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UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.**

For the quarterly period ended June 30, 2017

☐ **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	**45-2952962**
(State or other jurisdiction of incorporation or organization)	**(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)

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 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	☐	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☒
(Do not check if a smaller reporting company)			
Emerging growth company	☒		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

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

As of August 11, 2017, the number of outstanding shares of the registrant's common stock was 8,717,541.

XENETIC BIOSCIENCES, INC.
FORM 10-Q
QUARTERLY PERIOD ENDED JUNE 30, 2017

PART I – FINANCIAL INFORMATION

ITEM 1 – FINANCIAL STATEMENTS

XENETIC BIOSCIENCES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS

	June 30, 2017 (Unaudited)	December 31, 2016
ASSETS		
Current assets:		
Cash	$ 2,331,950	$ 4,048,131
Restricted cash	66,510	66,510
Accounts receivable	–	3,000,000
Prepaid expenses and other	1,432,512	1,224,009
Total current assets	3,830,972	8,338,650
Property and equipment, net	37,610	42,366
Goodwill	3,283,379	3,283,379
Indefinite-lived intangible assets	9,243,128	9,243,128
Other assets	43,380	66,342
Total assets	$ 16,438,469	$ 20,973,865
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,013,316	$ 1,006,903
Accrued expenses	920,313	838,888
Deferred revenue and other current liabilities	67,495	20,205
Total current liabilities	2,001,124	1,865,996
Deferred tax liability	2,918,518	2,918,518
Other liabilities	10,016	19,876
Total liabilities	4,929,658	4,804,390
Commitments and contingent liabilities (Note 10)		
Stockholders' equity:		
Preferred stock, 10,000,000 shares authorized		
Series B, $0.001 par value: 2,120,742 and 2,305,742 issued and outstanding as of June 30, 2017 and December 31, 2016, respectively	2,120	2,305
Series A, $0.001 par value: 970,000 shares issued and outstanding as of June 30, 2017 and December 31, 2016	970	970
Common stock, $0.001 par value; 45,454,546 shares authorized as of June 30, 2017 and December 31, 2016; 9,041,426 and 8,731,029 shares issued as of June 30, 2017 and December 31, 2016, respectively; 8,717,541 and 8,407,144 shares outstanding as of June 30, 2017 and December 31, 2016, respectively	9,040	8,730
Additional paid in capital	164,646,683	163,522,921
Accumulated deficit	(148,122,556)	(142,338,005)
Accumulated other comprehensive income	253,734	253,734
Treasury stock	(5,281,180)	(5,281,180)
Total stockholders' equity	11,508,811	16,169,475
Total liabilities and stockholders' equity	$ 16,438,469	$ 20,973,865

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

XENETIC BIOSCIENCES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	THREE MONTHS ENDED JUNE 30,		SIX MONTHS ENDED JUNE 30,	
	2017	**2016**	**2017**	**2016**
Operating costs and expenses:				
Cost of research and development revenue	$ (59,091)	$ –	$ (59,091)	$ –
Research and development	(873,837)	(2,205,213)	(2,094,981)	(2,634,494)
In-process research and development expense	–	(39,500,000)	–	(39,500,000)
General and administrative	(1,970,471)	(1,557,677)	(3,605,004)	(2,980,043)
Loss from operations	(2,903,399)	(43,262,890)	(5,759,076)	(45,114,537)
Other non-operating income (expense):				
Change in fair value of derivative liability	–	1,769,275	–	1,905,289
Loss on issuance of hybrid debt instruments	–	–	–	(1,584,218)
Loss on conversion of debt	–	(6,187,337)	–	(6,187,337)
Other income (expense)	(25,276)	12,863	(34,632)	(13,551)
Interest income	10,201	13	10,201	27
Interest expense	(456)	(103,086)	(1,044)	(348,470)
Total other non-operating expense	(15,531)	(4,508,272)	(25,475)	(6,228,260)
Net loss	$ (2,918,930)	$ (47,771,162)	$ (5,784,551)	$ (51,342,797)
Basic and diluted loss per share	$ (0.34)	$ (6.12)	$ (0.67)	$ (8.28)
Weighted-average shares of common stock outstanding, basic and diluted	8,706,387	7,804,187	8,613,127	6,197,776

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

XENETIC BIOSCIENCES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	SIX MONTHS ENDED JUNE 30,	
	2017	**2016**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (5,784,551)	$ (51,342,797)
Adjustments to reconcile net loss to net cash used in operating activities:		
In-process research and development expense	–	39,500,000
Depreciation	14,020	18,164
Amortization of hybrid debt instrument discount	–	204,003
Non-cash interest expense	–	142,929
Share-based payments	1,225,490	791,831
Warrant expense for services	(95,906)	1,118,642
Vendor share-based payments	60,280	107,790
Change in fair value of derivative liability	–	(1,905,289)
Loss on issuance of hybrid debt instruments	–	1,584,218
Loss on conversion of debt	–	6,187,337
Changes in operating assets and liabilities:		
Accounts receivable	3,000,000	–
Prepaid expenses and other assets	(185,541)	36,990
Accounts payable, accrued expenses and other liabilities	59,291	421,823
Net cash used in operating activities	(1,706,917)	(3,134,359)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(9,264)	(14,613)
Net cash used in investing activities	(9,264)	(14,613)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of debt	–	3,500,000
Payments on loan from related party	–	(242,471)
Net cash provided by financing activities	–	3,257,529
Net change in cash, excluding restricted cash	(1,716,181)	108,557
Cash at beginning of period	4,048,131	132,229
Cash at end of period	$ 2,331,950	$ 240,786
SUPPLEMENTAL CASH FLOW INFORMATION:		
Cash paid for interest	$ 1,100	$ –
SUPPLEMENTAL SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Convertible debt paid in common stock	$ –	$ 6,500,000
Interest paid in common stock	$ –	$ 227,829
Issuance of warrants in connection with debt	$ –	$ 1,701,214
Recording of derivative liability in connection with debt	$ –	$ 3,346,423
Reclassification of common shares issuable to accounts payable	$ 65,977	$ –
Conversion of Series B preferred stock to common stock	$ 185	$ –
Issuance of common stock for promissory note converted in 2016	$ 125	$ –

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

1. The Company

Background

Xenetic Biosciences, Inc. ("Xenetic" or the "Company)" incorporated in the state of Nevada and based in Lexington, Massachusetts, is a biopharmaceutical company focused on the discovery, research and development of next-generation biologic drugs and novel orphan oncology therapeutics. Xenetic's proprietary drug development platforms include PolyXen™, which enables next-generation biologic drugs by improving their half-life and other pharmacological properties. The Company incorporates its patented and proprietary technologies into a number of drug candidates currently under development either in-house or with biotechnology and pharmaceutical collaborators in order to create what it believes will be next-generation biologic drugs and therapeutics. Xenetic's lead investigational product candidates include oncology therapeutic XBIO-101 (sodium cridanimod) for the treatment of progesterone resistant endometrial cancer ("EC"), and a polysialylated form of erythropoietin for the treatment of anemia in pre-dialysis patients with chronic kidney disease.

Going Concern and Management's Plan

The Company incurred a net loss of approximately $5.8 million for the six months ended June 30, 2017, and had an accumulated deficit of $148.1 million as of June 30, 2017. The Company's working capital was approximately $1.8 million as of June 30, 2017, and $6.5 million as of December 31, 2016. The Company expects to continue incurring losses for the foreseeable future and will need to raise additional capital or pursue other strategic alternatives in the very near term in order to continue pursuit of its business plan and continue as a going concern.

The Company believes that it has access to capital resources through possible public or private equity offerings, debt financings, corporate collaborations or other means; however, it has not secured any commitment for new financing at this time. The terms, timing and extent of any future financing will depend upon several factors, including the achievement of progress in its clinical development programs, its ability to identify and enter into licensing or other strategic arrangements, and factors related to financial, economic and market conditions, many of which are beyond its control.

While these condensed consolidated financial statements have been prepared on a going concern basis, if the Company does not successfully raise additional working capital, there can be no assurance that the Company will be able to continue its operations, and these conditions raise substantial doubt about its ability to continue as a going concern. Under such circumstances, the Company would have to further reduce the planned scale of, or possibly suspend, some or all of its pre-clinical development initiatives and clinical trials. In addition, the Company would have to continue to reduce its general and administrative and other operating expenses and delay or cease the purchase of clinical research services if and until the Company is able to obtain additional financing. The accompanying condensed consolidated financial statements do not include any adjustments related to the recoverability or classification of asset carrying amounts or the amounts and classification of liabilities that may result should the Company be unable to continue as a going concern.

2. Summary of Significant Accounting Policies

Preparation of Interim Financial Statements

The accompanying condensed consolidated financial statements were prepared by the Company pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC") and, in the opinion of management, include all normal and recurring adjustments necessary to present fairly the results of the interim periods shown. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles have been condensed or omitted pursuant to such SEC rules and regulations. Management believes that the disclosures made are adequate to make the information presented not misleading. The results for the interim periods are not necessarily indicative of results for the full year. The condensed consolidated financial statements contained herein should be read in conjunction with the consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 31, 2017 and amended on May 1, 2017.

Reclassifications

Certain items previously reported in specific financial statement captions have been reclassified to conform to the current period presentation, including vendor share-based payments of $0.1 million in the statements of cash flows. Such reclassifications do not materially impact previously reported net losses, total assets, liabilities or stockholders' equity.

Principles of Consolidation

The financial statements of the Company include the accounts of Xenetic Biosciences (UK) Limited and its wholly owned subsidiaries: Lipoxen Technologies Limited, Xenetic Bioscience, Incorporated, and SymbioTec GmbH ("SymbioTec"). All material intercompany balances and transactions have been eliminated in consolidation.

Recently Adopted Accounting Standards

In March 2016, the Financial Accounting Standards Board issued ASU 2016-09, *Compensation – Stock Compensation (Topic 718)* ("ASU 2016-09"). ASU 2016-09 simplifies several aspects of employee share-based payment accounting, including income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 is effective for fiscal years beginning after December 15, 2016, including interim periods within that year. The Company adopted ASU 2016-09 effective January 1, 2017. The adoption of this standard did not have a material impact on the Company's financial statements or related disclosures as:

- There have been no stock option exercises as a US company and, therefore, there are no excess tax benefits related to windfalls. Moreover, the Company maintains a full valuation allowance and expects to do so for the foreseeable future.
- The Company has elected to account for forfeitures as they occur, which the Company adopted using a modified retrospective approach and there was no material cumulative effect adjustment to be recorded to opening retained earnings.
- The Company will classify cash paid to taxing authorities arising from the withholding of shares from employees in cash flows from financing activities.

3. Significant Strategic Collaborations – Related Parties

The Company has entered into various research, development, license and supply agreements with the Company's controlling stockholder PJSC Pharmsynthez ("Pharmsynthez") and SynBio LLC ("SynBio"), which is a wholly owned subsidiary of Pharmsynthez, Serum Institute of India ("Serum Institute") and Shire plc ("Shire"). The Company and its collaborative partners continue to engage in research and development activities with no resultant commercial products through June 30, 2017. No amounts were recognized as revenue related to these agreements during the six months ended June 30, 2017 or 2016.

4. Property and Equipment, net

Property and equipment, net consists of the following:

	June 30, 2017	December 31, 2016
Laboratory equipment	$ 264,583	$ 264,583
Office and computer equipment	46,634	37,370
Leasehold improvements	26,841	26,841
Furniture and fixtures	20,263	20,263
Property and equipment – at cost	358,321	349,057
Less accumulated depreciation	(320,711)	(306,691)
Property and equipment – net	$ 37,610	$ 42,366

Depreciation expense was approximately $6,000 and $9,000 for the three months ended June 30, 2017 and 2016, respectively, and approximately $14,000 and $18,000 for the six months ended June 30, 2017 and 2016, respectively.

5. Hybrid Debt Instrument

During 2015 and 2016 the Company entered into several financing arrangements which included the issuance of convertible notes and warrants to purchase shares of common stock. On July 1, 2015, the Company entered into a Securities Purchase Agreement (the "SPA") with Pharmsynthez providing for the issuance of a minimum of a $3.0 million, 10% Senior Secured Collateralized Convertible Promissory Note (the "SPA Note"). The SPA also provided for the issuance of certain warrants up to the amount of the SPA Note to purchase shares of common stock at the lesser of $6.60 per share and 120% of the price per share in the Company's next capital raise of at least $7 million (the "Exercise Price").

On November 13, 2015, the Company entered into an Asset Purchase Agreement (the "APA") with Pharmsynthez and AS Kevelt ("Kevelt") providing for the issuance of a minimum of a $3.5 million, 10% Senior Secured Collateralized Convertible Promissory Note (the "Initial APA Note") and the transfer to the Company of certain intellectual property rights with respect to XBIO-101 in exchange for, among other things, 3,378,788 shares of our common stock. The APA also provided for the issuance of certain warrants covering up to half the amount of the Initial APA Note to purchase shares of common stock at the Exercise Price. During the six month period ended June 30, 2016, the Company issued $3.5 million of convertible debt as well as the associated warrants, both in connection with the Initial APA Note. The convertible debt and its embedded debt-like features were recorded within current liabilities as a hybrid debt instruments. A $1.6 million loss was recorded upon the issuance of hybrid debt instruments. In addition, a $1.9 million gain was recorded during the six months ended June 30, 2016, reflecting the change in fair value of the hybrid debt instruments during the period.

On April 22, 2016, Pharmsynthez converted all of the convertible notes issued by the Company to Pharmsynthez in the principal amount of $6.5 million plus accrued interest of approximately $0.2 million, resulting in a $6.2 million loss. The conversion rate was $4.95 per share. As such, the Company issued to Pharmsynthez 1,373,036 shares of common stock in connection with conversion of the convertible notes. The related embedded derivatives, which had been bifurcated from the host debt and accounted for separately, were settled by action of the conversion. Following the settlement of these instruments, no hybrid debt instruments were outstanding as of June 30, 2017 and December 31, 2016, respectively.

6. Fair Value Measurements

ASC Topic 820, *Fair Value Measurement,* defines fair value as the price that would be received to sell an asset or be paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Company applies the following fair value hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement. Level 1 inputs are quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 2 utilizes quoted market prices in markets that are not active, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency. Level 3 inputs are unobservable inputs for the asset or liability in which there is little, if any, market activity for the asset or liability at the measurement date.

The Company's cash and restricted cash are measured at fair value and are classified as Level 1 in the fair value hierarchy. The carrying amount of certain of the Company's financial instruments approximate fair value due to their short maturities. The Company measures derivative liabilities at fair value on a recurring basis and are classified as Level 3 in the fair value hierarchy.

There were no financial instruments classified as Level 3 in the fair value hierarchy during the six months ended June 30, 2017. For the six months ended June 30, 2016, the following table provides a summary of the changes in fair value of the compound derivative measured at fair value on a recurring basis using significant unobservable inputs.

Balance as of January 1, 2016	$	3,544,222
Issuances of compound derivative instrument		3,346,423
Change in fair value of compound derivative instrument		(1,905,289)
Settlement of derivative instrument through conversion of debt host		(4,985,356)
Balance as of June 30, 2016	$	–

7. Stockholders' Equity

Common Stock

During the six months ended June 30, 2017, 185,000 shares of Series B preferred stock were converted into 185,000 shares of common stock.

In connection with the Company's underwritten public offering in November 2016 and pursuant to the terms of the APA, a $500,000 10% convertible promissory note issued to our controlling stockholder, Pharmsynthez, in July 2016 automatically converted into shares of common stock in March 2017. The associated 125,397 shares issued to Pharmsynthez represent both owed principal and accrued interest.

On April 29, 2016, the Company closed the APA with an effective date of April 27, 2016, acquiring in-process research and development ("IPR&D") related to certain intellectual property rights with respect to the immunomodulator product XBIO-101 (formerly known as Virexxa) held by Kevelt, which included the grant of the worldwide right to develop, market and license XBIO-101 for certain uses. In connection with the closing of the APA, the Company issued 3,378,788 shares of its common stock to Pharmsynthez. As there was no alternative use for the IPR&D, the Company recognized $39.5 million of expense based on the fair value of intellectual property received, which was determined to be more reliably measured than the related equity consideration.

Warrants

In connection with the Company's issuance of the Initial APA Note in March 2016, the Company issued a warrant to purchase 353,540 shares of common stock at the Exercise Price (the "Initial APA Warrant"). The Initial APA Warrant has a five-year term and is exercisable commencing March 31, 2016. The fair value of the warrant was calculated using the Black-Scholes option pricing model. The key valuation assumptions used consist of the Company's stock price, a risk-free rate of 1.42% and an expected volatility of 135%.

As of June 30, 2017 and December 31, 2016, there were warrants to purchase an aggregate of 3,522,225 shares of common stock at a weighted average exercise price of $4.30 outstanding, which had been issued in connection with debt and equity financing arrangements.

8. Share-Based Compensation

Total share-based compensation related to stock options, common stock awards, and non-financing warrants was $0.5 million and $1.7 million during the three months ended June 30, 2017 and 2016, respectively, and $1.2 million and $2.0 million for the six months ended June 30, 2017 and 2016, respectively.

Share-based compensation expense is classified in the condensed consolidated statements of operations as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Research and development expenses	$ 12,246	$ 1,427,691	$ 121,779	$ 1,234,240
Administrative expenses	511,622	304,112	1,068,085	784,023
	$ 523,868	$ 1,731,803	$ 1,189,864	$ 2,018,263

Employee Stock Options

During the six months ended June 30, 2017, the Company granted 350,000 employee stock options. The key valuation assumptions used consisted of the Company's stock price, a risk-free rate of 0.19% and an expected volatility of approximately 110%. During the six months ended June 30, 2016, the Company granted 12,122 employee stock options. The key valuation assumptions used consisted of the Company's stock price, a risk-free rate of 0.54% and an expected volatility of 123%. During the six months ended June 30, 2017 and 2016, the Company extended the exercise expiration date of certain former employee stock option awards resulting in a change in incremental value of approximately $4,000 and $24,000, respectively, which was charged to administrative expense. The Company recognized a total of $0.5 million and $0.3 million of compensation expense related to employee stock options during the three months ended June 30, 2017 and 2016, respectively, and $1.1 million and $0.8 million during the six months ended June 30, 2017 and 2016, respectively.

Non-Employee Stock Options

No non-employee stock options were granted and no non-employee stock options were exercised during the six months ended June 30, 2017 or 2016. The Company recognized approximately $30,000 and $70,000 of compensation expense related to non-employee stock options during the three and six months ended June 30, 2017, respectively, and approximately $3,000 during both the three and six months ended June 30, 2016, respectively.

Common Stock Awards

During the three months ended June 30, 2017 and 2016, the Company agreed to grant 7,235 and 9,581 common stock awards, respectively, and 12,710 and 11,939 common stock awards during the six months ended June 30, 2017 and 2016, respectively, based on the value of the services provided and the average stock price during each respective quarter. As all services were rendered in each respective quarter, approximately $30,000 and $50,000 of compensation expense related to common stock awards was recognized during the three month periods ended June 30, 2017 and 2016, respectively, and approximately $60,000 and $0.1 million during the six months ended June 30, 2017 and 2016, respectively. The common stock awards were not issued as of June 30, 2017.

Warrants

In connection with certain of the Company's collaboration agreements and consulting arrangements, the Company has issued warrants to purchase shares of common stock as payment for services. As of June 30, 2017 and December 31, 2016, warrants to purchase 646,249 shares of common stock were outstanding. The fair value of these warrants were determined at each issuance date using the Black-Scholes option pricing model. The warrants are subject to re-measurement at each reporting period until the measurement date is reached. Expense is recognized on a straight-line basis over the expected service period or at the date of issuance, if there is not a service period. The Company recognized a gain of approximately $80,000 and expense of $1.4 million related to collaboration and consulting warrants during the three months ended June 30, 2017 and 2016, respectively. For the six months ended June 30, 2017 and 2016, the Company recognized a gain of $0.1 million and expense of $1.1 million, respectively, related to collaboration and consulting warrants.

No warrants have been issued in the first six months of 2017. During the first six months of 2016, warrants to purchase 212,222 shares of common stock were issued.

9. Income Taxes

During the six months ended June 30, 2017 and 2016, there was no provision for income taxes as the Company incurred losses during both periods. Deferred tax assets and liabilities reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The Company records a valuation allowance against its deferred tax assets as the Company believes it is more likely than not the deferred tax assets will not be realized. The valuation allowance against deferred tax assets was approximately $23.2 million and $21.5 million as of June 30, 2017 and December 31, 2016, respectively.

As of June 30, 2017, and December 31, 2016, the net deferred tax liability of $2.9 million on the condensed consolidated balance sheets is related to book and tax basis differences for intangible assets with indefinite lives that were acquired in the Company's January 2012 acquisition of SymbioTec. In accordance with ASC 740-10-30-18, the deferred tax liability related to the intangible assets cannot be used to offset deferred tax assets when determining the amount of the valuation allowance for deferred tax assets which are not more-likely-than-not to be realized. This results in a net deferred tax liability, even though the Company has a full valuation allowance on its other net deferred tax assets. This net deferred tax liability will continue to be reflected on the balance sheet until the related intangible assets are no longer held by the Company.

As of June 30, 2017 and December 31, 2016, the Company did not record any unrecognized tax positions.

10. Commitments and Contingencies

Leases

In August 2013, the Company entered into an agreement to lease office and laboratory space in Lexington, Massachusetts under an operating lease with a commencement date of January 1, 2014 and a termination date of January 31, 2019. In connection with this lease, the Company is required to maintain a $66,000 letter of credit as a security deposit. In addition, the Company recorded approximately $50,000 as prepaid rent as of June 30, 2017, with approximately $20,000 recorded as a non-current asset. The Company also incurred a liability of approximately $90,000 with respect to the Company's contribution to the landlord's leasehold improvements, of which approximately $30,000 is outstanding as of June 30, 2017, with approximately $10,000 recorded as a non-current liability, respectively. This liability is repayable as additional rent expense over the term of the lease and bears interest at 6%. In addition, in January 2017, the Company leased office space in Miami, Florida requiring a total of approximately $6,000 in payments through the lease termination date in December 2017.

11. Related Party Transactions

The Company has entered into various research, development, license and supply agreements with its controlling stockholder, Pharmsynthez (as well as SynBio, a wholly owned subsidiary of Pharmsynthez), and Serum Institute, each a related party whose relationship and ownership has not materially changed from that disclosed in the Company's Annual Report on Form 10-K for the years ended December 31, 2016 filed with the SEC on March 31, 2017, as amended on May 1, 2017.

12. Subsequent Events

The Company performed a review of events subsequent to the balance sheet date through the date the financial statements were issued and determined that there were no such events requiring recognition or disclosure in the financial statements except as noted below.

On August 27, 2015, Eurogentec S.A. ("EGT"), a former supplier of the Company, brought an action against the Company in the Commercial Court of the Canton of Zurich Switzerland (the "Court") alleging nonpayment of invoices for services provided by EGT. The Company requested dismissal of the claim based on the argument that EGT knew, or should have known, that the services provided by EGT should not have been performed or had not been properly performed. On July 12, 2017, the Court rendered a decision in favor of EGT ordering the Company to pay approximately $0.7 million to EGT, representing all amounts that EGT alleged were owed by the Company, plus interest and court and legal fees.

The Company had previously recorded $0.6 million related to this contract when the relevant costs were incurred. As a result of this ruling, the Company has accrued an additional $0.1 million related to interest and fees associated with the ruling. The Company intends to defend this action vigorously.

ITEM 2 – MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report contains both historical and forward-looking statements. The forward-looking statements in this quarterly report are not based on historical facts, but rather reflect the current expectations of our management concerning future results and events. These forward-looking statements include, but are not limited to, statements concerning our plans to continue the development of our proposed drug candidates; our expectations regarding the nature, timing and extent of clinical trials and proposed clinical trials; our expectations regarding the timing for proposed submissions of regulatory filings, including but not limited to any Investigational New Drug ("IND") filing or any new drug application ("NDA"); the nature, timing and extent of collaboration arrangements; the expected results pursuant to collaboration arrangements including the receipts of future payments that may arise pursuant to collaboration arrangements; the outcome of our plans to obtain regulatory approval of our drug candidates; the outcome of our plans for the commercialization of our drug candidates; our plans to address certain markets, engage third party manufacturers, and evaluate additional drug candidates for subsequent commercial development, and the likelihood and extent of competition to our drug candidates.

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

In some cases, these statements may be identified by terminology such as "may", "will", "should", "expect", "plan", "anticipate", "believe", "estimate", "predict", "potential", or "continue", or the negative of such terms and other comparable terminology. Although we believe that the expectations reflected in the forward-looking statements contained herein are reasonable, we cannot guarantee future results, the levels of activity, performance or achievements. These statements involve known and unknown risks and uncertainties that may cause our or our industry's results, levels of activity, performance or achievements to be materially different from those expressed or implied by forward-looking statements.

The Management's Discussion and Analysis of Financial Condition and Results of Operations (the "MD&A") should be read together with our financial statements and related notes included elsewhere in this quarterly report. This quarterly report, including the MD&A, contains trend analysis and other forward-looking statements. Any statements in this quarterly report that are not statements of historical facts are forward-looking statements. These forward-looking statements made herein are based on our current expectations, involve a number of risks and uncertainties and should not be considered as guarantees of future performance.

Some factors that could cause actual results to differ materially include without limitation:

- our need to raise additional working capital for the purpose of further developing our various drug candidates and to continue as a going concern;
- our ability to finance our business;
- our ability to achieve milestone and other payments associated with our co-development collaborations and strategic arrangements;
- the impact of new technologies on our drug candidates and our competition;
- changes in laws or regulations of governmental agencies;
- interruptions or cancellation of existing contracts;
- impact of competitive products and pricing;
- product demand and market acceptance and risks;
- the presence of competitors with greater financial resources;
- product development and commercialization risks;
- continued availability of supplies or materials used in manufacturing at the current prices;
- the ability of management to execute plans and motivate personnel in the execution of those plans;
- adverse publicity related to our products or the Company itself;
- adverse claims relating to our intellectual property;
- the adoption of new, or changes in, accounting principles;
- the costs inherent with complying with new statutes and regulations applicable to public reporting companies, such as the Sarbanes-Oxley Act of 2002; and
- other new lines of business that the Company may enter in the future.

These factors are not necessarily all of the important factors that could cause actual results to differ materially from those expressed in the forward-looking statements in this Quarterly Report. Other unknown or unpredictable factors also could have material adverse effects on our future results, including, but not limited to, those discussed in the section titled "Risk Factors." The forward-looking statements in this quarterly report are made only as of the date of this Quarterly Report, and we do not have any obligation to publicly update any forward-looking statements to reflect subsequent events or circumstances.

BUSINESS OVERVIEW

We are a clinical-stage biopharmaceutical company focused on the discovery, research and development of next-generation biologic drugs and novel orphan oncology therapeutics. We have an extensive patent portfolio of over 200 issued patents and more than 65 pending patent applications in the United States and worldwide, which covers various aspects of our PolyXen platform technology and advanced polymer conjugate technologies, as well as our proprietary biologic drugs and novel oncology drug candidates. We believe our portfolio positions us well for strategic partnership and commercialization opportunities. Our objective is to maximize opportunities to out-license assets from our portfolio in order to generate working capital to both build long-term stockholder value and provide us with the funding necessary to clinically develop our orphan oncology drug candidate pipeline through market launch.

Our lead drug candidate, XBIO-101 (sodium cridanimod), is a small-molecule immunomodulator and interferon inducer, which, in preliminary studies, has been shown to increase progesterone receptor ("PrR") expression in endometrial tissue. We have exclusive rights to develop and commercialize XBIO-101 worldwide, except for specified countries in the Commonwealth of Independent States, including Russia. XBIO-101 has been granted orphan drug designation by the U.S. Food and Drug Administration ("FDA") for the potential treatment of progesterone receptor negative ("PrR-") endometrial cancer in conjunction with progesterone therapy. Patient enrollment for the Phase 2 trial for XBIO-101 commenced in June 2017.

- The primary objective of the open-label, multi-center, single-arm, two-period Phase 2 study is to assess the antitumor activity of XBIO-101 in conjunction with progestin therapy as measured by Overall Disease Control Rate in women with recurrent or persistent endometrial carcinoma not amenable to surgical treatment or radiotherapy who have either failed progestin monotherapy or who have been identified as PrR-. Secondary objectives include assessments of efficacy and safety/tolerability parameters.
- The study is expected to enroll a total of 72 women with recurrent or persistent endometrial cancer not amenable to surgical treatment or radiotherapy but suitable to be treated with progestins. All subjects determined to be PrR- at screening, as well as those subjects who experience disease progression after at least 4 weeks of progestin monotherapy, will receive XBIO-101 in combination with continued progestin treatment. Subjects will receive treatment until disease progression as defined according to RECIST 1.1 criteria.

Our lead proprietary technology is PolyXen™, an enabling platform technology designed for protein or peptide therapeutics. It uses the natural polymer polysialic acid ("PSA") to prolong a drug's circulating half-life and potentially improve other pharmacological properties. PolyXen has been demonstrated in human clinical trials to confer extended half-life to biotherapeutics such as recombinant human erythropoietin and recombinant Factor VIII ("rFVIII"). We believe this technology may be used in a variety of drug candidates to enhance the properties of the therapeutic, potentially providing advantages over competing products.

Recent Developments

In May 2017, we announced that our strategic collaborator, Shire, had terminated further development of SHP656, its polysialylated rFVIII drug candidate being developed using our proprietary PolyXen technology. While Shire's Phase 1/2 trial demonstrated SHP656's efficacy and pharmacokinetic data commensurate with the profile of an extended half-life rFVIII product, the pre-defined once-weekly dosing criterion set forth in the research, development, license and supply agreement was not met. Furthermore, to our knowledge, there were no drug-related adverse events, serious adverse events, or rFVIII inhibitors reported to date. Though the trial's pre-defined once-weekly dosing criterion was not met, we intend to explore the potential for future collaborations with Shire.

We are also developing a broad pipeline of clinical candidates for next-generation biologics and novel oncology therapeutics in a number of orphan disease indications. Though we hold a broad patent portfolio, the current focus of our internal development efforts is currently limited to research and development of our lead product candidate XBIO-101 and lead proprietary technology PolyXen because of capital constraints.

Critical Accounting Estimates

The preparation of our financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amount of expenses during the reporting period. On an ongoing basis, we evaluate management's estimates that are based on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. The result of these evaluations forms the basis for making judgments about the carrying values of assets and liabilities and the reported amount of expenses that are not readily apparent from other sources. Because future events and their effects cannot be determined with certainty, actual results could differ from our assumptions and estimates, and such differences could be material.

There has been no material change to our critical accounting estimates since those critical accounting estimates described in our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 31, 2017, as amended on May 1, 2017.

RESULTS OF OPERATIONS

Comparison of Quarter Ended June 30, 2017 and 2016

The comparison of our historical results of operations for the three months ended June 30, 2017 to the three months ended June 30, 2016 is as follows:

Description	Quarter Ended June 30, 2017	Quarter Ended June 30, 2016	Increase (Decrease)	Percentage Change
Cost of research and development revenue	$ (59,091)	$ –	$ 59,091	100.0
Research and development expenses	(873,837)	(2,205,213)	(1,331,376)	(60.4)
IPR&D expense	–	(39,500,000)	(39,500,000)	(100.0)
General and administrative expenses	(1,970,471)	(1,557,677)	412,794	26.5
Loss from operations	(2,903,399)	(43,262,890)	(40,359,491)	(93.3)
Other non-operating income (expense):				
Change in fair value of derivative liability	–	1,769,275	1,769,275	100.0
Loss on conversion of debt	–	(6,187,337)	(6,187,337)	(100.0)
Other income (expense)	(25,276)	12,863	38,139	296.5
Interest income	10,201	13	(10,188)	(78,369.2)
Interest expense	(456)	(103,086)	(102,630)	(99.6)
Net loss	$ (2,918,930)	$ (47,771,162)	$ (44,852,232)	(93.9)

Cost of Research and Development Revenue

Cost of research and development revenue represents costs related to funded research and development programs conducted on behalf of third parties in 2017. Costs are expensed as incurred. There were no such third party programs in 2016.

Research and Development Expenses

Overall, corporate research and development ("R&D") expenses for the quarter ended June 30, 2017 decreased by $40.8 million primarily due to the decrease of in-process R&D ("IPR&D") expense of $39.5 million. During the quarter ended June 30, 2016, we expensed $39.5 million of IPR&D associated with the closing of our asset acquisition of Kevelt. There was no similar expense in the quarter ended June 30, 2017. Excluding the effects of the write-off of the IPR&D, R&D expenses decreased $1.3 million, or 60.4% to $0.9 million from $2.2 million in the comparable quarter in 2016. The table below sets forth the R&D costs incurred by us, by category of expense, for the three months ended June 30, 2017 and 2016:

	Three Months Ended,	
Category of Expense	June 30, 2017	June 30, 2016
IPR&D expense	$ –	$ 39,500,000
Outside services and contract research organizations	642,906	563,233
Salaries and wages	132,290	120,233
Share-based compensation expense	12,245	1,427,691
Other	86,396	94,056
Total research and development expense	$ 873,837	$ 41,705,213

The decrease in R&D expenses exclusive of the IPR&D charge was primarily due to a decrease in share-based compensation expense of $1.4 million related to warrants issued to Serum Institute in 2016. Ongoing R&D costs associated with the XBIO-101 program were slightly higher in 2017 compared to 2016 primarily due to the initiation of XBIO-101 phase 2 clinical trial.

General and Administrative Expenses

General and administrative expenses increased by approximately $0.4 million or 26.5% for the three months ended June 30, 2017, to $2.0 million from $1.6 million in the comparable quarter in 2016. The most significant drivers of the change were related to increases in personnel costs including salary, share-based compensation and travel as we hired our Chief Operating Officer in December 2016 and our Chief Financial Officer in April 2017. In addition, we accrued an additional $0.1 million related to litigation and increased our investor and public relations outreach following our underwritten public offering in November 2016.

Hybrid Debt Instruments

During the three months ended June 30, 2016, we recorded a net charge of approximately $4.4 million associated with hybrid debt instruments including a $6.2 million loss on conversion of debt offset by a $1.8 million gain from changes in derivative fair value during the quarter as well as the interest expense associated with the instruments. All hybrid debt instruments were settled in 2016 and none were issued or outstanding in 2017.

On April 22, 2016, Pharmsynthez converted all of the convertible notes of our Company in the principal amount of $6.5 million plus accrued interest of approximately $0.2 million, issued by us to Pharmsynthez resulting in a $6.2 million loss. The conversion rate was $4.95 per share. As such, we issued to Pharmsynthez 1,373,036 shares of common stock in connection with conversion of the convertible notes. The related embedded derivatives, which had been bifurcated from the host debt and accounted for separately, were settled by action of the conversion. Following the settlement of these instruments there were no hybrid debt instruments outstanding as of June 30, 2017 and December 31, 2016, respectively.

Other Income (Expense)

Other income (expense) increased approximately $38,000, or 296.5% from approximately $13,000 of income for the three months ended June 30, 2016 to an approximate $25,000 expense for the three months ended June 30, 2017. This increase is primarily related to changes in foreign currency exchange rates between the periods.

Interest Expense

Interest expense decreased by approximately $0.1 million, or 100%, to approximately $1,000 for the three months ended June 30, 2017. The decrease is due to the settlement of all outstanding debt in connection with our underwritten public offering in November 2016.

Comparison of Six Months Ended June 30, 2017 and 2016

The comparison of our historical results of operations for the six months ended June 30, 2017 to the six months ended June 30, 2016 is as follows:

Description	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016	Increase (Decrease)	Percentage Change
Cost of research and development revenue	$ (59,091)	$ –	$ 59,091	100.0
Research and development expenses	(2,094,981)	(2,634,494)	(539,513)	(20.5)
IPR&D expense	–	(39,500,000)	(39,500,000)	(100.0)
General and administrative expenses	(3,605,004)	(2,980,043)	624,961	21.0
Loss from operations	(5,759,076)	(45,114,537)	(39,355,461)	(87.2)
Other non-operating income (expense):				
Change in fair value of derivative liability	–	1,905,289	1,905,289	100.0
Loss on issuance of hybrid debt instruments	–	(1,584,218)	(1,584,218)	(100.0)
Loss on conversion of debt	–	(6,187,337)	(6,187,337)	(100.0)
Other income (expense)	(34,632)	(13,551)	21,081	155.6
Interest income	10,201	27	(10,174)	(37,681.5)
Interest expense	(1,044)	(348,470)	(347,426)	(99.7)
Net loss	$ (5,784,551)	$ (51,342,797)	$ (45,558,246)	(88.7)

Cost of Research and Development Revenue

Cost of research and development revenue represents costs related to funded research and development programs conducted on behalf of third parties in 2017. Costs are expensed as incurred. There were no such third party programs in 2016.

Research and Development Expenses

Overall, corporate R&D expenses for the six months ended June 30, 2017 decreased by $40.0 million primarily due to the decrease of IPR&D expense of $39.5 million. During the six months ended June 30, 2016, we expensed $39.5 million of IPR&D associated with the closing of our asset acquisition of Kevelt. There was no similar expense in 2017. Excluding the effects of the IPR&D expense, R&D expenses decreased $0.5 million, or 20.5% to $2.1 million from $2.6 million in the comparable period in 2016. The table below sets forth the R&D costs incurred by us, by category of expense, for the six months ended June 30, 2017 and 2016:

	Six Months Ended,	
Category of Expense	**June 30, 2017**	**June 30, 2016**
IPR&D expense	$ –	$ 39,500,000
Outside services and contract research organizations	1,481,321	986,750
Salaries and wages	320,275	248,792
Share-based compensation expense	121,779	1,234,240
Other	171,606	164,712
Total research and development expense	$ 2,094,981	$ 42,134,494

The decrease in R&D expenses exclusive of the IPR&D charge was primarily due to the decrease in share-based compensation expense of $1.1 million related to warrants issued to Serum Institute in 2016. Ongoing R&D costs associated with the XBIO-101 program were substantially higher in 2017 compared to 2016 primarily due to the initiation of XBIO-101 phase 2 clinical trial. In addition, salaries and wages increased due to the hiring of our Chief Scientific Officer on January 1, 2017.

General and Administrative Expenses

General and administrative expenses increased by approximately $0.6 million or 21.0% for the six months ended June 30, 2017 to $3.6 million from $3.0 million in the comparable period in 2016. The most significant drivers of the change were related to increases in personnel costs including salary, share-based compensation and travel as we hired our Chief Operating Officer in December 2016 and our Chief Financial Officer in April 2017.

Hybrid Debt Instruments

During the six months ended June 30, 2016, we recorded a net gain of approximately $0.3 million associated with hybrid debt instruments representing a $1.6 million loss on issuance and a $1.9 million gain from changes in derivative fair value as well as the interest expense associated with the instruments.

On April 22, 2016, Pharmsynthez converted all of the convertible notes of our Company in the principal amount of $6.5 million plus accrued interest of approximately $0.2 million, issued by us to Pharmsynthez resulting in a $6.2 million loss. The conversion rate was $4.95 per share. As such, we issued to Pharmsynthez 1,373,036 shares of common stock in connection with conversion of the convertible notes. The related embedded derivatives, which had been bifurcated from the host debt and accounted for separately, were settled by action of the conversion. Following the settlement of these instruments, there were no hybrid debt instruments outstanding as of June 30, 2017 and December 31, 2016, respectively.

Other Income (Expense)

Other expense increased approximately $21,000, or 155.6% to an approximate $35,000 expense for the six months ended June 30, 2017. This increase is primarily related to changes in foreign currency exchange rates between the periods.

Interest Expense

Interest expense decreased by approximately $0.3 million, or 99.7%, to approximately $1,000 for the six months ended June 30, 2017. The decrease is due to the settlement of all outstanding debt in connection with our underwritten public offering in November 2016.

Liquidity and Capital Resources

We incurred a net loss of approximately $5.8 million for the six months ended June 30, 2017, and had an accumulated deficit of $148.1 million at June 30, 2017. Working capital was approximately $1.8 million and $6.5 million at June 30, 2017 and December 31, 2016, respectively. During the six months ended June 30, 2017, our working capital decreased by $4.7 million due primarily to outflows for general operating costs and costs related to the initiation of our XBIO-101 phase 2 clinical trial. We expect to continue incurring losses for the foreseeable future and will need to raise additional capital or pursue other strategic alternatives in the very near term in order to continue our pursuit of our business plan and continue as a going concern.

Our principal source of liquidity consists of cash. At June 30, 2017, we had approximately $2.3 million in cash and $1.9 million in accounts payable and accrued expenses. At December 31, 2016, we had approximately $4.0 million in cash and $1.8 million in accounts payable and accrued expenses.

We have historically relied upon sales of our equity securities to fund our operations. Since 2005, we have raised approximately $60.0 million in proceeds from offerings of our common and preferred stock, including net proceeds of approximately $9.0 million from our underwritten public offering in November 2016. We have also received approximately $13.0 million from revenue producing activities from 2005 through June 30, 2017, including a $3.0 million milestone payment from Shire recognized in the fourth quarter of 2016 and received in January 2017. More than 90% of the milestone revenue received to date has been from a single collaborator, Shire. We expect the majority of our funding through equity or equity-linked instruments, debt financings and/or licensing agreements to continue as a trend for the foreseeable future.

We estimate that our existing resources will only be able to fund our planned operations, existing obligations and contractual commitments through the latter part of the third quarter of 2017. This projection is based on our current expectations regarding projected staffing expenses, working capital requirements, capital expenditure plans and anticipated revenues. Given our current working capital constraints, we have attempted to minimize cash commitments and expenditures for external research and development and general and administrative services to the greatest extent practicable. We will need to raise additional working capital in the very near term in order to fund our future operations.

We have no committed sources of additional capital. Our management believes that we have access to capital resources through possible public or private equity offerings, debt financings, corporate collaborations or other means; however, we have not secured any commitment for new financing at this time. The terms, timing and extent of any future financing will depend upon several factors including the achievement of progress in our clinical development programs, our ability to identify and enter into licensing or other strategic arrangements and factors related to financial, economic and market conditions, many of which are beyond our control.

Our management evaluates whether there are conditions or events, considered in the aggregate, that raise substantial doubt about our ability to continue as a going concern within one year after the date that the financial statements are issued. We have incurred substantial losses since our inception and we expect to continue to incur operating losses in the near-term. We will need to raise additional capital in order to sustain our operations. If we are unable to secure additional funds on a timely basis or on acceptable terms, we may be required to defer, reduce or eliminate significant planned expenditures, restructure, curtail or eliminate some or all of our development programs or other operations, reduce general and administrative expenses, and delay or cease the purchase of clinical research services, dispose of technology or assets, pursue an acquisition of our company by a third party at a price that may result in a loss on investment for our stockholders, enter into arrangements that may require us to relinquish rights to certain of our drug candidates, technologies or potential markets, file for bankruptcy or cease operations altogether.

We continue to seek appropriate out-license arrangements for our ErepoXen™ technology but are currently unable to reliably predict when we may enter into an agreement. Due to the uncertainties inherent in the clinical research process and unknown future market conditions, there can be no assurance our ErepoXen™ technology will lead to any future income.

Cash Flows from Operating Activities

Cash flows used in operating activities for the six months ended June 30, 2017 totaled approximately $1.7 million, which was primarily due to our $5.8 million loss for the period offset by non-cash charges of $1.2 million. This net use of cash was substantially offset by the receipt of the $3.0 million clinical milestone payment from Shire in January 2017.

Cash flows used in operating activities for the six months ended June 30, 2016 totaled approximately $3.1 million, which includes a net loss of $51.3 million offset by $48.2 million in non-cash charges related to the XBIO-101 asset acquisition, which was immediately expensed ($39.5 million), as well as the hybrid debt instrument ($6.2 million including issuance loss, interest, amortization, change in fair value, and loss on extinguishment upon conversion of the debt host). In addition, we recognized a net non-cash charge of approximately $2.0 million for share-based compensation and warrants.

Cash Flows from Investing Activities

For the six months ended June 30, 2017 and 2016, there were no significant cash sources or uses from investing activities.

Cash Flow from Financing Activities

For the six months ended June 30, 2017, there were no significant cash sources or uses from financing activities. During the six months ended June 30, 2016, we received $3.5 million in proceeds from issuance of $3.5 million 10% convertible secured promissory notes in connection with the APA that was partially offset by $0.2 million of payments on a loan from a related party.

Contractual Obligations and Commitments

As of June 30, 2017, there were no material changes in our contractual obligations and commitments from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 31, 2017, as amended on May 1, 2017.

Off Balance Sheet Arrangements

We do not have any off-balance sheet financing arrangements that have or are reasonably likely to have a current or future material effect on our financial condition, change in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources.

Recent Accounting Standards

See Note 2 in our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 31, 2017, as amended on May 1, 2017 for a discussion of recent accounting pronouncements.

Critical Accounting Policies and Estimates

Our condensed consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States. The preparation of our condensed consolidated financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, revenue, costs and expenses. We base our estimates and assumptions on historical experience and other factors that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. The results of these evaluations form the basis for making judgments about the carrying values of the assets and liabilities and the reported amount of expenses that are not readily apparent from other sources. Our actual results may differ from these estimates. There have been no material changes in our critical accounting policies from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 31, 2017, as amended on May 1, 2017.

ITEM 3 – QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are not required to provide the information required by this Item because we are a “smaller reporting company” (as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”)).

ITEM 4 – CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer (principal executive officer) and our Chief Financial Officer (principal financial officer), evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) or 15d-15(e) under the Exchange Act, as of the end of the period covered by this Quarterly Report on Form 10-Q.

Based on this evaluation our management, including our Chief Executive Officer and our Chief Financial Officer concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q that would have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1 – LEGAL PROCEEDINGS

From time to time, we are subject to legal proceedings and claims arising from the conduct of our business operations, including litigation related to employment matters. See Note 12 to the unaudited condensed consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q for a discussion of recent legal proceedings.

ITEM 1A – RISK FACTORS

Except for the risk factors set forth below, there have been no material changes to the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 31, 2017, as amended on May 1, 2017.

Our independent registered public accounting firm and the Company have expressed substantial doubt about our ability to continue as a going concern.

Our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern. As described in the notes to the condensed consolidated financial statements, we have incurred recurring losses and negative cash flows from operations since inception and have an accumulated deficit at June 30, 2017 of $148.1 million. These matters raise substantial doubt about our ability to continue as a going concern. Our condensed consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. If we cannot continue as a viable entity, our stockholders may lose some or all of their investment in us.

ITEM 2 – UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

During the three months ended June 30, 2017, we issued 65,000 shares of common stock upon the conversion of 65,000 shares of Series B Preferred Stock. This issuance was made by us pursuant to an exemption from registration provided by Section 3(a)(9) of the Securities Act.

ITEM 3 – DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4 – MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5 – OTHER INFORMATION

None.

ITEM 6 – EXHIBITS

The following exhibits are incorporated herein by reference or filed as part of this report.

EXHIBIT NUMBER	DESCRIPTION
3.1	Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-178082) filed with the SEC on November 21, 2011).
3.2	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 333-178082) filed with the SEC on February 12, 2013).
3.3	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 333-178082) filed with the SEC on February 27, 2013).
3.4	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 333-178082) filed with the SEC on January 10, 2014).
3.5	Certificate of Change Pursuant to NRS 78.209 (incorporated by reference to Exhibit 3.2 to the Registrant' s Quarterly Report on Form 10-Q (File No. 333-178082) filed with the SEC on January 10, 2014).
3.6	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 333-178082) filed with the SEC on September 30, 2015.
3.7	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-37937) filed with the SEC on February 27, 2017).
3.8	Form of Amended and Restated Certificate of Designation of Preferences, Rights and Limitations of Series A Preferred Stock (incorporated by reference to Exhibit 3.8 of the Registrant's Registration Statement on Form S-1/A (File No. 333-211249) filed with the SEC on October 27, 2016).
3.9	Second Amended and Restated Certificate of Designation of Preferences, Rights and Limitations of Series B Preferred Stock (incorporated by reference to Exhibit 3.9 of the Registrant's Registration Statement on Form S-1/A (File No. 333-211249) filed with the SEC on October 31, 2016).
10.1*+	Form of Indemnity Agreement by and between the Registrant and each of its directors and executive officers.
10.2+	Employment Agreement, effective April 3, 2017, by and between the Registrant and James F Parslow (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 001- 37937) filed with the SEC on April 4, 2017).
10.3+	Inducement Award Agreement, dated April 3, 2017, by and between the Registrant and James F Parslow (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K (File No. 001- 37937) filed with the SEC on April 4, 2017).
31.1*	Certification of Michael Scott Maguire, Principal Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of James Parslow, Principal Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certifications of Michael Scott Maguire, Principal Executive Officer, and James Parslow, Principal Financial Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
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	XBRL Taxonomy Extension Presentation Linkbase Document

*	Filed herewith.
**	Exhibit 32.1 is being furnished and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall such exhibits be deemed to be incorporated by reference in any registration statement or other document filed under the Securities Act of 1933, as amended or the Securities Exchange Act of 1934, as amended, except as otherwise stated in such filing
+	Indicates management contract or compensatory plan.

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.

August 14, 2017

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

August 14, 2017

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

EXHIBIT INDEX

EXHIBIT NUMBER	DESCRIPTION
3.1	Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-178082) filed with the SEC on November 21, 2011).
3.2	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 333-178082) filed with the SEC on February 12, 2013).
3.3	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 333-178082) filed with the SEC on February 27, 2013).
3.4	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 333-178082) filed with the SEC on January 10, 2014).
3.5	Certificate of Change Pursuant to NRS 78.209 (incorporated by reference to Exhibit 3.2 to the Registrant' s Quarterly Report on Form 10-Q (File No. 333-178082) filed with the SEC on January 10, 2014).
3.6	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 333-178082) filed with the SEC on September 30, 2015.
3.7	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-37937) filed with the SEC on February 27, 2017).
3.8	Form of Amended and Restated Certificate of Designation of Preferences, Rights and Limitations of Series A Preferred Stock (incorporated by reference to Exhibit 3.8 of the Registrant's Registration Statement on Form S-1/A (File No. 333-211249) filed with the SEC on October 27, 2016).
3.9	Second Amended and Restated Certificate of Designation of Preferences, Rights and Limitations of Series B Preferred Stock (incorporated by reference to Exhibit 3.9 of the Registrant's Registration Statement on Form S-1/A (File No. 333-211249) filed with the SEC on October 31, 2016).
10.1*+	Form of Indemnity Agreement by and between the Registrant and each of its directors and executive officers.
10.2+	Employment Agreement, effective April 3, 2017, by and between the Registrant and James F Parslow (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 001- 37937) filed with the SEC on April 4, 2017).
10.3+	Inducement Award Agreement, dated April 3, 2017, by and between the Registrant and James F Parslow (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K (File No. 001- 37937) filed with the SEC on April 4, 2017).
31.1*	Certification of Michael Scott Maguire, Principal Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of James Parslow, Principal Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certifications of Michael Scott Maguire, Principal Executive Officer, and James Parslow, Principal Financial Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
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	XBRL Taxonomy Extension Presentation Linkbase Document

*	Filed herewith.
**	Exhibit 32.1 is being furnished and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall such exhibits be deemed to be incorporated by reference in any registration statement or other document filed under the Securities Act of 1933, as amended or the Securities Exchange Act of 1934, as amended, except as otherwise stated in such filing
+	Indicates management contract or compensatory plan.

EXHIBIT 10.1

INDEMNITY AGREEMENT

This Indemnity Agreement (this "**Agreement**") dated as of _____ _____, 20__, is made by and between **_____**, Inc.**,** a Nevada corporation (the "**Company**"), and **_____** ("**Indemnitee**").

Recitals

A. The Company desires to attract and retain the services of highly qualified individuals as directors, officers, employees and agents.

B. The Company's bylaws (the "**Bylaws**") require that the Company indemnify its directors and officers, and empowers the Company to indemnify its employees and agents, as authorized by the Nevada Corporation Law, as amended (the "**Code**"), under which the Company is organized and such Bylaws expressly provide that the indemnification provided therein is not exclusive and contemplates that the Company may enter into separate agreements with its directors, officers and other persons to set forth specific indemnification provisions.

C. Indemnitee does not regard the protection currently provided by applicable law, the Company's governing documents and available insurance as adequate under the present circumstances, and the Company has determined that Indemnitee and other directors, officers, employees and agents of the Company may not be willing to serve or continue to serve in such capacities without additional protection.

D. The Company desires and has requested Indemnitee to serve or continue to serve as a director, officer, employee or agent of the Company, as the case may be, and has proffered this Agreement to Indemnitee as an additional inducement to serve in such capacity.

E. Indemnitee is willing to serve, or to continue to serve, as a director, officer, employee or agent of the Company, as the case may be, if Indemnitee is furnished the indemnity provided for herein by the Company.

Agreement

Now Therefore, in consideration of the mutual covenants and agreements set forth herein, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Definitions.

(a) **Agent**. For purposes of this Agreement, the term "agent" of the Company means any person who: (i) is or was a director**,** officer, employee or other fiduciary of the Company or a subsidiary of the Company; or (ii) is or was serving at the request or for the convenience of, or representing the interests of, the Company or a subsidiary of the Company, as a director, officer, employee or other fiduciary of a foreign or domestic corporation, partnership, joint venture, trust or other enterprise.

(b) **Expenses**. For purposes of this Agreement, the term "expenses" shall be broadly construed and shall include, without limitation, all direct and indirect costs of any type or nature whatsoever (including, without limitation, all attorneys', witness, or other professional fees and related disbursements, and other out-of-pocket costs of whatever nature), actually and reasonably incurred by Indemnitee in connection with the investigation, defense or appeal of a proceeding or establishing or enforcing a right to indemnification under this Agreement, the Code or otherwise, and amounts paid in settlement by or on behalf of Indemnitee, but shall not include any judgments, fines or penalties actually levied against Indemnitee for such individual's violations of law. The term "expenses" shall also include reasonable compensation for time spent by Indemnitee for which he is not compensated by the Company or any subsidiary or third party (i) for any period during which Indemnitee is not an agent, in the employment of, or providing services for compensation to, the Company or any subsidiary; and (ii) if the rate of compensation and estimated time involved is approved by the directors of the Company who are not parties to any action with respect to which expenses are incurred, for Indemnitee while an agent of, employed by, or providing services for compensation to, the Company or any subsidiary.

(c) Proceedings. For purposes of this Agreement, the term "proceeding" shall be broadly construed and shall include, without limitation, any threatened, pending, or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative or investigative nature, and whether formal or informal in any case, in which Indemnitee was, is or will be involved as a party or otherwise by reason of: (i) the fact that Indemnitee is or was a director or officer of the Company; (ii) the fact that any action taken by Indemnitee or of any action on Indemnitee's part while acting as director, officer, employee or agent of the Company; or (iii) the fact that Indemnitee is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, and in any such case described above, whether or not serving in any such capacity at the time any liability or expense is incurred for which indemnification, reimbursement, or advancement of expenses may be provided under this Agreement.

(d) Subsidiary. For purposes of this Agreement, the term "subsidiary" means any corporation or limited liability company of which more than 50% of the outstanding voting securities or equity interests are owned, directly or indirectly, by the Company and one or more of its subsidiaries, and any other corporation, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of the Company as a director, officer, employee, agent or fiduciary.

(e) Independent Counsel. For purposes of this Agreement, the term "independent counsel" means a law firm, or a partner (or, if applicable, member) of such a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five (5) years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party, or (ii) any other party to the proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "independent counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement.

2 . Agreement to Serve. Indemnitee will serve, or continue to serve, as a director, officer, employee or agent of the Company or any subsidiary, as the case may be, faithfully and to the best of his or her ability, at the will of such corporation (or under separate agreement, if such agreement exists), in the capacity Indemnitee currently serves as an agent of such corporation, so long as Indemnitee is duly appointed or elected and qualified in accordance with the applicable provisions of the bylaws or other applicable charter documents of such corporation, or until such time as Indemnitee tenders his or her resignation in writing; provided, however, that nothing contained in this Agreement is intended as an employment agreement between Indemnitee and the Company or any of its subsidiaries or to create any right to continued employment of Indemnitee with the Company or any of its subsidiaries in any capacity.

The Company acknowledges that it has entered into this Agreement and assumes the obligations imposed on it hereby, in addition to and separate from its obligations to Indemnitee under the Bylaws, to induce Indemnitee to serve, or continue to serve, as a director, officer, employee or agent of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director, officer, employee or agent of the Company.

3. Indemnification.

(a) Indemnification in Third Party Proceedings. Subject to Section 10 below, the Company shall indemnify Indemnitee to the fullest extent permitted by the Code, as the same may be amended from time to time (but, only to the extent that such amendment permits Indemnitee to broader indemnification rights than the Code permitted prior to adoption of such amendment), if Indemnitee is a party to or threatened to be made a party to or otherwise involved in any proceeding, for any and all expenses, actually and reasonably incurred by Indemnitee in connection with the investigation, defense, settlement or appeal of such proceeding.

(b) Indemnification in Derivative Actions and Direct Actions by the Company . Subject to Section 10 below, the Company shall indemnify Indemnitee to the fullest extent permitted by the Code, as the same may be amended from time to time (but, only to the extent that such amendment permits Indemnitee to broader indemnification rights than the Code permitted prior to adoption of such amendment), if Indemnitee is a party to or threatened to be made a party to or otherwise involved in any proceeding by or in the right of the Company to procure a judgment in its favor, against any and all expenses actually and reasonably incurred by Indemnitee in connection with the investigation, defense, settlement, or appeal of such proceedings, if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 3(b) in respect of any claim, issue or matter as to which Indemnitee shall have been finally adjudged by a court competent jurisdiction to be liable to the Company, unless and only to the extent that the Chancery Court of the State of Delaware or any court in which the proceeding was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification.

4 . Indemnification of Expenses of Successful Party. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is a party to (or a participant in) any proceeding and has been successful on the merits or otherwise in defense of any proceeding or in defense of any claim, issue or matter therein, including the dismissal of any action without prejudice, the Company shall indemnify Indemnitee against all expenses actually and reasonably incurred in connection with the investigation, defense or appeal of such proceeding.

5 . Partial Indemnification. If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of any expenses actually and reasonably incurred by Indemnitee in the investigation, defense, settlement or appeal of a proceeding, but is precluded by applicable law or the specific terms of this Agreement to indemnification for the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion thereof to which Indemnitee is entitled.

6 . Advancement of Expenses. To the extent not prohibited by law, the Company shall advance the expenses incurred by Indemnitee in connection with any proceeding, and such advancement shall be made within twenty (20) days after the receipt by the Company of a statement or statements requesting such advances (which shall include invoices received by Indemnitee in connection with such expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditures made that would cause Indemnitee to waive any privilege accorded by applicable law shall not be included with the invoice) and upon request of the Company, an undertaking to repay the advancement of expenses if and to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnitee is not entitled to be indemnified by the Company. Advances shall be unsecured, interest free and without regard to Indemnitee's ability to repay the expenses. Advances shall include any and all expenses actually and reasonably incurred by Indemnitee pursuing an action to enforce Indemnitee's right to indemnification under this Agreement, or otherwise and this right of advancement, including expenses incurred preparing and forwarding statements to the Company to support the advances claimed. Indemnitee acknowledges that the execution and delivery of this Agreement shall constitute an undertaking providing that Indemnitee shall, to the fullest extent required by law, repay the advance if and to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnitee is not entitled to be indemnified by the Company. The right to advances under this Section shall continue until final disposition of any proceeding, including any appeal therein. This Section 6 shall not apply to any claim made by Indemnitee for which indemnity is excluded pursuant to Section 10(b).

7. Notice and Other Indemnification Procedures.

(a) Notification of Proceeding. Indemnitee will notify the Company in writing promptly upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any proceeding or matter which may be subject to indemnification or advancement of expenses covered hereunder. The written notification to the Company shall include a description of the nature of the proceeding and the facts underlying the proceeding. The failure of Indemnitee to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise.

(b) Request for Indemnification and Indemnification Payments. Indemnitee shall notify the Company promptly in writing upon receiving notice of any demand, judgment or other requirement for payment that Indemnitee reasonably believes to be subject to indemnification under the terms of this Agreement, and shall request payment thereof by the Company. Indemnification payments requested by Indemnitee under Section 3 hereof shall be made by the Company no later than sixty (60) days after receipt of the written request of Indemnitee. Claims for advancement of expenses shall be made under the provisions of Section 6 herein.

(c) Application for Enforcement. In the event the Company fails to make timely payments as set forth in Sections 6 or 7(b) above, Indemnitee shall have the right to apply to any court of competent jurisdiction for the purpose of enforcing Indemnitee's right to indemnification or advancement of expenses pursuant to this Agreement. In such an enforcement hearing or proceeding, the burden of proof shall be on the Company to prove that indemnification or advancement of expenses to Indemnitee is not required under this Agreement or permitted by applicable law. Any determination by the Company (including its Board of Directors, shareholders or independent counsel) that Indemnitee is not entitled to indemnification hereunder, shall not be a defense by the Company to the action nor create any presumption that Indemnitee is not entitled to indemnification or advancement of expenses hereunder.

(d) Indemnification of Certain Expenses. The Company shall indemnify Indemnitee against all expenses incurred in connection with any hearing or proceeding under this Section 7 unless the Company prevails in such hearing or proceeding on the merits in all material respects.

8. Assumption of Defense. In the event the Company shall be requested by Indemnitee to pay the expenses of any proceeding, the Company, if appropriate, shall be entitled to assume the defense of such proceeding, or to participate to the extent permissible in such proceeding, with counsel reasonably acceptable to Indemnitee. Upon assumption of the defense by the Company and the retention of such counsel by the Company, the Company shall not be liable to Indemnitee under this Agreement for any fees of counsel subsequently incurred by Indemnitee with respect to the same proceeding, provided that Indemnitee shall have the right to employ separate counsel in such proceeding at Indemnitee's sole cost and expense. Notwithstanding the foregoing, if Indemnitee's counsel delivers a written notice to the Company stating that such counsel has reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of any such defense or the Company shall not, in fact, have employed counsel or otherwise actively pursued the defense of such proceeding within a reasonable time, then in any such event the fees and expenses of Indemnitee's counsel to defend such proceeding shall be subject to the indemnification and advancement of expenses provisions of this Agreement.

9 . Insurance. To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees, or agents of the Company or of any subsidiary ("**D&O Insurance**"), Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any such director, officer, employee or agent under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has D&O Insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

10. Exceptions.

(a) Certain Matters. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee on account of any proceeding with respect to (i) remuneration paid to Indemnitee if it is determined by final judgment or other final adjudication that such remuneration was in violation of law (and, in this respect, both the Company and Indemnitee have been advised that the Securities and Exchange Commission believes that indemnification for liabilities arising under the federal securities laws is against public policy and is, therefore, unenforceable and that claims for indemnification should be submitted to appropriate courts for adjudication, as indicated in Section 10(d) below); (ii) a final judgment rendered against Indemnitee for an accounting, disgorgement or repayment of profits made from the purchase or sale by Indemnitee of securities of the Company against Indemnitee or in connection with a settlement by or on behalf of Indemnitee to the extent it is acknowledged by Indemnitee and the Company that such amount paid in settlement resulted from Indemnitee's conduct from which Indemnitee received monetary personal profit, pursuant to the provisions of Section 16(b) of the Securities Exchange Act of 1934, as amended, or other provisions of any federal, state or local statute or rules and regulations thereunder; (iii) a final judgment or other final adjudication that Indemnitee's conduct was in bad faith, knowingly fraudulent or deliberately dishonest or constituted willful misconduct (but only to the extent of such specific determination); or (iv) on account of conduct that is established by a final judgment as constituting a breach of Indemnitee's duty of loyalty to the Company or resulting in any personal profit or advantage to which Indemnitee is not legally entitled. For purposes of the foregoing sentence, a final judgment or other adjudication may be reached in either the underlying proceeding or action in connection with which indemnification is sought or a separate proceeding or action to establish rights and liabilities under this Agreement.

(b) Claims Initiated by Indemnitee. Any provision herein to the contrary notwithstanding, the Company shall not be obligated to indemnify or advance expenses to Indemnitee with respect to proceedings or claims initiated or brought by Indemnitee against the Company or its directors, officers, employees or other agents and not by way of defense, except (i) with respect to proceedings brought to establish or enforce a right to indemnification under this Agreement or under any other agreement, provision in the Bylaws or Articles of Incorporation or applicable law, or (ii) with respect to any other proceeding initiated by Indemnitee that is either approved by the Board of Directors or Indemnitee's participation is required by applicable law. However, indemnification or advancement of expenses may be provided by the Company in specific cases if the Board of Directors determines it to be appropriate.

(c) Unauthorized Settlements. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee under this Agreement for any amounts paid in settlement of a proceeding effected without the Company's written consent. Neither the Company nor Indemnitee shall unreasonably withhold consent to any proposed settlement; provided, however, that the Company may in any event decline to consent to (or to otherwise admit or agree to any liability for indemnification hereunder in respect of) any proposed settlement if the Company is also a party in such proceeding and determines in good faith that such settlement is not in the best interests of the Company and its shareholders.

(d) Securities Act Liabilities. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee or otherwise act in violation of any undertaking appearing in and required by the rules and regulations promulgated under the Securities Act of 1933, as amended (the "Act"), or in any registration statement filed with the SEC under the Act. Indemnitee acknowledges that paragraph (h) of Item 512 of Regulation S-K currently generally requires the Company to undertake in connection with any registration statement filed under the Act to submit the issue of the enforceability of Indemnitee's rights under this Agreement in connection with any liability under the Act on public policy grounds to a court of appropriate jurisdiction and to be governed by any final adjudication of such issue. Indemnitee specifically agrees that any such undertaking shall supersede the provisions of this Agreement and to be bound by any such undertaking.

11. Nonexclusivity and Survival of Rights. The provisions for indemnification and advancement of expenses set forth in this Agreement shall not be deemed exclusive of any other rights which Indemnitee may at any time be entitled under any provision of applicable law, the Company's Articles of Incorporation, Bylaws or other agreements, both as to action in Indemnitee's official capacity and Indemnitee's action as an agent of the Company, in any court in which a proceeding is brought, and Indemnitee's rights hereunder shall continue after Indemnitee has ceased acting as an agent of the Company and shall inure to the benefit of the heirs, executors, administrators and assigns of Indemnitee. The obligations and duties of the Company to Indemnitee under this Agreement shall be binding on the Company and its successors and assigns until terminated in accordance with its terms. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her corporate status prior to such amendment, alteration or repeal. To the extent that a change in the Code, whether by statute or judicial decision, permits greater indemnification or advancement of expenses than would be afforded currently under the Company's **Articles** of Incorporation, Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, by Indemnitee shall not prevent the concurrent assertion or employment of any other right or remedy by Indemnitee.

12. Term. This Agreement shall continue until and terminate upon the later of: (a) five (5) years after the date that Indemnitee shall have ceased to serve as a director or and/or officer, employee or agent of the Company; or (b) one (1) year after the final termination of any proceeding, including any appeal then pending, in respect to which Indemnitee was granted rights of indemnification or advancement of expenses hereunder.

No legal action shall be brought and no cause of action shall be asserted by or in the right of the Company against an Indemnitee or an Indemnitee's estate, spouse, heirs, executors or personal or legal representatives after the expiration of five (5) years from the date of accrual of such cause of action, and any claim or cause of action of the Company shall be extinguished and deemed released unless asserted by the timely filing of a legal action within such five-year period; provided, however, that if any shorter period of limitations is otherwise applicable to such cause of action, such shorter period shall govern.

13. Subrogation. In the event of payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who, at the request and expense of the Company, shall execute all papers required and shall do everything that may be reasonably necessary to secure such rights, including the execution of such documents necessary to enable the Company effectively to bring suit to enforce such rights.

14. Interpretation of Agreement. It is understood that the parties hereto intend this Agreement to be interpreted and enforced so as to provide indemnification to Indemnitee to the fullest extent now or hereafter permitted by law.

15. Severability. If any provision of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever, (a) the validity, legality and enforceability of the remaining provisions of the Agreement (including without limitation, all portions of any paragraphs of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby; and (b) to the fullest extent possible, the provisions of this Agreement (including, without limitation, all portions of any paragraph of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable and to give effect to Section 14 hereof.

16. Amendment and Waiver. No supplement, modification, amendment, or cancellation of this Agreement shall be binding unless executed in writing by the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

17. Notice. Except as otherwise provided herein, any notice or demand which, by the provisions hereof, is required or which may be given to or served upon the parties hereto shall be in writing and, if by electronic transmission, shall be deemed to have been validly served, given or delivered when sent, if by overnight delivery, courier or personal delivery, shall be deemed to have been validly served, given or delivered upon actual delivery and, if mailed, shall be deemed to have been validly served, given or delivered three (3) business days after deposit in the United States mail, as registered or certified mail, with proper postage prepaid and addressed to the party or parties to be notified at the addresses set forth on the signature page of this Agreement (or such other address(es) as a party may designate for itself by like notice). If to the Company, notices and demands shall be delivered to the attention of the Secretary of the Company.

18. Governing Law. This Agreement shall be governed exclusively by and construed according to the laws of the State of Nevada, as applied to contracts between Nevada residents entered into and to be performed entirely within Nevada.

19. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute but one and the same Agreement. Only one such counterpart need be produced to evidence the existence of this Agreement.

20. Headings. The headings of the sections of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction hereof.

21. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements, understandings and negotiations, written and oral, between the parties with respect to the subject matter of this Agreement; provided, however, that this Agreement is a supplement to and in furtherance of the Company's Articles of Incorporation, Bylaws, the Code and any other applicable law, and shall not be deemed a substitute therefor, and does not diminish or abrogate any rights of Indemnitee thereunder.

In Witness Whereof, the parties hereto have entered into this Agreement effective as of the date first above written.

COMPANY

By: _____
Name:_____
Title: _____

INDEMNITEE

_____
Signature of Indemnitee

_____
Print or Type Name of Indemnitee

EXHIBIT 31.1

I, Michael Scott Maguire, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Xenetic Biosciences, Inc.;

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;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 14, 2017

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

EXHIBIT 31.2

I, James Parslow, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Xenetic Biosciences, Inc.;

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;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 14, 2017

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

EXHIBIT 32.1

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Michael Scott Maguire, Chief Executive Officer of Xenetic Biosciences, Inc. (the "Company"), and James Parslow, Chief Financial Officer of the Company, each hereby certifies that, to the best of his or her knowledge:

The Company's Quarterly Report on Form 10-Q for the period ended June 30, 2017, to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 14, 2017

In Witness Whereof, the undersigned have set their hands hereto as of the 14th day of August, 2017.

/s/ Michael Scott Maguire	/s/James Parslow
Michael Scott Maguire	James Parslow
Chief Executive Officer	Chief Financial Officer

"This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Xenetic Biosciences, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing."