---------------------------|-------------------------------------|
| Large accelerated filer | <input type="checkbox"/> | Accelerated filer | <input type="checkbox"/> |
| Non-accelerated filer (Do not check if a smaller reporting company) | <input type="checkbox"/> | Smaller reporting company | <input checked="" type="checkbox"/> |
| Emerging growth company | <input checked="" type="checkbox"/> | | |

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.
Indicate by check mark whether the registrant is a shell company (as defined in Exchange Act Rule 12b-2): Yes No

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of June 30, 2016, based upon the closing price of the registrant's common stock on OTCQB on that date of \$5.10, was approximately \$13,978,386. For purposes of this computation, all officers, directors, and 10% beneficial owners of the registrant are deemed to be affiliates. Such determination should not be deemed an admission that such officers, directors or 10% beneficial owners are, in fact, affiliates of the registrant.

As of April 25, 2017 the number of outstanding shares of the registrant's common stock was 8,697,541.

DOCUMENTS INCORPORATED BY REFERENCE
None.

EXPLANATORY NOTE

The Registrant is filing this Amendment No. 1 on Form 10-K/A (this “Amendment”) to amend its Annual Report on Form 10-K for the fiscal year ended December 31, 2016 originally filed with the Securities and Exchange Commission (“SEC”) on March 31, 2017 (the “Original Filing”) to include the information required by Items 10 through 14 of Part III of Form 10-K. This information was previously omitted from the Original Filing in reliance on General Instruction G(3) to Form 10-K, which permits the information in the above-referenced items to be incorporated in the Form 10-K by reference from our definitive proxy statement if such statement is filed no later than 120 days after our fiscal year-end. We are filing this Amendment to include Part III information in our Form 10-K because our definitive proxy statement will be filed later this year. The reference on the cover of the Original Filing to the incorporation by reference to portions of our definitive proxy statement into Part III of the Original Filing is deleted by this Amendment.

Part III of the Original Filing (Items 10 through 14) is being amended and restated in its entirety by this Amendment. In addition, the Exhibit Index that is incorporated by reference into Part IV, Item 15 of the Original Filing is being amended and restated in its entirety by this Amendment. This Amendment does not amend or otherwise update any other information in the Original Filing. Accordingly, this Amendment should be read in conjunction with the Original Filing. In addition, this Amendment does not reflect events that may have occurred subsequent to the date of the Original Filing.

Pursuant to Rule 12b-15 under the Exchange Act, this Amendment also contains new certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, which are attached hereto. Because no financial statements are included in this Amendment and this Amendment does not contain or amend any disclosure with respect to Items 307 and 308 of Regulation S-K, paragraphs 3, 4, and 5 of the certifications have been omitted.

As used in this Amendment, unless otherwise indicated, all references herein to “Xenetic,” the “Company,” “we” or “us” refer to Xenetic Biosciences, Inc. and its wholly owned subsidiaries.

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PART III

ITEM 10 – DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Directors and Executive Officers

Set forth below is the name, age, position and brief biographies of each of our executive officers and directors as of April 28, 2017.

| Name | Age | Position |
|--------------------------|-----|---|
| Michael Scott Maguire | 51 | President, Chief Executive Officer and Director |
| Jeffrey Eisenberg | 51 | Chief Operating Officer and Director |
| Dr. Curtis Lockshin | 56 | Chief Scientific Officer |
| James Parslow | 52 | Chief Financial Officer and Corporate Secretary |
| Dr. Edward Benz | 71 | Director ^{(1), (2)} |
| Firdaus Jal Dastoor, FCS | 64 | Director ^{(1), (2)} |
| Darlene Deptula-Hicks | 59 | Director ^{(1), (2), (3)} |
| Roman Knyazev | 36 | Director |
| Dr. Roger Kornberg | 70 | Director ⁽³⁾ |

(1) Member of the Audit Committee

(2) Member of the Compensation Committee

(3) Member of the Nominating and Corporate Governance Committee

M. Scott Maguire has served as our President, Chief Executive Officer and a member of our Board since January 2014, having been originally appointed as our Chief Executive Officer and to the Board pursuant to the terms of the agreement of our acquisition of Xenetic U.K. Mr. Maguire previously served as the Chief Executive Officer of Xenetic U.K. from April 2004 to January 2014. Mr. Maguire's background is in life science and healthcare investment banking, advising U.S. and European companies on capital raisings and commercial development. He received his M.B.A. from the Babson Graduate School. We believe Mr. Maguire's prior experience in the biotechnology sector and as an executive and member of other boards of directors provides him with the appropriate set of skills to serve as a member of our Board, as well as the perspective and experience he brings as our Chief Executive Officer.

Jeffrey F. Eisenberg was appointed our Chief Operating Officer on December 2, 2016 and has served as a member of our Board since July 2016. Mr. Eisenberg previously worked at Noven Pharmaceuticals, Inc., a subsidiary of Hisamitsu Pharmaceutical, Inc., where he held various positions of increasing responsibility, most recently serving from 2009-2016, as Noven's president, chief executive officer and as a member of its board of directors. Currently, Mr. Eisenberg is a member of the board of directors of Mabvax Therapeutics, Inc., a publicly-traded clinical-stage biopharmaceutical company. Mr. Eisenberg obtained his J.D. at Columbia University Law School and a B.S. in Economics from the Wharton School, University of Pennsylvania. We believe Mr. Eisenberg's extensive life science executive experience and leadership experience in the areas of R&D, operations, manufacturing/quality, business development, strategic partnering, product development, commercialization, and talent management provides him with the appropriate set of skills to serve as a member of our Board.

Dr. Curtis A. Lockshin initially joined us on a part-time basis in March 2014 as our Vice President of Research & Operations and was appointed our Chief Scientific Officer effective January 1, 2017. Dr. Lockshin has held management positions in development and commercial stage biotechnology companies, with experience including discovery, preclinical and clinical development, as well as commercial manufacturing. Since May 2013 he has served and continues to serve as the president and chief executive officer of Guardum Pharmaceuticals LLC, a wholly-owned subsidiary of PJSC PharmSynthez. Dr. Lockshin does not receive any compensation in this role but is covered under Guardum Pharmaceuticals LLC's health plan. In addition, Dr. Lockshin has worked as an officer or consultant of several biotechnology companies on a part-time basis, including: (a) from March 2014 to December 2016 as the Vice President of Research & Operations of our company; (b) as an officer of a series of related companies following multiple mergers beginning as chief executive officer of SciVac Ltd. from September 2014 to July 2015, chief executive officer of SciVac Therapeutics Inc. from July 2015 to May 2016, and chief technology officer of VBI Vaccines Inc. from May 2016 to December 2016; and (c) Vice President of Corporate R&D Initiatives for OPKO Health from October 2011 to February 2013. Dr. Lockshin is currently serving as a member of the board of directors of RXi Pharmaceuticals Corporation, a publicly-traded clinical-stage RNAi company, a position he has held since April 2013. He previously served as a director of ChromaDex Inc., a publicly-traded natural products company, from March 2011 to December 2013, and as a director of Sorrento Therapeutics, a publicly-traded, clinical stage biopharmaceutical company from October 2009 to September 2012. Dr. Lockshin has a Ph.D. in Biological Chemistry (Massachusetts Institute of Technology 1998).

James Parslow was appointed our Chief Financial Officer on 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. Since 2015, he has served as an independent consultant providing interim chief financial officer services to multiple emerging technology companies. Mr. Parslow is a Certified Public Accountant with more than 25 years of experience serving private and public companies in the alternative energy, online auction, 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.

Dr. Edward J. Benz has served as a member of our Board since November 2016. Dr. Benz is an expert in blood disorders and is board certified in both hematology and internal medicine. He is an active clinical hematologist and a National Institutes of Health (NIH) funded researcher with a focus on the molecular basis and genetics around inherited blood disorders. From October 2000 until his retirement in October 2016, Dr. Benz served as President and CEO of Dana-Faber Cancer Institute and the Richard and Susan Smith Professor of Medicine and Professor of Genetics at Harvard Medical School. Prior to his role at Dana-Faber, Dr. Benz served as chairman for the Department of Medicine and Sir William Osler Professor of Medicine at Johns Hopkins University School of Medicine, as well as physician in chief at Johns Hopkins Hospital. Dr. Benz has also served as President of the American Society of Hematology, the Association of American Cancer Institutes, the American Society for Clinical Investigation, the American Clinical and Climatological Society, and the Friends of the National Institute of Nursing Research. Over the course of his career, Dr. Benz has authored more than 300 articles, books, reviews and abstracts and has received numerous awards. We believe Dr. Benz's experience in the field of hematology and blood disorders provides 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 included in the Company's acquisition of Xenetic U.K. He has been employed by the Cyrus Poonawalla Group, a conglomerate in India with interests in horse racing and breeding, biotech, engineering and hotels, 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 is 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 engineering products, life sciences and biotech, international trade, financial services and quality standards certifications. Mr. Dastoor received a Bachelor's Degree in Commerce from the University of Poona. We believe Mr. Dastoor's experience in the fields of life sciences and biotechnology, and his finance and business development background provide him with the appropriate set of skills to serve as a member of our Board.

Darlene Deptula-Hicks has served as a member of our Board since April 2014. From September 2015 to March 2017, Ms. Deptula-Hicks served as the Chief Financial Officer and Senior Vice President of Pieris Pharmaceuticals, Inc. From November 2014 to September 2015, Ms. Deptula-Hicks was engaged as a financial consultant at Pieris Pharmaceuticals, Inc. pursuant to a consulting agreement with the financial advisory firm of Danforth Advisors, LLC. From June 2012 to November 2014 Ms. Deptula-Hicks served as Vice President and Chief Financial Officer of Microline Surgical, Inc. Prior to that Ms. Deptula-Hicks was the Vice President, Chief Financial Officer, Treasurer and Secretary of ICAD, Inc. from 2006 through 2011. She received her B.S. in Accounting from Southern New Hampshire University and her M.B.A. from Rivier College. We believe Ms. Deptula-Hicks' extensive financial experience in capital raising, mergers, public companies and life sciences provides her with the appropriate set of skills to serve as a member of our Board.

Roman Knyazev has served as a member of our Board since April 2014. Mr. Knyazev has served in various positions, most recently as Senior Investment Manager, of Rusnano Moscow since 2009. Mr. Knyazev serves on the board of Nanolek, PETAR, Pharmsynthez, Lipoxen Technologies, Ltd and SynBio. From 2003 to 2005, Mr. Knyazev served as Chief Financial Officer of Biotec Pharma Moscow. Mr. Knyazev is a Fellow of the Kauffman Fellows Program. We believe Mr. Knyazev's experience investing in clinical stage biotechnology companies provides him with the appropriate set of skills to serve as a member of our Board.

Dr. Roger Kornberg 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 is a member of the board of directors of Ophthalix Inc., a publicly-traded clinical-stage biopharmaceutical company 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.

Board Role in Risk Oversight

Our Board is responsible for consideration and oversight of risks to us, and is responsible for ensuring that material risks are identified and managed appropriately, including the evaluation of our risk assessment and risk management policies. In fulfilling this role, the Board receives reports directly from management. In addition, the Board reviews areas of the Company's material risk, including operational, financial, legal, regulatory and strategic risks. The Board also considers specific risk topics in connection with strategic planning and other matters.

Our Board of Directors

Currently, the Board consists of seven (7) members: M. Scott Maguire, Jeffrey F. Eisenberg, Dr. Edward J. Benz, Firdaus Jal Dastoor, Darlene Deptula-Hicks, Roman Knyazev, and Dr. Roger Kornberg. Mr. Maguire was appointed the Chairman of the Board in April 2017. Prior to that, the Chairmanship was vacant. 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.

Committees of the Board

Our Board has designated the following three standing committees: the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee. It has adopted charters to govern the conduct, authority and responsibilities of each of these committees.

Audit Committee

The Audit Committee is responsible for making recommendations to the Board concerning the selection and engagement of independent accountants and for reviewing the scope of the annual audit, audit fees, results of the audit and auditor independence. The Audit Committee also reviews and discusses with management and the Board such matters as accounting policies, internal accounting controls and procedures for preparation of financial statements. The Audit Committee held four (4) meetings during 2016. The Company's Audit Committee Charter provides that the Audit Committee shall consist of at least three members. Any vacancy occurring on the Audit Committee may be filled only by the Nominating and Corporate Governance Committee. A copy of the current Audit Committee Charter is available on the Company's website, www.xeneticbio.com. Our website and the information contained therein are not incorporated into this Amendment. The adequacy of the Audit Committee Charter shall be reassessed annually.

The current members of our Audit Committee are Ms. Deptula-Hicks, Dr. Benz and Mr. Dastoor. Ms. Deptula-Hicks serves as the chairperson of the committee. All members of our Audit Committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and NASDAQ. The Board of Directors has determined that Ms. Deptula-Hicks is an "audit committee financial expert" within the meaning of applicable regulations adopted by the SEC and has the requisite financial sophistication as defined under the applicable rules and regulations of NASDAQ. Under the rules of the SEC, members of the Audit Committee must also meet heightened independence standards. Our Board has determined that each of the members of our Audit Committee is independent under the applicable rules of NASDAQ and the SEC.

Code of Business Conduct and Ethics

We have adopted a 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 conduct is available on our website, www.xeneticbio.com, under "Investors" at "Corporate Governance." We intend to disclose any amendment to, or waiver of, any provision of the Code of Business Conduct and Ethics by disclosing such information on our website, to the extent required by the applicable rules and exchange requirements.

Director Nominations

The Board of Directors nominates directors for election at each Annual Meeting of Stockholders and appoints new directors to fill vacancies when they arise. The Nominating and Corporate Governance Committee has the responsibility to identify, evaluate, recruit and recommend qualified candidates to the Board of Directors for nomination or election.

One of the Board of Directors' objectives in evaluating director nominations is to ensure that its membership is composed of experienced and dedicated individuals with a diversity of backgrounds, perspectives and skills. The Nominating and Corporate Governance Committee will select nominees for director based on their character, judgment, diversity of experience, business acumen, and ability to act on behalf of all stockholders. We do not have a formal diversity policy. However, the Nominating and Corporate Governance Committee endeavors to have a Board representing diverse viewpoints as well as diverse expertise at policy-making levels in many areas, including business, accounting and finance, healthcare and in other areas that are relevant to our activities.

The Nominating and Corporate Governance Committee believes it appropriate for at least one, and, preferably, multiple, members of the Board of Directors to meet the criteria for an "audit committee financial expert" as defined by rules of the SEC, and for a majority of the members of the Board of Directors to meet the definition of "independent director" as defined by the NASDAQ Listing Rules. The Nominating and Corporate Governance Committee also believes it appropriate for key members of our management to participate as members of the Board of Directors.

Prior to each Annual Meeting of Stockholders, the Nominating and Corporate Governance Committee identifies nominees first by evaluating the current directors whose term will expire at the Annual Meeting and who are willing to continue in service. These candidates are evaluated based on the criteria described above, including as demonstrated by the candidate's prior service as a director, and the needs of the Board of Directors with respect to the particular talents and experience of its directors. In the event that a director does not wish to continue in service, the Nominating and Corporate Governance Committee determines not to re-nominate the director, or a vacancy is created on the Board of Directors as a result of a resignation, an increase in the size of the Board or other event, the Committee will consider various candidates for Board membership, including those suggested by the Committee members, by other Board of Directors members, by any executive search firm engaged by the Committee, or by stockholders.

A stockholder who wishes to suggest a prospective nominee for the Board of Directors should notify Xenetic's Secretary or any member of the Committee in writing and include any supporting material the stockholder considers appropriate. In addition, our Bylaws contain provisions addressing the process by which a stockholder may nominate an individual to stand for election to the Board of Directors at our Annual Meeting of Stockholders. In order to nominate a candidate for director, a stockholder must give timely notice in writing to Xenetic's Secretary and otherwise comply with the provisions of our Bylaws. To be timely, our Bylaws provide that we must have received the stockholder's notice not later than 60 days earlier than 90 days in advance of the one-year anniversary of the date the proxy statement was released to the stockholders in connection with the previous year's Annual Meeting of Stockholders; however, if we have not held an Annual Meeting in the previous year or the date of the Annual Meeting is changed by more than 30 days from the date contemplated at the time of the mailing of the prior year's proxy statement, we must have received the stockholder's notice not earlier than the close of business on the 90th day prior to such annual meeting and not later than the close of business on the later of the 60th day prior to such annual meeting or, in the event public announcement of the date of such annual meeting is first made by the corporation fewer than 70 days prior to the date of such annual meeting, the close of business on the 10th day following the day on which public announcement of the date of such meeting is first made. Information required by the Bylaws to be in the notice includes (A) the name, age, business address and residence address of such person, (B) the principal occupation or employment of such person, (C) the class and number of shares of the corporation which are beneficially owned by such person, (D) a description of all arrangements or understandings between the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder, and (E) any other 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 Section 14 of the Securities Exchange Act of 1934 and the related rules and regulations under that Section.

Stockholder nominations must be made in accordance with the procedures outlined in, and include the information required by, our Bylaws and must be addressed to: Secretary, Xenetic Biosciences, Inc., 99 Hayden Ave, Suite 230, Lexington, Massachusetts 02421. You can obtain a copy of our Bylaws by writing to the Secretary at this address.

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, 2016, 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 that one report, covering an aggregate of one transaction, was filed late by Mr. Maguire; one report, covering an aggregate of two transactions, was filed late by Mr. Kornberg; one report, covering an aggregate of one transaction, was filed late by Mr. Benz; and one report, covering an aggregate of one transaction, was filed late by Ms. Deptula-Hicks. Initial reports on Form 3 of ownership were filed late by Messrs. Eisenberg, Knyazev, Kornberg, Dastoor, Maguire, and Benz and Ms. Deptula-Hicks and Messrs. Knyazev, Dastoor, and Maguire and Ms. Deptula-Hicks inadvertently did not include all respective holdings on such filings. Our majority shareholder failed to file a Form 3 after becoming subject to Section 16(a) of the Exchange Act.

ITEM 11 – EXECUTIVE COMPENSATION

This item sets forth the compensation information for Michael Scott Maguire, our Chief Executive Officer and Jeffrey Eisenberg, our Chief Operating Officer, who were the only executive officers whose compensation exceeded \$100,000 for the most recent fiscal year. We refer to Messrs. Maguire and Eisenberg herein as our “named executive officers.”

Summary Compensation Table

The following table sets forth information concerning the compensation of our named executive officers for the years ended December 31, 2016 and 2015:

| <u>Name and Principal Position</u> | <u>Year</u> | <u>Salary</u> <u>(\$)</u> | <u>Bonus</u> <u>(\$)</u> | <u>Stock</u> <u>Awards</u> <u>(\$)</u> | <u>Option</u> <u>Awards</u> ⁽¹⁾ <u>(\$)</u> | <u>Non-Equity</u> <u>Incentive Plan</u> <u>Compensation</u> <u>(\$)</u> | <u>All Other</u> <u>Compensation</u> <u>(\$)</u> | <u>Total</u> <u>(\$)</u> |
|---|-------------|------------------------------|-----------------------------|--|--|--|--|-----------------------------|
| M. Scott Maguire, Chief Executive Officer | 2016 | \$ 456,067 ⁽²⁾ | – | – | \$ 727,241 | \$206,630 | \$ 78,589 ⁽⁴⁾ | \$ 1,468,527 |
| Executive Officer | 2015 | 505,735 ⁽²⁾ | – | – | 1,984,500 | – | 60,688 | 2,550,923 |
| Jeffrey F. Eisenberg, Chief Operating Officer | 2016 | 41,823 ⁽³⁾ | – | – | 648,984 | – | 2,991 ⁽⁵⁾ | 693,798 |

(1) The amounts represent the aggregate grant date fair value of stock options granted in the applicable fiscal year, computed in accordance with FASB ASC Topic 718, excluding the effect of estimated forfeitures. Assumptions used in the calculation of this amount are set forth in Note 12 to our audited consolidated financial statements included in Part 8 of the Original Filing. Mr. Maguire and Mr. Eisenberg were granted options to purchase 250,000 shares and 230,000 shares of common stock, respectively, during 2016. Of these totals, 125,000 and 117,350 shares, respectively, were granted under our 2014 Equity Incentive Plan while 125,000 and 112,650 shares, respectively, (the “Unapproved Portion”) are granted pursuant to the amendment and restatement of our 2014 Equity Incentive Plan, such grants subject to forfeiture in the event stockholders fail to approve the new plan. The amounts reflected above represent the full fair value of the grants, assuming the Unapproved Portion is approved by our stockholders.

(2) Mr. Maguire earned \$456,067 and \$505,735 for the years ended December 31, 2016 and 2015, respectively pursuant to his written employment agreement with the Company. A portion of Mr. Maguire’s 2015 salary was deferred pursuant to a convertible promissory note and subsequently paid in full in 2016. As part of this arrangement, Mr. Maguire earned \$13,176 of interest and was granted a warrant to purchase 37,369 shares of our common stock at the lesser of \$6.60 and 120% of the price per share in our next capital raise of at least \$7 million. Mr. Maguire’s compensation is denominated and paid in British pounds. The amount paid in pounds is converted to U.S. dollars at the spot exchange rate on the date of payment.

(3) Mr. Eisenberg was named our Chief Operating Officer in December 2016. This amount represents the amount earned by Mr. Eisenberg pursuant to his written employment agreement with the Company as well as fees earned for his Board service prior to his appointment as COO totaling \$16,823. Mr. Eisenberg was appointed a director of the Company in July 2016. As an employee, Mr. Eisenberg no longer receives compensation for serving as a member of our Board.

(4) Includes (i) \$41,217 of contributions to a UK defined contribution plan which qualifies under the rules established by HM Revenue & Customs, (ii) \$33,872 for health and welfare plans, and (iii) tax preparation costs of \$3,500.

(5) Includes (i) \$1,250 of contributions to our U.S. 401(k) Plan and (ii) \$1,741 for health and welfare plans.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth certain information with respect to outstanding equity awards held by our named executive officers at December 31, 2016.

| Name | Option Awards | | | | Stock Awards | |
|----------------------|--|--|----------------------------|------------------------|---|--|
| | Number of Securities Underlying Unexercised Options, Exercisable | Number of Securities Underlying Unexercised Options, Exercisable | 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 (\$) |
| M. Scott Maguire | 15,002 ⁽¹⁾ | – | 4.59 | 6/9/2020 | – | – |
| | 141,415 ⁽²⁾ | 70,707 ⁽²⁾ | 4.59 | 9/5/2025 | – | – |
| | – | 250,000 ⁽³⁾⁽⁴⁾ | 3.50 | 12/20/2026 | – | – |
| | 37,402 ⁽⁵⁾⁽⁶⁾ | – | 11.55 | None | – | – |
| | 226,722 ⁽⁵⁾⁽⁷⁾ | – | 17.49 | None | – | – |
| Jeffrey F. Eisenberg | 4,700 ⁽⁸⁾ | 225,300 ⁽⁹⁾⁽¹⁰⁾ | 3.40 | 12/01/2016 | – | – |

(1) Vests 100% on the date of grant.

(2) Vests one-third on the date of grant, one-third upon the first anniversary of the grant date and one-third upon the second anniversary of the grant date.

(3) 125,000 of the options granted are subject to our shareholders voting to approve an amendment and restatement of our 2014 Equity Incentive Plan as well as increasing the amount of authorized shares under such plan.

(4) Vests one-third upon the first anniversary of the grant date, one-third upon the second anniversary of the grant date and one-third on the third anniversary of the grant date.

(5) References a JSOP award. The JSOP awards do not carry an expiration date once vested. Please refer to Note 12 to our audited consolidated financial statements included in Part 8 for further description of the JSOP awards.

(6) Vests equally over a five-year period from the date of grant.

(7) Vests equally over a three-year period from the date of grant.

(8) Vests 100% on the date of grant.

(9) 112,650 of the options granted are subject to our shareholders voting to approve an amendment and restatement of our 2014 Equity Incentive Plan as well as increasing the number of authorized shares under such plan.

(10) Vests one-third upon the first anniversary of the grant date, one-third of the remaining amount upon the second anniversary of the grant date and one-third of the remaining amount on the third anniversary of the grant date.

Employment Agreements with our Named Executive Officers

Employment Agreement with Mr. Maguire

Mr. Maguire's written employment agreement dated November 3, 2009 with Xenetic U.K. is for a term then commencing and continuing thereafter unless and until terminated by either Mr. Maguire or the Company in writing with not less than twelve months' notice. The employment agreement is governed by and construed in accordance with English law. Mr. Maguire's present annual salary under his employment agreement is \$456,067. The salary under this agreement is subject to periodic review by the Company without any obligation on the part of the Company to increase. The Company is required to make contributions to its Defined Contribution Pension Scheme at a rate of 12% of base salary. Additionally, Mr. Maguire is provided with life insurance coverage equal to four times base salary and is entitled to participate in the Company's Permanent Health and Private Medical Schemes. He is also eligible to participate in the Company's bonus and share option/equity incentive schemes in force from time to time. The agreement may be terminated by the Company for good cause without notice or payment in lieu of notice to Mr. Maguire. In case of termination upon change in control, Mr. Maguire may be entitled to twelve months' severance.

Employment Agreement with Mr. Eisenberg

The Company entered into an employment agreement with Mr. Eisenberg effective as of December 1, 2016. The agreement is for an initial term of one year, and automatically renews for successive one year periods unless either party gives notice to the other no later than 90 days prior to the expiration of the then-applicable term; provided, however, that the Company may terminate the agreement at any time. Mr. Eisenberg's annual salary under the agreement is \$300,000, and is subject to annual review and upward adjustment only by the Board. Mr. Eisenberg is also eligible to receive a bonus equal to 35% of his annual salary based on the attainment of certain individual and/or Company goals established by the Board or a committee thereto. Mr. Eisenberg 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. Eisenberg is also subject to certain customary confidentiality, non-solicitation and non-competition provisions.

If Mr. Eisenberg's employment is terminated by the Company without "Cause" (as defined in his employment agreement) or if he resigns for "Good Reason" (as defined in his employment agreement), he will be entitled to receive (i) six months of his then current base salary, paid over time in accordance with the Company's payroll practices then in effect if he has been employed by the Company for six months or less, (ii) 12 months of his then current base salary, paid over time in accordance with the Company's payroll practices then in effect if he has been employed by the Company for more than six months, (iii) a pro-rated annual bonus and (iv) payment of premiums for continued health benefits under COBRA for up to six months.

Director Compensation Table

As our employee directors, Messrs. Maguire and Eisenberg do not receive any compensation for their Board service. The following table sets forth information for the year ended December 31, 2016 regarding the compensation awarded to, earned by or paid to our non-employee directors:

| <u>Name</u> | <u>Fees Earned or Paid in Cash (\$)</u> | <u>Stock Awards (\$)</u> | <u>Option Awards⁽¹⁾⁽²⁾ (\$)</u> | <u>All Other Compensation (\$)</u> | <u>Total (\$)</u> |
|-----------------------------------|---|--------------------------|--|------------------------------------|-------------------|
| Dr. Edward J. Benz ⁽⁴⁾ | \$ 5,978 | – | \$ 72,724 | – | \$ 78,702 |
| Firdaus J. Dastoor | \$ 4,047 | – | \$ – | – | \$ 4,047 |
| Darlene Deptula-Hicks | \$ 50,000 | – | \$ 116,359 | – | \$ 166,359 |
| Roman Knyazev | \$ 4,047 | – | \$ – | – | \$ 4,047 |
| Dr. Roger Kornberg ⁽⁵⁾ | \$ 41,667 | – | \$ 72,724 | – | \$ 114,391 |
| Dr. Dmitry Genkin ⁽⁶⁾ | \$ 1,074 | – | \$ – | \$ 129,043 ⁽³⁾ | \$ 130,117 |

(1)The amounts represent the aggregate grant date fair value of stock options granted during 2016. For a discussion of the assumptions and methodology used to calculate the value of our stock options, see Note 12 to our audited financial statements included in Part 8 of the Original Filing.

(2)The table below shows the aggregate number of option awards outstanding for each of our non-employee directors as of December 31, 2016:

| <u>Name</u> | <u>Option Awards (#)</u> |
|-----------------------|--------------------------|
| Dr. Edward J. Benz | 25,000 |
| Firdaus J. Dastoor | 45,455 |
| Darlene Deptula-Hicks | 71,517 |
| Roman Knyazev | 37,879 |
| Dr. Roger Kornberg | 25,000 |
| Dr. Dmitry Genkin | 37,389 |

In addition to the option awards described above, Mr. Dastoor holds a warrant to purchase 48,485 shares of our common stock at \$7.92 per share. These warrants were fully vested and expire in December 2019. In addition, Dr. Genkin holds a warrant to purchase 30,304 shares of our common stock at \$13.86 per share. These warrants were fully vested and expire in November 2020.

(3)These amounts represent fees paid for scientific services rendered to the Company by Dr. Genkin during 2016.

(4)Dr. Benz was appointed to the Board of Directors in November 2016.

(5)Dr. Kornberg was appointed to the Board of Directors in February 2016.

(6)Dr. Genkin resigned from the Board effective May 3, 2016.

ITEM 12 – SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table and footnotes set forth certain information known to us regarding beneficial ownership of our capital stock as of March 31, 2017 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 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 8,652,541 shares of our common stock outstanding as of March 31, 2017, on an as-converted basis. Shares of our common stock that a person has the right to acquire within 60 days after March 31, 2017 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 99 Hayden Ave, Suite 230, Lexington, Massachusetts 02421.

| Name of Beneficial Owner | Number of Shares Beneficially Owned ⁽¹⁾ | Percentage Beneficially Owned |
|---|---|----------------------------------|
| <u>Named Executive Officers and Directors</u> | | |
| M. Scott Maguire | 531,863 ⁽²⁾ | 5.8% |
| Jeffrey F. Eisenberg | 4,700 ⁽³⁾ | * |
| Dr. Edward J. Benz | 12,500 ⁽⁴⁾ | * |
| Firdaus J. Dastoor | 78,788 ⁽⁵⁾ | * |
| Darlene Deptula-Hicks | 31,416 ⁽⁶⁾ | * |
| Roman Knyazev ⁽⁷⁾ | 25,253 ⁽⁸⁾ | * |
| Dr. Roger Kornberg | 25,000 ⁽⁹⁾ | * |
| All executive officers and directors as a group (9 persons) | 729,117 ⁽¹⁰⁾ | 7.8% |
| <u>5% Current Stockholders</u> | | |
| PJSC Pharmsynthez ⁽⁷⁾ | 9,335,159 ⁽¹¹⁾ | 74.0% |
| OPKO Health, Inc. ⁽¹²⁾ | 1,278,911 ⁽¹³⁾ | 13.3% |
| Serum Institute of India Private Limited | 842,519 ⁽¹⁴⁾ | 9.5% |
| Alpha Capital | 731,196 ⁽¹⁵⁾ | 7.8% |

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

(1) 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 73,953 shares of common stock owned directly or through nominee trusts, 264,124 JSOP award shares and 193,786 shares issuable upon exercise of warrants and options that are exercisable within 60 days of March 31, 2017.

(3) The total beneficial ownership consists of 4,700 shares issuable upon exercise of options that are exercisable within 60 days of March 31, 2017.

(4) The total beneficial ownership consists of 12,500 shares issuable upon exercise of options that are exercisable within 60 days of March 31, 2017.

(5) The total beneficial ownership consists of 78,788 shares issuable upon exercise of warrants and options that are exercisable within 60 days of March 31, 2017.

(6) The total beneficial ownership consists of 31,416 shares issuable upon exercise of options that are exercisable within 60 days of March 31, 2017.

(7) Mr. Knyazev is the Deputy Chairman of the Board of Directors of Pharmsynthez. Pharmsynthez acquired 100% of SynBio on February 27, 2017.

- (8) The total beneficial ownership consists of 25,253 shares issuable upon exercise of options that are exercisable within 60 days of March 31, 2017.
- (9) The total beneficial ownership consists of 25,000 shares issuable upon exercise of options that are exercisable within 60 days of March 31, 2017.
- (10) The total beneficial ownership consists of 73,953 shares of common stock owned directly or through nominee trusts, 264,124 JSOP award shares, and 391,040 shares issuable upon exercise of warrants and options that are exercisable within 60 days of March 31, 2017.
- (11) The total beneficial ownership consists of 5,365,455 shares of common stock owned directly including 145,455 held in escrow, 1,454,545 shares issuable upon the conversion of Series B Preferred Stock and 2,515,159 shares issuable upon exercise of warrants that are exercisable within 60 days of March 31, 2017. The address of PJSC Pharmsynthez is Office Center IT Park, 25 Liter ZH, Krasnogo Kursanta ul., St. Petersburg, 197110, Russia.
- (12) OPKO Health in 2013 acquired a significant ownership position in Pharmsynthez. By virtue of such relationship, OPKO Health may be deemed to have voting and investment power with respect to the shares held by Pharmsynthez noted above and as a result may be deemed to have beneficial ownership over such shares.
- (13) The total beneficial ownership consists of 309,215 shares of common stock owned directly, 484,848 shares issuable upon the conversion of Series B Preferred Stock and 484,848 shares issuable upon exercise of warrants that are exercisable within 60 days of March 31, 2017. The address of OPKO Health Inc. is 4400 Biscayne Boulevard, Miami, FL 33137.
- (14) The total beneficial ownership consists of 630,396 shares of common stock owned directly and indirectly by related affiliates of Serum Institute of India Private Limited and 212,123 shares issuable upon exercise of warrants that are exercisable within 60 days of March 31, 2017. The address of Serum Institute of India is S. No. 212/2, Off Soli Poonawalla Road, Hadapsar, Pune, 411028, Maharashtra, India.
- (15) The total beneficial ownership consists of 246,348 shares issuable upon the conversion of Series B Preferred Stock and 484,848 shares issuable upon exercise of warrants that are exercisable within 60 days of March 31, 2017. The address of Alpha Capital is 510 Madison Ave, 14th Floor, NY, NY 10022.

Equity Compensation Plan Information

The following table sets forth information as of December 31, 2016 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 | Weighted Average Exercise Price of Outstanding Options, Warrants and Rights | Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans |
|--|---|---|--|
| Equity compensation plans approved by security holders | 1,013,504 ⁽¹⁾ | \$ 4.84 | 247,568 |
| Equity compensation plans not approved by security holders | — | — | — |
| Total | 1,013,504 | \$ 4.84 | 247,568 |

(1) Consists of 1,013,504 shares of our common stock to be issued upon the exercise of outstanding stock options under the 2014 Plan.

ITEM 13 – CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

During the fiscal year ended December 31, 2016 and the fiscal year ended December 31, 2015, 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 disclosed below.

Policy Regarding Related Party Transactions

Our Board has adopted a written related party transaction policy to set forth the policies and procedures for the review and approval or ratification of related party transactions. Any transaction between the Company and its officers, directors, principal stockholders or affiliates are required to be on terms no less favorable to us than could be reasonably obtained in arms-length transactions with independent third-parties, and any such material related party transactions must also be reviewed and approved by a majority of the Board of Directors. All of the actions described in this section occurred prior to the adoption of this policy.

PJSC Pharmsynthez

PJSC Pharmsynthez (formerly, OJSC Pharmsynthez) (“Pharmsynthez”) is our largest and controlling stockholder with a share ownership of 52.5% of the total issued and outstanding common stock at March 31, 2017. Pharmsynthez was a related party of SynBio, which is related party of ours, and acquired 100% of SynBio in February 2017. The combined ownership of Pharmsynthez and SynBio was 62.0% at March 31, 2017. In addition, one of our directors, Mr. Roman Knyazev, is also a director of Pharmsynthez and one of our executive officers, Dr. Curtis Lockshin, is an officer of a wholly-owned subsidiary of Pharmsynthez. In November 2009, we entered into a collaborative research and development license agreement with Pharmsynthez (the “Pharmsynthez Arrangement”) pursuant to which we granted an exclusive license to Pharmsynthez to develop, commercialize and market six drug candidates based on our PolyXen and ImuXen technology in certain territories. In exchange, Pharmsynthez granted us an exclusive license to use any pre-clinical 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 our own expense.

Financing Agreements

In July 2015, we entered into a Securities Purchase Agreement with Pharmsynthez providing for the issuance of certain promissory notes and certain warrants to purchase shares of our common stock.

In November 2015, we entered into the Kevelt APA with AS Kevelt and Pharmsynthez. The Kevelt APA provided for the transfer to us of certain intellectual property rights with respect to the immunomodulatory drug candidate XBIO-101 held by AS Kevelt. In April 2016, we completed the purchase of the intellectual property rights associated with the Kevelt APA and issued 3,045,455 shares of common stock pursuant to the agreement.

The Kevelt APA also provided for our issuance of certain convertible promissory notes and warrants to purchase shares of our common stock. During the quarter ended March 31, 2016, we issued \$3.5 million of convertible promissory notes to Pharmsynthez receiving \$3.5 million in cash proceeds. In April 2016, Pharmsynthez converted all of its convertible promissory notes (both the July 2015 note and the Q1 2016 notes) and associated interest of approximately \$12.3 million into 1,373,036 shares of common stock. As such, we issued to Pharmsynthez 1,373,036 shares of common stock in connection with conversion of the convertible notes, which amount, together with the 3,045,455 shares of common stock in connection with the closing of the Kevelt APA, resulted in an aggregate of 4,418,491 new shares of common stock being issued to Pharmsynthez.

During the quarter ended September 30, 2016, we issued \$1.0 million of convertible promissory notes to Pharmsynthez, receiving \$1.0 million in cash proceeds of which \$0.5 million of the notes was applied toward our November 2016 offering. On November 1, 2016, Pharmsynthez purchased 1,454,545 shares of Convertible Series B Preferred Stock in our initial public offering for \$6.0 million.

SynBio LLC

SynBio is one of our largest stockholders and owns approximately 9.5% of our total issued and outstanding common stock as of March 31, 2017 and all of our outstanding Series A Preferred Stock. Effective February 27, 2017, PJSC Pharmsynthez acquired 100% of SynBio.

In August 2011, we entered into a Co-Development Agreement with SynBio, which is still in effect, pursuant to which we granted an exclusive license to SynBio to develop pharmaceutical products within Russia and the CIS using certain molecule(s) based on SynBio's technology and our proprietary technologies: PolyXen, OncoHist and ImuXen. In return, SynBio granted us an exclusive license to use the pre-clinical and clinical data generated by SynBio in certain agreed upon products and engage in the development of commercial drug candidates.

The Co-Development Agreement provides for the sale of certain research supplies between each party to the agreement. For the years ended December 31, 2016 and 2015, we did not recognize any supply service revenues from sales to SynBio about the Co-Development Agreement.

On September 23, 2016, SynBio exchanged 970,000 shares of our common stock for an equal number of shares of Series A Preferred Stock.

Effective October 26, 2016, we entered into a voting agreement with SynBio whereby SynBio agreed to vote their shares of common stock in the same proportion as the shares of common stock held by non-affiliates on all matters subject to stockholder approval for a period of one year.

Loan Agreement

In May 2011, we received a short-term unsecured loan facility of up to \$1.7 million from SynBio, of which \$0 was outstanding as of December 31, 2016. In connection with the Kevelt APA, we made a series of payments during 2016 totaling \$323,640 to creditors of Kevelt. Pursuant to the Kevelt APA such payments are considered direct offsets to the loan with SynBio. The loan had an interest rate of 8.04% per annum as of the date of grant, with interest payable upon repayment of the loan, which was to be seven months after the closing date of the loan. In December 2016, we entered into an agreement with SynBio, Pharmsynthez, and Kevelt, which settled all amounts owed by us on the SynBio loan; for services provided by Kevelt to us in connection with the XBIO-101 Phase 2 project; and the purchase of drug candidate supply from Kevelt sufficient to meet the needs of the XBIO-101 Phase 2 clinical trial. Pursuant to the agreement, we transferred \$620,387 to the counterparties. We repaid the remainder of the loan facility with proceeds from our November 1, 2016 offering.

Serum Institute

Serum Institute owns approximately 7.3% of our total issued and outstanding common stock at March 31, 2017. In the period from 2004 through 2011, we entered into certain amended license and supply agreements with Serum Institute. The original license agreement with Serum Institute was a collaborative Development and Manufacturing Arrangement to develop agreed upon potential commercial product candidates using our PolyXen technology. Following the 2011 amendment, which is still in effect, Serum Institute retained an exclusive license to use our PolyXen technology to research and develop one potential commercial product, Polysialylated Erythropoietin (PSA-EPO) in territories excluding the United States of America, European Economic Area and Japan, among certain other territories. Serum Institute will be responsible for conducting all pre-clinical and clinical trials required to achieve regulatory approvals within the certain predetermined territories at Serum Institute's own expense.

Manufacturing Agreement

The 2011 amendment with Serum Institute also provides for the supply of PSA by Serum Institute to us and our collaborative partners. Serum Institute has the non-exclusive right to supply PSA to us, and our collaborative partners and customers on a cost-plus basis. On an individual basis, Serum Institute may enter into separate supply agreements with us and/or our collaborative partners for the purpose of providing a supply of PSA directly to the collaborative partners. Further, any agreement between Serum Institute and a collaborative partner shall not create any obligation or liability for us.

In September 2016, we issued 211,486 shares of common stock to Serum in exchange for \$750,000 of research and development and clinical PSA supply as well as settlement of approximately \$163,000 of prior purchases of PSA supply. During 2015, we paid Serum Institute \$115,000 for the supply of PSA or PSA-EPO for use in our ErepoXen human clinical trials being conducted in Australia.

Relationship with Shire plc

As of March 31, 2017, Shire owned approximately 4.6% of our total issued and outstanding common stock. Shire was formerly a related party of ours in 2015 with share ownership of approximately 8.0% of our total issued and outstanding common stock. We have entered into an exclusive research, development, license and supply agreement with Shire plc to develop products with an extended half-life of certain proteins and molecules using our patent protected PolyXen technology whereby PSA is conjugated with Shire's proprietary molecule(s) to create a new generation of drugs to treat the failure of blood to coagulate in the therapeutic treatment of blood and bleeding disorders such as hemophilia. The lead candidate in this collaboration is a longer-acting form of a recombinant Factor VIII ("rFVIII") protein (SHP656). The agreement with Shire was originally entered into in August 2005 and has been amended several times, most recently in January 2014. The 2014 amendment resulted in increased development, regulatory, sales and deadline extension receipts, restructured target deadlines and royalty receipts on potential net sales. In December 2016, we received a \$3 million milestone payment from Shire related to the advancement of the Phase 1/2 clinical study of SHP656

Equity Investment

In connection with the January 2014 amendment, we entered into a stock purchase agreement with Shire pursuant to which we sold to Shire 324,097 shares of our common stock for \$10 million. Pursuant to the stock purchase agreement, Shire agreed that until the earlier of (i) three months after the effective date of a listing of our common stock on the NASDAQ Stock Market or (ii) January 29, 2015 (such earlier date, the Lock-Up Expiration Date), Shire would not assign, transfer, sell or dispose of the Shares to any party other than a wholly owned subsidiary. In addition, Shire agreed that until the 12-month anniversary of the Lock-Up Expiration Date, it would not sell or offer to sell any shares of our common stock in an amount that would exceed 15% of the daily trading volume of Company's common stock on the principal market or exchange on which the shares of Company's common stock are traded, and in no event would Shire sell or offer to sell more than 15% of the Shares in any one month period. In October 2015, Shire agreed in writing not to sell any of its shares currently held before June 30, 2016 and then further to limit the sale of its shares for an additional six months (to December 2016) to a price of no less than \$41.25 per share. Both parties agreed to waive this limitation in connection with our November 1, 2016 offering.

Director Fees and Consulting Services Agreement with Dr. Dmitry Genkin

We previously had entered into an agreement with Dr. Dmitry Genkin under which he was entitled to an annual fee of £750 paid in quarterly installments for his services as director of the Company. During 2016 and 2015, Dr. Genkin was paid approximately \$1,000 annually in respect of director services provided in each year. In addition, Dr. Genkin provides research and consulting services to the Company, for which he was paid approximately \$129,000 and \$73,000 during the years ended December 31, 2016 and 2015, respectively. In May 2016, Mr. Genkin resigned from our board of directors.

Director Fees and Consulting Services Agreement with Dr. Timothy R. Coté

We previously had entered into an agreement with Dr. Timothy R. Coté under which he was entitled to an annual fee of \$25,000 paid in quarterly installments for his services as director of the Company. In addition, his agreement provided for payment of an additional annual fee of between \$3,000 and \$10,000 as compensation for attendance at up to four board meetings per year, plus issuance of options to purchase up to 1,516 shares of our common stock, subject to certain vesting requirements.

During 2015, Dr. Coté received \$18,750 in respect of director services provided and \$4,000 for advisory services related to certain orphan drug filings. In April 2015, Dr. Cote resigned from the board of directors and the consulting agreement was terminated. No consulting services were provided to us in 2016.

Deferred Salary Arrangement with Mr. M. Scott Maguire

Mr. M. Scott Maguire is our Chief Executive Officer. Mr. Maguire current annual salary is \$456,067 pursuant to his written employment agreement with the Company. Of Mr. Maguire's 2015 salary amount and 2016 salary through June 30, 2016, fifty percent (50%) has been paid in cash and fifty percent (50%) has been deferred and accrued pursuant to an unwritten arrangement between us and Mr. Maguire. In July 2016, we issued a 10% Junior Secured Collateralized Convertible Promissory Note in the amount of \$369,958 and warrants to purchase 37,369 shares of our common stock at the lesser of \$6.60 per share and 120% of the price per share in our next capital raise of at least \$7 million to Mr. Maguire for the deferred salary. We also entered into a Deferred Salary Security Agreement with Mr. Maguire, pursuant to which Mr. Maguire agreed to continue to defer fifty percent (50%) of his salary until the earlier to occur of: (i) the closing of a public offering of our securities concurrent to a NASDAQ listing, or (ii) September 30, 2016 (the "Deferral End Date"). All deferred salary shall become due and payable on the Deferral End Date. As security for the payment of the deferred salary, we granted Mr. Maguire a continuing security interest in our assets, including all inventory, accounts, accounts receivable, equipment, trademarks, contracts, copyrights and general intangibles, provided, however, that pursuant to a Debt Subordination Agreement by and between Mr. Maguire and Pharmsynthez, the payment of such deferred salary is subordinate to the prior payment in full in cash of any and all of our indebtedness and liabilities to Pharmsynthez. Upon completion of our public offering on November 7, 2016, we settled this note and related interest in cash and the Debt Subordination Agreement was terminated.

Director Independence

Under the rules of NASDAQ Capital Market, independent directors must comprise a majority of a listed company's board of directors. In addition, the rules of The NASDAQ Capital Market require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent. Under the rules of The NASDAQ Capital Market, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Our board of directors has undertaken a review of the independence of each director and considered whether each director has a material relationship with us that could compromise his ability to exercise independent judgment in carrying out his responsibilities. As a result of this review, our board of directors determined that each of Mr. Dastoor, Dr. Kornberg, Ms. Deptula-Hicks and Dr. Benz are independent directors as defined under the applicable rules and regulations of the SEC, and the listing requirements and rules of The NASDAQ Capital Market. In making these determinations, our board of directors reviewed and discussed information provided by the directors and us with regard to each director's business and personal activities and relationships as they may relate to us and our management, including the beneficial ownership of our capital stock by each nonemployee director and the transactions involving them described in the section titled "Certain Relationships and Related Party Transactions."

Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended Exchange Act. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors or any other board committee: (1) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries. Our board of directors has determined that each member of our audit committee meets the independence requirements of Rule 10A-3.

ITEM 14 – PRINCIPAL ACCOUNTING FEES AND SERVICES

The following table sets forth the Company's fees billed for services rendered by our auditors, Marcum LLP. All fees described below were approved by our Board of Directors.

| | <u>2016</u> | <u>2015</u> |
|--------------------|-------------------|-------------------|
| Audit Fees | \$ 209,140 | \$ 218,835 |
| Audit-Related Fees | 145,327 | – |
| Tax Fees | – | – |
| Other Fees | – | – |
| | <u>\$ 354,467</u> | <u>\$ 218,835</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, 2016 and 2015.

Audit-Related Fees

Audit-related fees during the year ended December 31, 2016 include fees incurred in connection with consulting services provided for review and analysis of financial accounting and reporting requirements related to the Company's NASDAQ uplisting and reverse stock split.

Tax Fees

Tax fees include the total fees incurred in connection with tax compliance and general advisory services provided during the year ended December 31, 2016.

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 Securities Exchange Act of 1934, which are approved by the Audit Committee prior to the commencement of services.

Our Audit Committee approved and retained Marcum LLP to audit our consolidated financial statements for 2016. Our Audit Committee reviewed all services provided by Marcum LLP in 2016 and concluded that the services provided were compatible with maintaining its independence.

PART IV

ITEM 15 – EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following financial statements, schedules and exhibits are filed as part of this report:

Consolidated Financial Statements: The consolidated financial statements and report of independent registered public accounting firm required by this item are included in Part II, Item 8 of the Original Filing;

Financial Statement Schedules: Schedule II, Valuation and Qualifying Accounts, is included in Part II, Item 8 of the Original Filing. All other schedules were omitted because they are not applicable, not required under the instructions, or the requested information is shown in the consolidated financial statements or related notes thereto.

(b) **Exhibits:** The attached list of exhibits in the “Exhibit Index” immediately preceding the exhibits to this Amendment is incorporated herein by reference in response to this item.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

XENETIC BIOSCIENCES, INC.

Date: May 1, 2017

By: /s/ MICHAEL SCOTT MAGUIRE
 Michael Scott Maguire
 Chief Executive Officer and President

EXHIBIT INDEX

| Exhibit No. | Exhibit Index | Form | Filing Date | Exhibit Number | Filed Herewith |
|-------------|---|---------------|-------------|----------------|----------------|
| 2.1 | Scheme of Arrangement (court order) | 8-K | 01/29/2014 | 2.1 | |
| 3.1 | Articles of Incorporation | S-1 | 11/21/2011 | 3.1 | |
| 3.2 | Certificate of Amendment to Articles of Incorporation | 8-K | 02/12/2013 | 3.1 | |
| 3.3 | Certificate of Amendment to Articles of Incorporation | 8-K | 02/27/2013 | 3.1 | |
| 3.4 | Certificate of Amendment to Articles of Incorporation | 10-Q | 01/10/2014 | 3.1 | |
| 3.5 | Certificate of Change Pursuant to NRS 78.209 | 10-Q | 01/10/2014 | 3.2 | |
| 3.6 | Certificate of Amendment to Articles of Incorporation | 8-K | 09/30/2015 | 3.1 | |
| 3.7 | Bylaws | S-1 | 11/21/2011 | 3.2 | |
| 3.8 | Form of Amended and Restated Certificate of Designation of Preferences, Rights and Limitations of Series A Preferred Stock | S-1 | 10/27/2016 | 3.8 | |
| 3.9 | Second Amended and Restated Certificate of Designation of Preferences, Rights and Limitations of Series B Preferred Stock | S-1/A | 10/31/2016 | 3.9 | |
| 4.1 | Form of Common Stock Certificate of the Registrant | S-1 | 07/14/2016 | 4.1 | |
| 4.2 | Xenetic Biosciences, Inc. Shareholder Voting Agreement dated October 26, 2016 between Xenetic Biosciences Inc. and SynBio, LLC | S-1 | 10/27/2016 | 4.2 | |
| 4.3 | SynBio LLC Warrant to Purchase Common Stock of Xenetic Bioscience, Incorporated | 10-K | 04/15/2015 | 10.2 | |
| 4.4 | Serum Institute of India Limited Warrant to Purchase Common Stock of Xenetic Bioscience, Incorporated | 10-K | 04/15/2015 | 10.03 | |
| 4.5 | Firdaus Jal Dastoor Warrant to Purchase Common Stock of Xenetic Bioscience, Incorporated | 10K | 04/15/2015 | 10.4 | |
| 4.6 | Form of Common Stock Purchase Warrant | 8-K | 11/16/2015 | 10.3 | |
| 4.7 | Form of Common Stock Purchase Warrant | 8-K | 11/16/2015 | 10.4 | |
| 4.8 | Form of Amended and Restated Common Stock Purchase Warrant | 8-K | 11/16/2015 | 10.6 | |
| 4.9 | Form of Common Stock Purchase Warrant | 8-K | 07/08/2016 | 10.3 | |
| 4.10 | Form of Common Stock Purchase Warrant | S-1/A | 10/31/2016 | 10.53 | |
| 4.11 | Form of Ten Percent (10%) Senior Secured Convertible Promissory Note | 8-K | 11/16/2015 | 10.2 | |
| 4.12 | Form of Ten Percent (10%) Junior Secured Convertible Promissory Note – Due Deferral End Date | 8-K | 07/08/2016 | 10.2 | |
| 4.13 | Form of Amended and Restated Ten Percent (10%) Senior Secured Convertible Promissory Note | 8K | 11/16/2015 | 10.5 | |
| 4.14 | Registration Rights Agreement, dated July 1, 2015, between Xenetic Bioscience, Inc. and OJSC Pharmsynthez | 8-K | 07/08/2015 | 10.3 | |
| 4.15 | Form of First Amendment to Registration Rights Agreement | 8-K | 11/16/2015 | 10.8 | |
| 10.1 | Possible Offer for Xenetic Biosciences plc by General Sales & Leasing, Inc., dated October 21, 2013 | 8-K | 10/21/2013 | 9.1 | |
| 10.2 | Recommended Acquisition of Xenetic Biosciences plc by General Sales & Leasing, Inc. including Scheme of Arrangement | 8-K and 8-K/A | 11/25/2013 | 9.1 | |
| 10.3 | Announcement of Recommended Offer by General Sales and Leasing, Inc. for shares of Xenetic Biosciences plc, dated November 12, 2013 | 8-K | 11/25/2013 | 9.2 | |
| 10.4 | Agreement of Conveyance, Transfer and Assignment of Subsidiaries and Assumption of Obligations dated November 12, 2013 between General Sales Inc., Leasing, Inc., Oxbridge Technology Partners, SA, Shift It Media Company and General Aircraft, Inc. | 10-K | 11/27/2013 | 9.3 | |

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|-------|--|--------|------------|-------|
| 10.5† | Form of Rules of the Lipoxen plc Unapproved Share Option Plan dated July 18, 2000 (as amended by a resolution of the board of directors of Lipoxen plc passed on March 14, 2006) | 10-K | 04/15/2014 | 10.5 |
| 10.6† | Form of Xenetic Biosciences plc 2007 Share Option Scheme and US Addendum (as established in 2007 and by resolution of shareholders in 2010 and awarded by board resolution in 2012) | 10-K | 04/15/2014 | 10.6 |
| 10.7† | Form of Xenetic Biosciences, Inc. Equity Incentive Plan, effective January 23, 2014 | 10-K | 04/15/2014 | 10.7 |
| 10.8 | Master Clinical Research Services Agreement between Novotech Pty Limited and Xenetic Biosciences plc dated Feb. 6, 2013 | 10-K | 04/15/2014 | 10.17 |
| 10.9† | Employment Agreement, dated November 3, 2009, between Lipoxen plc and M. Scott Maguire | 10-K/A | 02/18/2015 | 10.01 |
| 10.10 | Form of Lease for Ledgemont Research Center, Lexington, Massachusetts dated August 1, 2013 between One Ledgemont LLC and Xenetic Bioscience, Inc. | 10-K/A | 02/18/2015 | 10.03 |
| 10.11 | Stock Purchase Agreement, dated January 29, 2014, between Xenetic Biosciences, Inc. and Baxter Healthcare SA | 10-K/A | 02/18/2015 | 10.08 |
| 10.12 | Stock Purchase Agreement Amendment No. 1, dated February 14, 2014, between Xenetic Biosciences, Inc. and Baxter Healthcare SA | 10-K/A | 02/18/2015 | 10.09 |
| 10.13 | Exclusive Research, Development and License Agreement, dated August 15, 2005, between Lipoxen Technologies Limited, Baxter Healthcare SA and Baxter Healthcare Corporation | 10-K/A | 02/18/2015 | 10.10 |
| 10.14 | Letter Agreement, dated December 11, 2006, between Lipoxen Technologies Limited, Baxter Healthcare SA, Baxter Healthcare Corporation and Serum Institute of India Limited | 10-K/A | 02/18/2015 | 10.11 |
| 10.15 | Amendment to the Exclusive Research, Development and License Agreement, dated December 13, 2006, between Lipoxen Technologies Limited, Baxter Healthcare SA and Baxter Healthcare Corporation | 10-K/A | 02/18/2015 | 10.12 |
| 10.16 | Second Amendment to the Exclusive Research, Development and License Agreement, dated May 28, 2009, between Lipoxen Technologies Limited, Baxter Healthcare SA and Baxter Healthcare Corporation | 10-K/A | 02/18/2015 | 10.13 |
| 10.17 | Amendment Number Four to the Exclusive Research, Development and License Agreement, dated August 10, 2010, between Lipoxen Technologies Ltd., Baxter Healthcare SA and Baxter Healthcare Corporation | 10-K/A | 02/18/2015 | 10.14 |
| 10.18 | Amendment Number Five to the Exclusive Research, Development and License Agreement, dated September 15, 2010, between Lipoxen Technologies Ltd., Baxter Healthcare SA and Baxter Healthcare Corporation | 10-K/A | 02/18/2015 | 10.15 |
| 10.19 | Form of Sixth Amendment to the Exclusive Research, Development and License Agreement, dated January 29, 2014, between Lipoxen Technologies Limited, Baxter Healthcare SA and Baxter Healthcare Corporation | 10-K/A | 02/18/2015 | 10.16 |
| 10.20 | Agreement on Co-Development and the Terms of Exclusive License dated August 4, 2011 between Lipoxen plc, Lipoxen Technologies LTD and SynBio LLC | 10-K/A | 02/18/2015 | 10.18 |
| 10.21 | Subscription Agreement in respect of ordinary shares in the capital of Lipoxen plc dated August 4, 2011 between SynBio LLC and Lipoxen plc | 10-K/A | 02/18/2015 | 10.19 |

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|---------|--|--------|------------|-------|---|
| 10.22 | Collaboration, Licence and Development Agreement, dated November 11, 2009, between Pharmsynthez ZAO and Lipoxen Technologies Ltd. | 10-K/A | 02/18/2015 | 10.20 | |
| 10.23 | Exclusive Patent and Know How Licence and Manufacturing Agreement, dated August 4, 2011, between Lipoxen plc, Lipoxen Technologies Ltd and Serum Institute of India Limited | 10-K/A | 02/18/2015 | 10.21 | |
| 10.24 | Intellectual Property Assignment between Dmitry Genkin, FDS Pharma, Lipoxen Technologies Limited and Xenetic Biosciences Inc. | 10-K | 04/15/2015 | 10.1 | |
| 10.25 | Securities Purchase Agreement, dated May 2015, between Xenetic Bioscience, Inc. and OJSC Pharmsynthez | 8-K | 07/08/2015 | 10.1 | |
| 10.26 | Security Agreement dated July 1, 2015, between Xenetic Bioscience, Inc. and OJSC Pharmsynthez | 8-K | 07/08/2015 | 10.4 | |
| 10.27 | Subsidiary Guarantee dated July 1, 2015, between Xenetic Bioscience, Inc. and OJSC Pharmsynthez | 8-K | 07/08/2015 | 10.5 | |
| 10.28 | Form of Assignment and Assumption Agreement | 8-K | 07/08/2015 | 10.7 | |
| 10.29 | Settlement Agreement, dated August 27, 2015, between Xenetic Biosciences (UK) Limited, Xenetic Biosciences, Inc., Lipoxen Technologies Limited and Colin Hill | 8-K | 09/02/2015 | 10.1 | |
| 10.30 | Form of Asset Purchase Agreement, dated as of November 13, 2015, by and among Xenetic Biosciences, Inc., Lipoxen Technologies, LTD, a U.K. corporation, AS Kevelt, an Estonian company and OJSC Pharmsynthez | 8-K | 11/16/2015 | 10.1 | |
| 10.31 | Form of First Amendment to Securities Purchase Agreement | 8-K | 11/16/2015 | 10.7 | |
| 10.32 | Form of First Amendment to Security Agreement | 8-K | 11/16/2015 | 10.9 | |
| 10.33 | Form of First Amendment to Subsidiary Guarantee | 8-K | 11/16/2015 | 10.10 | |
| 10.34 | Form of Transition, Services and Resupply Agreement by and among Xenetic Bioscience, Inc., AS Kevelt and OJSC Pharmsynthez | 8-K | 11/16/2015 | 10.11 | |
| 10.35 | Letter Agreement re. Appointment of Non – Employee, Independent Director of Xenetic Biosciences, Inc. for Roger D. Kornberg dated February 2016 | 8-K | 02/29/2016 | 10.1 | |
| 10.36† | Deferred Salary Security Agreement with Mr. Maguire | 8-K | 07/08/2016 | 10.1 | |
| 10.37† | Letter Agreement re: Appointment of Director of Xenetic Biosciences, Inc. for Jeffrey F. Eisenberg dated July 8, 2016 | 8-K | 07/17/2016 | 10.1 | |
| 10.38† | Letter Agreement re. Appointment of Non – Employee, Independent Director of Xenetic Biosciences, Inc. for Dr. Edward J. Benz dated November 18, 2016 | 8-K | 11/22/2016 | 10.1 | |
| 10.39† | Employment Agreement, dated December 1, 2016, between Xenetic Bioscience, Inc. and Jeffrey Eisenberg | 8-K | 12/6/2016 | 10.1 | |
| 21.1 | List of Subsidiaries | | | | X |
| 24.1 | Power of Attorney | 10-K | 03/31/2017 | 24.1 | |
| 31.1 | Certification of Principal Executive Officer, as required by Rule 13a-14(a) or Rule 15d-14(a) | | | | X |
| 31.2 | Certification of Principal Financial Officer, as required by Rule 13a-14(a) or Rule 15d-14(a) | | | | X |
| 32.1 | Certification of Principal Executive Officer and Principal Financial Officer, as required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 36 of Title 18 of the United States Code (18 U.S.C. §1350) | 10-K | 03/31/2017 | 24.1 | |
| 101.INS | XBRL Instance Document. | | | | |
| 101.SCH | XBRL Taxonomy Extension Schema Document. | | | | |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase Document. | | | | |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document. | | | | |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document. | | | | |
| 101.PRE | XRBL Taxonomy Extension Presentation Linkbase Document. | | | | |

† Indicates a management contract or any compensatory plan, contract or arrangement.

SUBSIDIARIES OF REGISTRANT

| Subsidiary | Country / State of Incorporation |
|--------------------------------|---|
| Xenetic Biosciences (UK), Ltd. | United Kingdom registered company |
| Lipoxen Technologies, Ltd. | United Kingdom registered company |
| Xenetic Technologies, Inc. | Delaware |
| SymbioTec, GmbH | German Registered Company |

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Michael Scott Maguire, certify that:

1. I have reviewed this Amendment No. 1 to the annual report on Form 10-K of Xenetic Biosciences, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Dated: May 1, 2017

By: /s/ Michael Scott Maguire
Michael Scott Maguire
Chief Executive Officer and President
(Principal Executive Officer)

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, James Parslow, certify that:

1. I have reviewed this Amendment No. 1 to the annual report on Form 10-K of Xenetic Biosciences, Inc.; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Dated: May 1, 2017

By: /s/ James Parslow
James Parslow
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)