

**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 **September 30, 2014**

**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: 333-178082**

**XENETIC BIOSCIENCES, INC.**

**(Exact name of registrant as specified in its charter)**

**Nevada**  
**(State or other jurisdiction of**  
**incorporation or organization)**

**45-2952962**  
**(IRS Employer**  
**Identification No.)**

**99 Hayden Ave, Suite 230**  
**Lexington, Massachusetts 02421**  
**(Address of principal executive offices and zip code)**  
**781-778-7720**

**(Registrant's telephone number, including area code)**

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, or a smaller reporting company.

See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting 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)

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

As of November 14, 2014 the number of outstanding shares of the registrant's common stock was 146,740,692.

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**XENETIC BIOSCIENCES, INC**  
**FORM 10-Q**  
**QUARTERLY PERIOD ENDED September 30, 2014**

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## PART 1 – FINANCIAL INFORMATION

## ITEM 1 – FINANCIAL STATEMENTS

XENETIC BIOSCIENCES, INC.  
CONDENSED CONSOLIDATED BALANCE SHEETS

	September 30, 2014	December 31, 2013
	(unaudited)	
<b>ASSETS</b>		
Current assets:		
Cash	\$ 4,834,640	\$ 4,839,486
Restricted cash	66,000	66,000
Other receivables	218,373	256,015
Prepaid expenses and other	239,015	168,308
Total current assets	5,358,028	5,329,809
Property and equipment, net	137,007	152,603
Goodwill	3,597,408	3,665,199
Indefinite-lived intangible assets	10,127,159	10,318,001
Other assets	98,203	-
Total assets	\$ 19,317,805	\$ 19,465,612
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 761,033	\$ 942,156
Accrued expenses	752,937	1,826,867
Accrued payroll taxes	92,683	84,599
Other current liabilities	42,538	55,266
Loans due to related parties	395,000	681,124
Total current liabilities	2,044,191	3,590,012
Deferred tax liability	3,197,651	3,257,910
Other liabilities	60,729	-
Total liabilities	5,302,571	6,847,922
Commitments and contingent liabilities	-	-
Stockholders' equity:		
Common stock, \$0.01 par value; 215,456,000 shares authorized as of September 30, 2014 and December 31, 2013; 146,740,692 and 130,575,516 shares issued as of September 30, 2014 and December 31, 2013, respectively; 136,052,498 and 119,887,322 shares outstanding as of September 30, 2014 and December 31, 2013, respectively	1,467,407	1,305,755
Additional paid in capital	88,268,648	73,999,860
Accumulated deficit	(71,321,438)	(58,306,999)
Accumulated other comprehensive income	881,797	900,254
Treasury stock	(5,281,180)	(5,281,180)
Total stockholders' equity	14,015,234	12,617,690
Total liabilities and stockholders' equity	\$ 19,317,805	\$ 19,465,612

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

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**XENETIC BIOSCIENCES, INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS**  
**(unaudited)**

	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2014	2013	2014	2013
Revenue	\$ -	\$ -	\$ -	\$ 1,000,000
Cost of revenue	-	-	-	-
Gross profit	-	-	-	1,000,000
Operating costs and expenses:				
Research and development	1,905,234	1,037,798	3,502,805	2,614,714
General and administrative	1,203,126	1,492,176	5,204,541	3,450,103
	3,108,360	2,529,974	8,707,346	6,064,817
Loss from operations	(3,108,360)	(2,529,974)	(8,707,346)	(5,064,817)
Other income (expense):				
Loss on disposal of subsidiaries	-	-	(1,069,675)	-
Other income (expense)	(72,877)	(206,546)	(235,484)	(5,191)
Interest income	218	7,743	11,960	27,924
Interest expense	(1,196)	-	(3,569)	(632)
	(73,855)	(198,803)	(1,296,768)	22,101
Loss before income taxes	\$ (3,182,215)	\$ (2,728,777)	\$ (10,004,114)	\$ (5,042,716)
Income tax	-	-	-	-
Net loss	\$ (3,182,215)	\$ (2,728,777)	\$ (10,004,114)	\$ (5,042,716)
Other comprehensive income (loss)				
Foreign currency translation adjustment	(542,098)	1,022,495	(18,457)	(188,641)
Total comprehensive loss	\$ (3,724,313)	\$ (1,706,282)	\$ (10,022,571)	\$ (5,231,357)
Net loss per share of common stock, basic and diluted	\$ (0.02)	\$ (0.02)	\$ (0.07)	\$ (0.04)
Weighted-average shares of common stock outstanding, basic and diluted	136,052,498	119,831,943	134,749,810	119,831,943

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

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

	<b>NINE MONTHS ENDED SEPTEMBER 30,</b>	
	<b>2014</b>	<b>2013</b>
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net loss	\$ (10,004,114)	\$ (5,042,716)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	59,108	34,347
Share-based compensation	678,508	336,275
Loss on disposal of subsidiaries	1,069,675	-
Changes in operating assets and liabilities:		
Accounts receivable, prepayments and other receivables	(160,983)	(12,004)
Accounts payable and accrued expenses	(1,186,034)	643,149
Net cash used in operating activities	(9,543,840)	(4,040,949)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Purchases of property and equipment	(46,009)	(14,804)
Disposition of property and equipment	5,487	-
Cash acquired from Acquisition	43,502	-
Cash transferred in connection with Hive Out Agreement	(43,502)	-
Fee paid in connection with Hive Out Agreement	(430,000)	-
Net cash used in investing activities	(470,522)	(14,804)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Proceeds from issuance of common stock	10,000,000	-
Proceeds from exercise of stock options	101,933	-
Payments on loan from related party	(286,124)	-
Net cash provided by financing activities	9,815,809	-
Effect of exchange rate change on cash and cash equivalents	193,707	(153,255)
Net decrease in cash and cash equivalents, excluding restricted cash	(4,846)	(4,209,008)
Cash and cash equivalents at beginning of period	4,839,486	11,136,870
Cash and cash equivalents at end of period	\$ 4,834,640	\$ 6,927,862
<b>SUPPLEMENTAL SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:</b>		
Equity consideration transferred in the Acquisition	\$ 3,750,000	\$ -
Repurchase and cancellation of common stock in the Hive Out Agreement	\$ (3,110,325)	\$ -

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

**XENETIC BIOSCIENCES, INC.**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**(unaudited)**

**1. The Company**

***Background***

Xenetic Biosciences, Inc. (the “Company”), incorporated in the state of Nevada and based in Lexington, Massachusetts, is a clinical stage biopharmaceutical company that is focused on the discovery, development and planned commercialization of a new generation of human drug therapies for the treatment of a variety of conditions including anemia, refractory Acute Myeloid Leukemia, Cystic Fibrosis and certain cancers based upon its proprietary and patented drug delivery platform systems and drug development collaborations with major third party pharmaceutical companies around the world.

The Company’s drug delivery platform systems include PolyXer® for creating next generation biologic drugs by extending the efficacy, safety and half-life of existing biologic drugs, OncoHist™ for the development of novel oncology drug therapies focused on orphan indications in humans and lmuXen® for the development of vaccines that can simultaneously deliver multiple active pharmaceutical ingredients. The Company is also developing a broad pipeline of drug candidates for next generation biologics and novel oncology therapeutics in a number of orphan disease indications.

With the Company’s relocation to the United States from the United Kingdom, the Company, having historically been a research organization, is now focused on employing United States based drug development expertise leveraging off its 140 issued patents and 90 patent applications to develop a proprietary drug pipeline of next generation products. All the rights over the Company’s patents and licenses are controlled in the United Kingdom.

***Going Concern***

The Company estimates that as of the date of the filing of this Form 10-Q, the Company has working capital available to fund its current business plan to the middle of the first quarter of 2015. Since its inception, the Company has incurred, and continues to incur, significant losses from operations. The Company has historically relied upon the proceeds of public and non-public financing activities to support the working capital requirements necessary to pursue the on-going research, development and commercialization of its intellectual property and know-how.

During September 2014, the Company entered into a non-exclusive financial advisory and placement agent agreement with an investment bank firm. Through introductions made by that firm and through other sources, the Company has met with and presented its business plan to potential investors for the purpose of raising working capital through a private placement transaction. Based upon the progress of on-going discussions, the Company has a reasonable expectation that it will raise sufficient working capital to meet its obligations over the next twelve months, and therefore has prepared the financial statements on the going concern basis. The Company’s planned capital raise is expected to be through debt (convertible or otherwise), by means of an equity-based instrument, or a combination thereof. The amount of capital the Company will be able to raise in that timeframe will determine to what extent the Company will be able to continue to fund its core programs and related operating costs, and/or accelerate programs as they relate to its preferred level of discretionary spend on pre-clinical developments and clinical trials delivered by external service providers.

While these financial statements have been prepared on a going concern basis, if the Company does not raise additional working capital by the end of 2014, there is no assurance that the Company would be able to continue its operations as now currently planned beyond the middle of the first quarter of 2015 and could raise substantial doubt over the Company’s ability to continue as a going concern. Under such circumstances the Company would first expect to reduce the scale of its pre-clinical programs from the current planned levels, which would likely compel it to reduce general and administrative expenses, defer or cease research and development projects, and delay or cease the purchase of significant clinical research services until it is able to obtain sufficient financing.

***Recent Significant Transaction***

On January 23, 2014, the Company consummated a reverse merger (the “Acquisition”) pursuant to a written plan of reorganization, in which the Company merged with Xenetic Biosciences (UK) Limited (formerly Xenetic Biosciences plc) (“Xenetic UK”), a company incorporated in England and Wales under the Companies Act of 1985, such that Xenetic UK became a wholly owned subsidiary of the Company. Upon completion of the Acquisition, the Company acquired all issued

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and outstanding shares of capital stock of Xenetic UK. As a result, 132,545,504 shares of the Company's common stock were newly issued and, immediately following the Acquisition, there were 136,045,504 shares of common stock issued and outstanding. At that time, because former Xenetic UK shareholders owned approximately 97% of the combined company on a fully diluted basis and all members of the combined company's executive management were from Xenetic UK, Xenetic UK was deemed to be the acquiring company for accounting purposes and the transaction was accounted for as a reverse acquisition in accordance with accounting principles generally accepted in the United States ("US GAAP").

Prior to the Acquisition, the Company changed its name from General Sales and Leasing, Inc. to Xenetic Biosciences, Inc. As used in these condensed consolidated financial statements, unless otherwise indicated, all references herein to "Xenetic", the "Company", "we" or "us" refer to Xenetic Biosciences, Inc. and its wholly owned subsidiaries.

## **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 US GAAP 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, 2013.

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These financial statements have been prepared on the assumption that the Company will be able to realize its assets and discharge its liabilities in the normal course of business. This assumption is presently in question and contingent upon the Company's ability to raise additional working capital. The financial statements do not include any adjustments relating to recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

Certain property and equipment classifications as of December 31, 2013 have been reclassified to conform with the current period presentation.

### ***Principles of Consolidation***

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

In accordance with the reverse acquisition guidance in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 805 *Business Combinations* ("ASC 805"), the consolidated financial statements for the year ended December 31, 2013 of the Company (the accounting acquiree) are a continuation of the financial statements of Xenetic UK (the accounting acquirer), adjusted to retroactively change Xenetic UK's legal capital to reflect the legal capital of the Company. This adjustment was calculated based upon the share exchange ratio of 56 new shares of Company common stock for every whole 175 shares of Xenetic UK capital stock previously issued and outstanding. Comparative information preserved in these consolidated financial statements is also retroactively adjusted to reflect the legal capital of the Company. The legal capital at September 30, 2014 reflects the legal capital of the Company after the Acquisition date and therefore requires no adjustment.

### ***Indefinite-Lived Intangible Assets***

Acquired indefinite-lived intangible assets consist of In-Process Research and Development ("IPR&D") related to the Company's business combination with SymbioTec, which were recorded at fair value on the acquisition date. IPR&D intangible assets are considered indefinite-lived intangible assets until completion or abandonment of the associated research and development efforts. Substantial additional research and development may be required before the Company's IPR&D reaches technological feasibility. Upon completion of the IPR&D project, the IPR&D assets will be amortized over their estimated useful lives.

In accordance with ASC Topic 350 *Intangibles - Goodwill and Other* ("ASC 350"), the Company assesses intangible assets with indefinite lives for impairment using the two-step impairment test at least annually as of October 1, or when events or changes in the business environment indicate the carrying value may not be fully recoverable. The determinations as to whether, and, if so, the extent to which, acquired IPR&D become impaired are highly judgmental and based on significant assumptions regarding the projected future financial condition and operating results, changes in the manner of the use and development of the acquired assets, the Company's overall business strategy, and regulatory, market and economic environment and trends. No impairment was recorded during the nine months ended September 30, 2014 or 2013.

### ***Goodwill***

Goodwill is comprised of the purchase price of business combinations in excess of the fair value assigned at acquisition to the net tangible and identifiable intangible assets acquired. See Footnote 3, *Acquisitions*, for further information on the goodwill activity related to the Acquisition and the subsequent disposal of subsidiaries. Goodwill is not amortized, but in accordance with ASC 350, the Company assesses goodwill for impairment using the two-step impairment test at least annually, or when events or changes in the business environment indicate the carrying value may not be fully recoverable. The Company performs its annual impairment review as of October 1.

In addition, the Company assesses market conditions, industry developments and internal operations to determine if events or changes in the business environment indicate the carrying value of goodwill may not be fully recoverable. No impairment was recorded during the nine months ended September 30, 2014 or 2013.

### ***Property and Equipment***

The Company records property and equipment at cost less accumulated depreciation. Expenditures for major renewals and improvements which extend the life or usefulness of the asset are capitalized. Items of an ordinary repair or maintenance nature are charged directly to operating expense as incurred. The Company periodically reviews the estimated useful lives assigned to property and equipment, and the Company changes its estimates to reflect the results

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of those reviews. During the first quarter of 2014, the Company completed such a review and, as a result, decreased the estimated useful lives of laboratory and office and computer equipment from four years to three years. Separately, the estimated useful lives of furniture and fixtures and leasehold improvements was increased from four years to five years. The effect of this change in estimate for the three months and nine months ended September 30, 2014 is not material to the Company's financial position or results of operations.

The Company calculates depreciation using the straight-line method over the estimated useful lives of the assets:

<b>Asset Classification</b>	<b>Estimated Useful Life</b>
Laboratory equipment	3 years
Office and computer equipment	3 years
Leasehold improvements	5 years or the remaining term of the lease, if shorter
Furniture and fixtures	5 years

The Company eliminates the cost of assets retired or otherwise disposed of, along with the corresponding accumulated depreciation, from the related accounts, and the resulting gain or loss is reflected in the results of operations.

### **Revenue Recognition**

The Company enters into supply, license and collaboration arrangements with pharmaceutical and biotechnology partners, some of which include royalty agreements based on potential net sales of approved commercial pharmaceutical products. The Company recognizes revenue in accordance with the authoritative guidance, ASC Topic 605, *Revenue Recognition*. The Company recognizes revenue when all of the following criteria are met: (i) persuasive evidence of an arrangement exists, (ii) delivery (or passage of title) has occurred or services have been rendered, (iii) the seller's price to the buyer is fixed or determinable, and (iv) collectability is reasonably assured.

#### *License, collaboration and other*

The terms of the Company's license agreements include delivery of an Intellectual Property ("IP") license to a collaboration partner. The Company may be compensated under license arrangements through a combination of non-refundable upfront payments, development and regulatory objective payments and royalty payments on future product sales by partners. Non-refundable upfront payments and development and regulatory objective payments received by the Company in license and collaboration arrangements that include future obligations, such as supply obligations, are recognized ratably over the Company's expected performance period under each respective arrangement. The Company makes its best estimate of the period over which the Company expects to fulfill the Company's performance obligations, which may include technology transfer assistance, research activities, clinical development activities, and manufacturing activities from development through the commercialization of the product. Given the uncertainties of these collaboration arrangements, significant judgment is required to determine the duration of the performance period. Non-refundable upfront license fees received, whereby continued performance or future obligations are considered inconsequential or perfunctory to the relevant licensed technology, are recognized as revenue upon delivery of the technology.

The Company expects to recognize royalty revenue in the period of sale, based on the underlying contract terms, provided that the reported sales are reliably measurable and the Company has no remaining performance obligations, assuming all other revenue recognition criteria are met.

Reimbursements for research and development services completed by the Company related to the collaboration agreements are recognized in operations as revenue on a gross basis.

The Company's license and collaboration agreements with certain collaboration partners could also provide for future payments to the Company based solely upon the performance of the respective collaboration partner in consideration of deadline extensions or upon the achievement of specified sales volumes of approved drugs. For such payments, the Company expects to recognize the payments as revenue when earned under the applicable contract terms on a performance basis or ratably over the term of the agreement. These payments may also be recognized as revenue when continued performance or future obligations by the Company are considered inconsequential or perfunctory.

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### **Share-Based Compensation**

#### *Stock options*

The Company grants share-based payments in the form of options to employees and non-employees, Joint Share Ownership Plan ("JSOP") awards to employees, as well as agreements to issue common stock in exchange for services provided by non-employees. The Company measures share-based payments in accordance with ASC Topic 718, *Compensation – Stock Compensation*.

Stock option compensation expenses are based on the fair value of the underlying option calculated using the Black-Scholes option pricing model. Determining the appropriate fair value model and related assumptions requires judgment, including estimating share price volatility and expected terms of the awards.

For employee options, the fair value measurement date is generally on the date of grant and the related compensation expense, less expense for expected forfeitures, is recognized on a straight-line basis over the requisite vesting period of the awards. Share-based compensation expense related to stock options granted to non-employees is recognized as the services are rendered on a straight-line basis. For non-employee options, the fair value measurement date is the earlier of the date the performance of services is complete or the date the performance commitment has been reached. The Company generally determines the fair value of the stock options is more reliably measurable than the fair value of the services received. Compensation expense related to stock options granted to non-employees is subject to re-measurement at each reporting period until the options vest. The Company estimates forfeitures at the time of grant and revises those estimates in subsequent periods if actual forfeitures differ from those estimates. Upon exercise, stock options are redeemed for newly issued shares of common stock.

#### *Common stock awards*

The Company grants common stock awards to non-employees in exchange for services provided. The Company generally measures the fair value of these awards using the fair value of the services provided as it is a more reliable measure of the fair value of the awards. The fair value measurement date of these awards is generally the date the performance of services is complete. The fair value of the awards is recognized on a straight-line basis as services are rendered. The share-based compensation related to common stock awards for the settlement of services provided by non-employees is recorded on the consolidated statement of comprehensive loss in the same manner and charged to the same account as if such settlements had been made in cash.

#### *Joint Share Ownership Plan awards*

The Company measures the fair value of JSOP awards using Monte Carlo simulations based on the terms of the plan, which includes vesting conditions based on the achievement of certain market conditions in the form of share price hurdles. Accordingly, the Company recognizes compensation expense related to its JSOP awards using a graded vesting model. Determination of the appropriate fair value model and related assumptions requires judgment, including estimating share price volatility and the expected term of the awards.

### **Basic and Diluted Net Loss per Share**

The Company computes basic net loss per share by dividing net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period. The Company computes diluted net loss per share after giving consideration to the dilutive effect of stock options that are outstanding during the period, except where such non-participating securities would be anti-dilutive. The Company's JSOP awards, prior to exercise, are considered treasury shares by the Company and thus do not impact the Company's net loss per share calculation.

Basic and diluted net loss per share are the same for the three-month and nine-month periods ended September 30, 2014 and 2013 as the Company was in a net loss position. Potentially dilutive non-participating securities have not been included in the calculations of diluted net loss per share, as their inclusion would be anti-dilutive. As of September 30, 2014 and 2013, 23,069,501 and 26,508,596 potentially dilutive non-participating securities were deemed anti-dilutive, respectively.

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### **Business Combinations**

The Company has a history of engaging in acquisition transactions that require the Company to evaluate whether the transaction meets the criteria of a business combination and, in some cases, whether it meets the definition of a reverse merger. For those acquisitions that meet the criteria for a reverse merger, the Company evaluates the entities involved to distinguish the appropriate accounting acquirer and acquiree according to ASC 805. If the transaction does not meet the reverse merger business combination requirements, the transaction is accounted for as a recapitalization and no goodwill or intangible assets are recognized. If the acquisition meets the definition of a business combination, the Company allocates the purchase price, including any contingent consideration, to the assets acquired and the liabilities assumed at their estimated fair values as of the date of the acquisition with any excess of the purchase price paid over the estimated fair value of net assets acquired recorded as goodwill. The fair value of the assets acquired and liabilities assumed is typically determined by using either estimates of replacement costs or discounted cash flow valuation methods.

When determining the fair value of tangible assets acquired, the Company estimates the cost to replace the asset with a new asset, taking into consideration such factors as age, condition and the economic useful life of the asset. When determining the fair value of intangible assets acquired, the Company uses judgment to estimate the applicable discount rate, growth rates and the timing and amount of future cash flows. The fair value of assets acquired and liabilities assumed is typically determined using the assistance of an independent third party specialist.

Acquisition related costs are expensed in the period in which the costs are incurred and the services are received.

### **Recent Accounting Pronouncements**

In August 2014, the Financial Accounting Standard Board (FASB) issued ASU 2014-15, *Presentation of Financial Statements – Going Concern* (Subtopic 205-40) (“ASU 2014-15”). ASU 2014-15 defines management’s responsibility to evaluate whether there is substantial doubt about an organization’s ability to continue as a going concern and provides guidance on the related footnote disclosures. This guidance is effective for annual reporting periods beginning after December 15, 2016, and interim periods within annual periods beginning after December 15, 2016. Early application is permitted. The Company is currently evaluating the impact of this new standard.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers* (Topic 606) (“ASU 2014-09”). ASU 2014-09 supersedes the revenue recognition requirements in ASC Topic 605, *Revenue Recognition*, and most industry-specific guidance. The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. This guidance is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period, under either full or modified retrospective approach. Early application is not permitted. The Company is currently evaluating the impact of this new standard on its revenue recognition policy.

The Company has considered other recent accounting pronouncements and concluded that they are either not applicable to the business, or that no material effect is expected on the consolidated financial statements as a result of future adoption.

### **3. Acquisitions**

On January 23, 2014, the Company completed the Acquisition transaction with Xenetic UK which resulted in the Company acquiring all of the issued and outstanding common stock of Xenetic UK. The Acquisition was accounted for as a reverse acquisition under the acquisition method of accounting per ASC 805, with Xenetic UK treated as the accounting acquirer and the Company treated as the “acquired” company for financial reporting purposes. This was determined based on the following facts: (i) after the reverse merger, former shareholders of Xenetic UK held a majority of the voting interest of the combined company; (ii) former Board of Directors of Xenetic UK possess majority control of the Board of Directors of the combined company; and (iii) members of the management of Xenetic UK are responsible for the management of the combined company. As such, the financial statements of Xenetic UK are treated as the historical financial statements of the combined company.

The fair value of the consideration transferred in the reverse merger was \$3.75 million. This was calculated as the number of shares of common stock that Xenetic UK would have had to issue in order for the Company’s shareholders to hold the same equity interest in the combined entity immediately following the acquisition (approximately 9.2%), multiplied by the estimated fair value of the Company’s common stock on the acquisition date (£0.06 per share). The estimated fair value of the Company’s common stock was based on the price of the Company’s stock on the acquisition date, which was actively traded on the Alternative Investments Market of the London Stock Exchange in the United Kingdom. In addition,

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Xenetic UK incurred approximately \$3 million of transaction costs related to the reverse merger to date. The Company recognized approximately \$2.5 million and \$0.5 million of transaction costs related to the reverse merger in general and administrative expenses on the condensed consolidated statement of comprehensive loss during the year ended December 31, 2013 and nine months ended September 30, 2014, respectively.

The fair value of all acquired assets and liabilities assumed summarized below is provisional pending finalization of the Company's acquisition accounting. The Company believes that such preliminary allocations provide a reasonable basis for estimating the fair values of assets acquired and liabilities assumed but the Company is waiting for additional information necessary to finalize fair value. The Company expects to finalize the valuation and complete the purchase price allocation as soon as practicable but no later than one year from the acquisition date. Final determination of the fair value may result in further adjustments. There have been no measurement period adjustments to date.

The fair values of the acquired assets and liabilities assumed are as follows:

Cash	\$ 43,502
Accounts receivable	145
Prepaid expenses	8,643
Property, plant and equipment	331,500
Accounts payable	(354,079)
Accrued expenses	(36,146)
Long-term debt	(372,813)
Total identifiable net assets	(379,248)
Goodwill	4,129,248
Total	\$ 3,750,000

Following the Acquisition, an Agreement of Conveyance, Transfer and Assignment of Subsidiaries and Assumption of Obligations (the "Hive Out Agreement") was executed, whereupon 10,000,000 outstanding shares of common stock held by Oxbridge Technology Partners SA ("Oxbridge") were returned to the Company and recorded as treasury shares and were subsequently canceled. In exchange, Oxbridge acquired all issued and outstanding shares of both of the Company's former operating subsidiaries, Shift It Media Co. and General Aircraft, Inc. (the "Disposed Subsidiaries"), including all assets and liabilities connected with the businesses transferred. In addition, the Company disposed of the associated goodwill. The Hive Out Agreement also required a payment to Oxbridge of \$430,000, which was paid by the Company shortly after the Acquisition.

The Company recorded this divestiture as a separate transaction from the Acquisition that results in the disposal of two of the Company's subsidiaries. The Disposed Subsidiaries did not record any operations in the combined entity following the Acquisition before they were disposed and these financial statements do not reflect the historical financial statements of the Disposed Subsidiaries as they were previously owned by the accounting acquiree. Accordingly, there are no balances to be recorded as discontinued operations on the statement of comprehensive loss. As a result of the divestiture of the Disposed Subsidiaries, the Company recorded a loss on disposal of subsidiaries of \$1,069,675 during the nine months ended September 30, 2014.

Due to the nature of the Acquisition and related Hive Out Agreement, the transaction did not result in any adjustments with a continuing impact on the Company's results of operations.

#### **4. Significant Strategic Drug Development Collaborations**

##### ***Baxter Healthcare SA and Baxter Healthcare Corporation***

In August 2005, the Company entered into an exclusive research, development, license and supply agreement with Baxter Healthcare SA ("Baxter SA") and Baxter Healthcare Corporation (together referred to as "Baxter") to develop products with an extended half-life of certain proteins and molecules using the Company's patent protected PolyXen® technology whereby polysialic acid ("PSA" – a chain of polysialic acids) is conjugated with Baxter's proprietary molecule(s) to create a new generation of drugs to treat the failure of blood to coagulate in the therapeutic treatment of blood and bleeding disorders, such as hemophilia. The lead candidate in this collaboration is a longer-acting form of a recombinant Factor VIII ("rFVIII") protein.

This agreement has been amended several times since 2005, most recently in January 2014. The January 2014 amendment provides for increased future development, regulatory, sales and deadline extension receipts, restructured target deadlines and royalty receipts on potential net sales. The Company is entitled to up to \$100 million in potential development, regulatory, sales and deadline extension receipts, which are contingent on the performance of Baxter achieving certain milestones. The Company is also entitled to royalties on potential net sales varying by country of sale.

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The Company's right to receive these royalties in any particular country will expire upon the later of ten years after the first commercial sale of the product in that country or the expiration of patent rights in that particular country. In connection with this amendment, Baxter SA also made a \$10 million equity investment in the Company in exchange for 10,695,187 shares of the Company's common stock during January 2014.

Through September 30, 2014, the Company and Baxter continued to engage in research and development activities with no resultant commercial products. No amounts were recognized as revenue during the three months ended September 30, 2014 and 2013 or during the nine months ended September 30, 2014. \$1 million was received and recognized as revenue during the nine months ended September 30, 2013 related to this collaboration as the Company's continued performance or future obligations were considered inconsequential or perfunctory.

Baxter is a related party of the Company, with a share ownership of approximately 8.9% and 1.8% of the total issued common stock as of September 30, 2014 and 2013, respectively.

### ***SynBio LLC***

In August, 2011, SynBio LLC ("SynBio") and the Company entered into a stock subscription and collaborative development of pharmaceutical products agreement (the "Co-Development Agreement"). The Company granted an exclusive license to SynBio to develop pharmaceutical products using certain molecule(s) based on SynBio's technology and the Company's proprietary technology (PolyXen®, OncoHist™ and lmuXen®) that prolongs the active life and/or improves the pharmacokinetics of certain therapeutic proteins and peptides (as well as conventional drugs). In return, SynBio granted an exclusive license to the Company to use the pre-clinical and clinical data generated by SynBio in certain agreed products and engage in the development of commercial candidates.

SynBio and the Company are each responsible for funding their own company's research activities. There are no milestone or other research-related payments due under the agreement other than fees for the supply of each company's respective research supplies based on their technology, which, when provided, are due to mutual convenience and not representative of an ongoing or recurring obligation to supply research supplies. Most recently, similar to the Company's agreement with Baxter, Serum Institute of India Limited ("Serum Institute") has agreed to directly provide the research supplies to SynBio, where the Company is not liable for any failure to supply the research supplies as a result of any act or fault of Serum Institute's. Upon successful commercialization of any resultant products, the Company is entitled to receive royalties on sales in certain territories and pay royalties to SynBio for sales outside those certain territories. Through September 30, 2014, the Company and SynBio continued to engage in research and development activities with no resultant commercial products. The Company did not recognize revenue in connection with the Co-Development Agreement during the nine months ended September 30, 2014 and 2013.

SynBio is a related party of the Company, with a share ownership of approximately 40.3% and 45.3% of the total issued common stock as of September 30, 2014 and 2013, respectively.

### ***Serum Institute of India Limited***

In the period from 2004 through 2011, the Company entered into and amended certain license and supply agreements with Serum Institute. The original license agreement with Serum Institute was a collaborative Development and Manufacturing Arrangement ("DMA") to develop agreed upon potential commercial product candidates using the Company's PolyXen® technology. Serum Institute then endeavored to further develop the potential commercial product candidates and eventually initiate pre-clinical and clinical trials at their own cost. The agreement was amended in 2011, resulting in the surrender of development rights for 14 potential commercial product candidates in 2012, which were vested to Serum Institute under the terms of the previous agreements, back to the Company.

Following the 2011 amendment, Serum Institute retained an exclusive license to use the Company's PolyXen® technology to research and develop one potential commercial product, Polysialylated Erythropoietin ("PSA-EPO"). Serum Institute will be responsible for conducting all pre-clinical and clinical trials required to achieve regulatory approvals within the certain predetermined territories at Serum Institute's own expense. The royalty payment schedule based on net revenues on the future commercial sales of PSA-EPO under the DMA was also modified as a result of the 2011 amendment. Royalty payments are payable by Serum Institute to the Company for net sales to certain customers in the Serum Institute sales territory. Royalty payments are payable by the Company to Serum Institute for net sales received by the Company over the term of the license. No royalty revenue or expense was recognized by the Company related to the Serum Institute arrangement during the nine months ended September 30, 2014 and 2013. There are no milestone or other research-related payments due under the DMA. Through September 30, 2014, the Company and Serum Institute continued to engage in research and development activities with no resultant commercial products.

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Serum Institute is a related party of the Company, with a share ownership of approximately 9.4% and 10.6% of the total issued common stock as of September 30, 2014 and 2013, respectively.

### 5. Property and Equipment, net

Property and equipment, net consists of the following:

	September 30, 2014	December 31, 2013
Laboratory equipment	\$ 245,450	\$ 1,106,761
Office and computer equipment	192,344	137,974
Leasehold improvements	94,855	69,296
Furniture and fixtures	51,291	52,904
Property and equipment – at cost	583,940	1,366,935
Less accumulated depreciation	(446,933)	(1,214,332)
Property and equipment – net	\$ 137,007	\$ 152,603

Following the closure of the laboratory in London, approximately \$885,000 of fully depreciated laboratory equipment was retired. Depreciation expense was \$23,254 and \$13,169 for the three months ended September 30, 2014 and 2013, respectively, and \$55,769 and \$40,689 for the nine months ended September 30, 2014 and 2013, respectively.

### 6. Goodwill and Indefinite-Lived Intangible Assets

#### *Goodwill*

A reconciliation of the change in the carrying value of goodwill is as follows:

Balance as of January 1, 2013	\$ 3,592,073
Foreign currency translation	73,126
Balance as of December 31, 2013	3,665,199
Acquired from acquisitions	4,129,248
Disposed with Hive Out Agreement	(4,129,248)
Foreign currency translation	(67,791)
Balance as of September 30, 2014	\$ 3,597,408

The goodwill acquired from the Acquisition was disposed in connection with the Hive Out Agreement. See Footnote 3, *Acquisitions*, for further discussion on the Acquisition and the Hive Out Agreement.

#### *Indefinite-Lived Intangible Assets*

The Company's acquired indefinite-lived intangible asset, OncoHist™, is IPR&D relating to the Company's business combination with SymbioTec. As of October 1, 2013, the date of the Company's annual impairment review, the fair value of the Company's indefinite-lived intangible asset balance was \$10,559,820. The carrying value of OncoHist™ was \$10,127,159 and \$10,318,001 as of September 30, 2014 and December 31, 2013, respectively. No impairment was recorded during the three months or nine months ended September 30, 2014 and 2013. The changes in the carrying value reflected herein are solely comprised of the effects of changes in foreign currency.

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**7. Accrued Expenses**

Accrued expenses consist of the following:

	September 30, 2014	December 31, 2013
Accrued professional fees	\$ 318,986	\$ 1,106,358
Accrued research costs	204,391	29,682
Accrued payroll and benefits	36,088	99,548
Accrued bonus compensation	-	422,226
Other	193,472	169,053
	<u>\$ 752,937</u>	<u>\$ 1,826,867</u>

**8. Income Taxes**

During the three and nine months ended September 30, 2014 and 2013, there was not a provision for income taxes as the Company incurred losses during these 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 \$13.5 million and \$9.5 million as of September 30, 2014 and December 31, 2013, respectively.

As of September 30, 2014 and December 31, 2013, the Company recorded unrecognized tax positions of \$182,521 and \$185,961, respectively, due to a claim for research and development tax credits. A full valuation allowance has been provided against the Company's research and development credits and, if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance with no resulting impact on overall income tax expense or the condensed consolidated statements of comprehensive loss.

**9. Share-Based Compensation**

Total share-based compensation related to stock options, common stock awards and JSOP awards was \$246,258 and \$123,374 for the three months ended September 30, 2014 and 2013, respectively, and \$678,508 and \$336,275 for the nine months ended September 30, 2014 and 2013, respectively.

Share-based compensation is classified in the condensed consolidated statements of comprehensive loss as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2014	2013	2014	2013
Research and development expenses	\$ 155,893	\$ 14,959	\$ 189,986	\$ 52,527
Administrative expenses	90,365	108,415	488,522	283,748
	<u>\$ 246,258</u>	<u>\$ 123,374</u>	<u>\$ 678,508</u>	<u>\$ 336,275</u>

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### ***Stock Option Modification***

Prior to the Acquisition, the Company had two incentive stock plans, the Lipoxen plc Unapproved Share Option Plan (the "2000 Stock Plan") and the Xenetic Biosciences plc 2007 Share Option Scheme (the "2007 Stock Plan"). Subsequent to the Acquisition, the 2000 and 2007 Stock Plans were converted to reflect the new shares issued by the Company under the Scheme of Arrangement related to the Acquisition. As part of the conversion, option holders under the 2000 and 2007 Stock Plan have the right to subscribe for a number of shares of common stock in the Company (the "Replacement Option Shares") in exchange for the cancellation and surrender by the option holder of the original options granted by the 2000 and 2007 Stock Plans. The number of Replacement Option Shares is determined in the same manner in which the shareholders of Xenetic UK were given the right to acquire shares of common stock in the Company according to the Acquisition. The aggregate exercise price payable in US dollars for Replacement Option Shares is the same as the aggregate exercise price in pounds sterling of the original options, using a foreign currency exchange rate for pounds sterling into US dollars quoted by Barclays Bank plc at 12 noon Greenwich Mean Time ("GMT") on January 23, 2014, the date of the Acquisition. The conversion of the options is treated as an option modification. The Company accounted for the option modification under ASC Topic 718, *Compensation – Stock Compensation*, and determined the option modification does not result in incremental stock compensation cost that is material to the Company's results of operations during the three months and nine months ended September 30, 2014.

### ***Stock Options***

During the three months and nine months ended September 30, 2014, 100,000 total stock options to purchase shares of common stock were granted under the Xenetic Biosciences, Inc. Equity Incentive Plan. These stock options vested immediately on the grant date and the Company recognized compensation expense of \$56,347 related to these grants. During the three months and nine months ended September 30, 2013, an employee was granted 1.92 million stock options to purchase shares of common stock. These shares were subsequently forfeited during the fourth quarter of 2013. Accordingly, any compensation recorded in connection with these options was reversed upon forfeiture. During the nine months ended September 30, 2014, a named executive of the Company exercised 1,984,080 stock options. Cash received from stock option exercise was \$101,933. There were no other employee stock option exercises during the nine months ended September 30, 2014 or 2013. The Company recognized compensation expense related to employee stock options of \$92,108 and \$23,708 during the three months ended September 30, 2014 and 2013, respectively, and \$117,007 and \$47,624 during the nine months ended September 30, 2014 and 2013, respectively.

### ***Non-Employee Stock Options***

No non-employee stock options were granted during the three months or nine months ended September 30, 2014 and 2013 and no non-employee stock options were exercised during the three months or nine months ended September 30, 2014 and 2013. The Company recognized compensation expense related to non-employee stock options of \$128,650 and \$3,716 during the three months ended September 30, 2014 and 2013, respectively, and \$140,096 and \$18,270 during the nine months ended September 30, 2014 and 2013, respectively.

### ***Common Stock Awards***

The Company granted 37,218 and 81,562 common stock awards during the three months ended September 30, 2014 and 2013, respectively, and granted 104,637 and 187,896 common stock awards during the nine months ended September 30, 2014 and 2013, respectively, in exchange for professional services. As all services were rendered in each respective period, compensation expense related to common stock awards of \$25,500 and \$25,504 was recognized during the three months ended September 30, 2014 and 2013, respectively, and \$76,500 and \$61,341 was recognized during the nine months ended September 30, 2014 and 2013, respectively. All common stock awards were authorized but not issued as of September 30, 2014.

### ***Joint Share Ownership Plan***

In 2010 and 2012, the Company issued 1,701,913 and 8,986,281 JSOP awards, respectively, to two senior executives under the JSOP. During 2011, the 2010 JSOP awards fully vested under the terms of the JSOP due to a significant change in beneficial ownership of the Company and the related compensation charges were fully recorded during periods prior to 2013 related to this accelerated vesting. During the first quarter of 2014, the 2012 JSOP awards fully vested under the terms of the JSOP due the achievement of specific share price hurdles and the related compensation charges were fully recorded during the first quarter of 2014 related to this accelerated vesting. As of September 30, 2014, all JSOP awards were fully vested.

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The total fair value of the 2012 JSOP awards was \$853,889 at the date of issuance. The Company recognized \$344,905 and \$209,040 of compensation costs during the nine months ended September 30, 2014 and 2013, respectively, and \$70,446 of compensation costs during the three months ended September 30, 2013 related to the 2012 JSOP awards. No compensation cost related to the 2012 JSOP awards was recognized during the three months ended September 30, 2014.

### **10. Commitments**

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. With the execution of this lease, the Company is required to maintain a \$66,000 letter of credit as a security deposit. In connection with the Lexington lease, the Company recorded \$127,664 as prepaid rent as of September 30, 2014, with \$98,203 recorded as a non-current asset. The Company also incurred a liability of \$89,074 with respect to the Company's contribution to the landlord's leasehold improvements, of which \$77,147 is outstanding as of September 30, 2014, with \$60,729 recorded as a non-current liability. This liability is repayable as additional rent expense over the term of the lease and bears interest at 6%. In addition, the Company leases office space in London, UK, which is due to expire in March 2017. In September 2014, the Company served notice to the landlord of the office space in London in accordance with the terms of the break clause in the lease. The Company also leased laboratory space in London, UK during 2013, however this lease was terminated in December 2013.

Rent expense is calculated on a straight-line basis over the term of the lease. Rent expense under the Company's operating leases was \$42,347 and \$69,483 for the three months ended September 30, 2014 and 2013, respectively, and \$129,577 and \$218,223 for the nine months ended September 30, 2014 and 2013, respectively.

### **11. Related Party Transactions**

In May 2011, the Company received a short term unsecured loan facility of up to \$1.7 million from SynBio, a related party, of which \$395,000 and \$681,124 was outstanding as of September 30, 2014 and December 31, 2013, respectively. A payment of \$286,124 on the outstanding loan was made to SynBio during the three and nine months ended September 30, 2014. The loan had an interest rate of 8.04% per annum as of the date of grant, with interest payable upon repayment of the loan, which was to be seven months after the closing date of the loan. During 2012, the loan matured and it was agreed by both parties that the loan can be called due with full repayment of the outstanding principal including accrued interest upon future agreement by both parties. It was also agreed at this point that as of July 1, 2012, no further interest on the outstanding loan balance will be accrued. The loan is recorded in "Loans due to related parties" within current liabilities as of September 30, 2014 and December 31, 2013. The loan does not bear interest at the prevailing market rate for instruments with similar characteristics

## 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.

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.

The single most pressing factor that could cause actual results to differ materially and adversely is our need to raise additional working capital for the purpose of further developing our various drug candidates. We estimate that we have less than six months of working capital as of November 14, 2014 and our future results could differ materially and adversely if we are unable to raise additional working capital.

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

- 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;
- any safety issues that arise with respect to our drug candidates;
- our ability to clinically demonstrate the safety or efficacy of our drug candidates;
- 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 (“IP”);
- the adoption of new, or changes in, accounting principles;
- the costs inherent with complying with current and 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. 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. Please also refer to Part I, Item 1A – Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2013.

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

## BUSINESS OVERVIEW

Management’s discussion and analysis of our financial condition and results of operations (“MD&A”) should be read in conjunction with the condensed consolidated financial statements and related footnotes.

The Company is a clinical stage biopharmaceutical company that is focused on the development of certain drug candidates for use in humans that incorporate the use of its patented and proprietary platform technologies that we believe will enable the creation of novel and next generation drug therapies.

## Significant Transactions and Recent Developments

On January 23, 2014 Xenetic Biosciences, Inc. (the “Company”) acquired all of the issued and outstanding capital stock of Xenetic Biosciences (UK) Limited (formerly known as Xenetic Biosciences plc) (“Xenetic UK”), a company incorporated in England and Wales under the Companies Act of 1985 in 1996. The Company’s acquisition of Xenetic UK (the “Acquisition”) was consummated pursuant to a written plan, known as a Scheme of Arrangement, under Part 26 of the Companies Act 2006 of England and Wales (the “Scheme”) dated as of November 21, 2013. The Scheme was approved by Order of the High Court of Justice, Chancery Division, in London (the “Court”) on January 23, 2014. In its ruling, the Court considered the fairness of the transaction and determined that the terms and conditions of the issuance of new shares of common stock of the Company in exchange for the issued and outstanding shares of Xenetic UK were fair. Accordingly, the new shares of common stock of the Company issued as part of the Acquisition are “Exempted Securities” under Section 3(a)(10) of the Securities Act of 1933, as amended (the “Securities Act”). Pursuant to the Scheme, the Company exchanged 56 new shares of Company common stock for every whole 175 shares of Xenetic UK capital stock. This transaction resulted in Xenetic UK becoming a wholly owned subsidiary of the Company.

An Agreement of Conveyance, Transfer and Assignment of Subsidiaries and Assumption of Obligations, previously executed on November 21, 2013 (the “Hive Out Agreement”), became effective upon closing of the Acquisition. Under the terms of the Hive Out Agreement, ten million shares of the Company’s common stock held by General Sales & Leasing, Inc.’s former controlling shareholder, Oxbridge Technology Partners SA (“Oxbridge”), were canceled and returned to treasury. In exchange, Oxbridge acquired all issued and outstanding shares of both of our former operating subsidiaries, Shift It Media Co. and General Aircraft, Inc. In addition, Oxbridge has assumed any and all liabilities connected with the business being transferred and has indemnified the Company for any losses arising out of such liabilities. The Hive Out Agreement also required a payment to Oxbridge in the amount of US dollars (“\$”) 430,000. The \$430,000 payment was made shortly after the closing of the Acquisition. As a result of the Hive Out Agreement, the Company’s assets, liabilities, and continuing operations are now exclusively those of Xenetic UK. Please refer to the Company’s 2013 Annual Report on Form 10-K filed on April 15, 2014 Part 1: Item 1 - Business, under the caption “Recent Developments”, for further information regarding the Acquisition.

## Board of Directors

We have appointed several experienced public company and industry experts to our Board. We have appointed a chairman, Mark Leuchtenberger, who has served as the CEO of two NASDAQ listed companies including a senior role at Biogen Idec, Inc. and Chairman of the Massachusetts Biotechnology Council. We have appointed a financial expert, Darlene Deptula-Hicks, to chair the audit committee. Ms. Deptula-Hicks is a Chief Financial Officer and has chaired the audit committees of several privately owned as well as US exchange traded companies. We have also appointed an industry expert, Dr. Timothy Coté, who was instrumental in implementing the Orphan Drug Act and led the US Food and Drug Administration (“FDA”) Office of Orphan Products Development from 2007 to 2011.

## Technology Overview

The Company is currently in various stages of development with respect to its three core patented and proprietary technologies, these being, PolyXen® (for biologics), OncoHist™ (as a broad spectrum oncology therapy), and ImuXer® (for vaccines).

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The Company's three core technologies are summarized as follows:

PolyXen®	An enabling technology that utilizes Polysialic Acid ("PSA"), a biopolymer, consisting of a chain of sialic acids which is a natural constituent of the human body. PSA is designed to extend the half-life in circulation in the human body for a variety of existing drug molecules and, thereby, to create potentially superior next generation drug candidates.
OncoHist™	A novel therapeutic platform that utilizes the properties of H1.3 for the development of drug candidates for the treatment of a broad range of cancer indications. OncoHist™, unlike many competing oncology therapies, is based on a molecule occurring naturally in the human body, in the cell nucleus, and is therefore expected to be less toxic and immunogenetic than other oncology therapies.
ImuXen®	A novel liposomal co-entrapment encapsulation technology designed to create new vaccines and improve the use and efficacy of certain existing vaccines for use in the human body. The technology is based on the co-entrapment of the nominated antigen(s) in a liposomal vesicle, a design that is intended to maximize both cell and immune system mediated responses.

All of the Company's current drug candidates are in the development stage and none has yet received regulatory approval for marketing in the US by the FDA or by any other applicable agencies in other countries.

### **Areas of Therapeutic Application**

The nature of the core technologies is that they each have very broad potential application in the creation of potentially superior therapies in, respectively, the fields of biologics, oncology and vaccines. The Company believes that relocating its corporate headquarters to the US provides it with the best possible platform for it to promote and execute its business strategy as a public company striving to introduce new and improved therapies to the US and global patient population. The Company believes OncoHist™ has the potential to address a number of cancers with high mortality, e.g. Acute Myeloid Leukemia ("AML").

Our PolyXen® PSA technology lead candidates primarily focus on blood disorders. Our ErepoXen® drug candidate, designed to be a best in class anemia therapy, is currently in Phase II clinical trials in Australia and New Zealand. Our technology is also the subject of a license deal with Baxter International, Inc. for hemophilia.

### **Our Business Strategy**

The Company intends to advance the clinical development of its drug candidates through a combination of conducting its own in-house research and through the use of the outside services of contract manufacturing and research organizations. The OncoHist™ drug candidate for AML has been granted orphan drug designation by the FDA. The Company expects to seek further orphan drug designations relating to this novel potentially ground-breaking cancer therapeutic over the next twelve months, working in concert with the Dana Farber Cancer Institute. The advancement of its drug candidates is dependent, in part, on several important co-development collaborations and strategic arrangements. Together with its collaborative partners, Baxter Healthcare SA and Baxter Healthcare Corporation (together referred to as "Baxter"), SynBio LLC ("SynBio"), a Russian pharmaceutical company and significant shareholder in the Company, OJSC ("Open Joint Stock Company") Pharmsynthez ("Pharmsynthez"), a Russian pharmaceutical company and Serum Institute of India Limited ("Serum Institute"), one of India's largest biotech companies and a shareholder in the Company, the Company is focused on developing its pipeline of next generation bio-therapeutics and novel orphan drugs in oncology based on the Company's PolyXen®, OncoHist™ and ImuXen® technology platforms.

The Company's strategy is to develop its orphan drug candidates through to regulatory approval. The Company then plans to commercialize those orphan drug candidates. For the non-orphan drug candidates vested in its pipeline via its collaborations, e.g. ErepoXen® and a Multiple Sclerosis vaccine candidate, MyeloXen™, the Company intends to develop to a stage that will enable it to seek profitable out-licensing arrangements with major pharmaceutical companies for further development and eventual commercialization, in exchange for milestone payments and royalties from product sales. Its collaborative out-licensing agreements relating to the platforms are an integral part of its early-stage monetization strategy.

Even with regard to its strategy of current and planned future co-development collaborations and out-licensing, the Company must raise significant additional capital in order to develop its drug candidates to the point of commercialization. The Company's management will regularly make evaluations in concert with the Company's Board of Directors as to when to seek additional working capital through various financing structures for the purpose of pursuing its business strategy. Although the Company is optimistic, there can be no assurance that it will be successful in raising additional working capital in the future. If not successful, the Company's business could be adversely affected.

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### **Reliance on Principal Customer**

Since August 2005, Baxter has been a principal customer of the Company, accounting for the substantial portion of the Company's revenue, through up-front payments and fee for services in prior years. In both current periods presented, there were no revenues earned under the existing Baxter arrangements. During the nine months ended September 30, 2013, the Company received and recognized \$1 million in revenue related to Baxter arrangements as the Company's continued performance or future obligations were considered inconsequential or perfunctory.

### **Our Technologies**

#### ***PolyXen®***

PolyXen® is a platform technology based on the concept of polysialylation. PSA is a polymer chain composed of sialic acids linked together. Sialic acid is found on the external membrane of a number of cell types in the body. In addition, it is a natural component expressed on the external membrane on a number of bacterial types. The chain of sialic acid molecules can be anywhere from 4 to over 200 individual sialic acid molecules in length. The Company uses the linear form of PSA called colominic acid. It is a natural, hydrophilic polymer isolated from a bacterial strain of E. coli K1. This natural glycan is negatively charged, non-toxic and is biodegradable. The PSA chain is extensively purified from large-scale bacterial cultures under Current Good Manufacturing Practices conditions, modified to specified sizes and then attached to defined sites on the therapeutic. Both the site of attachment and the length of the PSA chain can enhance the properties of the therapeutic.

The major effect of PSA addition to a therapeutic is to change the apparent hydrodynamic radius of the molecule. This physical alteration then changes a number of the biological characteristics of the therapeutic. The most noticeable, and perhaps the most relevant, is an extension of the lifetime of the therapeutic in blood circulation. This is due to the increase in the size of the drug which results in a decrease in the clearance rate of the molecule in the kidney by glomerular filtration. In addition, studies have shown changes in other biological characteristics such as protease sensitivity and temperature sensitivity. An added benefit is that the conjugated molecules are less viscous in solution than comparable other technologies, providing the potential for easier injections and fewer injection site reactions. Furthermore, we believe that adding PSA to an existing marketed drug may allow for patent extension, thereby potentially creating a patent-protected next generation candidate.

The current standard for certain biologic delivery agents is methyl Polyethylene Glycol ("PEG") which is attached similarly to therapeutics. The mode of action between PSA and PEG is similar, increasing the apparent size of the molecule and thereby increasing the circulating time of the drug in the blood. PEGylation is a proven technology that can offer advantages in terms of pharmacokinetics and pharmacodynamics for therapeutics over non-modified, first generation molecules. There are a number of PEG-modified molecules on the market, in clinical trials and under development. However, PEGylation is considered to have limitations, such as non-biodegradability and, at high doses, may thereby result in intra-cellular accumulation, potentially leading to vacuole formation in the cells. In contrast, because PSA is a chain of sialic acids, which are natural constituents of the human body, it is biodegradable into individual sialic acid units. In addition, PEG in many cases has been shown to be immunogenic when coupled to proteins and can activate the complement system. PEG has also demonstrated limitations on a few select molecules. Polysialylation has to date been shown to be non-immunogenic and has demonstrated greater versatility and fewer limitations in the context of early-stage development relative to PEG. We believe PSA may provide the advantages of PEG without many of its disadvantages, offering a potential advance over PEG molecules.

#### ***OncoHist™***

OncoHist™ is based on research covered under our patent portfolio related to novel functions of histones. Histone H1 has strong anti-proliferative properties against cancer cells of different histological origin. This has been demonstrated extensively for hematologic malignancies, such as leukemias, lymphomas, and myelomas, and also for tumors from other tissues. Susceptibility of cells to the cytotoxic effect of histones is determined by the ability of histone H1 to selectively destabilize the tumor cell membrane, which results in cell death.

A novel form of the molecule was developed by the Company and a patent filed for the protection of the new chemical entity, N-bis-met-histone 1.3 (OncoHist™) in use against cancer, providing patent protection at least until 2027. The activity of the new molecule was tested on 58 tumor cell lines derived from various tissues. Hematopoietic tumor cell

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lines were found to be among the most sensitive cell lines. The mechanism of action appears to be novel, involving the binding of OncoHist™ to the cell membrane, which is completely different than that of other therapeutic agents on the market for hematopoietic cancers. Confirmatory work on this mode of action with more detailed analyses is being completed by Dana-Farber Cancer Institute (“Dana-Farber”). Hematopoietic tumor lines resistant to current chemotherapeutic agents have shown sensitivity to OncoHist™.

In laboratory research work, the compound was tested at the National Cancer Institute in 60 human cancer cell lines from different tissue samples and showed high cytotoxic efficacy throughout, which would suggest a broad acting oncolytic potential. OncoHist™’s potency and potential to inhibit growth of cells from various histological origins were confirmed through in-vitro testing against the US National Cancer Institute 60 (“NCI-60”). OncoHist™ was awarded orphan drug designation (Orphan Medicinal Product Designation (“OMPD”)) for treatment of AML by the European Commission in December 2007 and by the FDA in October 2008. OncoHist™ was awarded an additional OMPD status for Acute Lymphocytic Leukemia (“ALL”) by the European Medicines Agency (the “EMA”).

A Phase I-II trial to evaluate the safety and tolerability of OncoHist™ was conducted in 2008 at Saarland University, in Germany with 22 AML patients. Tolerability and safety results were favorable with indications of the drug being immunologically safe. Clinical effects were noted in seven patients with three partial remissions. Most notably, two patients who had received two treatment cycles each experienced stabilization of their disease for 7 and 17 months.

A clinical trial with 120 AML patients has been performed in clinical centers in the Russian Federation. The aim of this trial was to examine the potential benefits of OncoHist™ in combination with standard therapy: cytarabine with mitoxantrone. A Non-Hodgkins Lymphoma (“NHL”) safety trial has been successfully completed in Russia. As an integral part of the Company’s strategy, we intend to await later stage clinical data on NHL to determine whether to progress this candidate into US FDA trials.

Based upon our analysis of data from the AML trial performed in the Russian Federation, and data developed in Germany at Saarland University, the Company has determined to commence pre-clinical animal studies which are underway in the US in support of a planned phase 1/IIa IND filing with the FDA in the first half of 2015.

### ***ImuXen®***

ImuXen® is a patented platform technology based on the concept of simultaneous delivery of multiple Active Pharmaceutical Ingredients (“APIs”) as antigens within the same liposome. The liposomes are composed of lipids that encapsulate an aqueous core. The APIs can be trapped in the core, be associated with the lipids, or both. Proteins, peptides, nucleic acids, polysaccharides and live or inactivated infectious agents can all be used as an API with the same liposome. Both the size and the lipid composition can be controlled which affects the biological properties of the liposome. Manufacturing involves the passive entrapment of the vaccine APIs by freeze drying commercially available liposomes with the antigens of interest.

Having multiple APIs formulated with the same liposome allows simultaneous delivery of the antigens to the same antigen-presenting cell. This may allow a more efficient immune response to all the agents presented. In addition, it is possible that multiple vaccines can be delivered with a single injection. Relevant pre-clinical studies have indicated a reduction in the dose required, a reduction in the number of doses required and a faster immune response time. This efficient immune response also may allow for use of antigens that traditionally give a poor antibody response.

A Phase I/II clinical trial to treat Relapsing Remitting Multiple Sclerosis and Secondary Progressive Multiple Sclerosis is in progress in the Russian Federation. Peptides corresponding to antigenic sections of basic myelin protein were encapsulated within liposomes to be used as the therapeutic agent (MyeloXen™). Administration of MyeloXen™ to patients has occurred and follow-up monitoring is in progress. As an integral part of the Company’s strategy, we await later stage clinical data on MyeloXen™ to determine whether to progress this candidate into FDA trials and eventual out-licensing.

### **Critical Accounting Estimates**

The preparation of our financial statements in conformity with US GAAP 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

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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 filed on April 15, 2014.

## RESULTS OF OPERATIONS

The comparison of our historical results of operations for the fiscal quarter ended September 30, 2014 to the fiscal quarter ended September 30, 2013 is set forth below:

Description	Quarter Ended September 30, 2014	Quarter Ended September 30, 2013	Increase (Decrease)	Percentage Change
Revenue	\$ -	\$ -	\$ -	-
Cost of revenue	-	-	-	-
Gross profit	-	-	-	-
Operating costs and expenses:				
Research and development	1,905,234	1,037,798	867,436	83.6%
General and administrative	1,203,126	1,492,176	(289,050)	19.4%
Loss from operations	(3,108,360)	(2,529,974)	578,386	22.9%
Loss on disposal of subsidiaries	-	-	-	-
Other income (expense)	(72,877)	(206,546)	133,669	64.7%
Interest income	218	7,743	(7,525)	97.2%
Interest (expense)	(1,196)	-	(1,196)	100.0%
	(73,855)	(198,803)	124,948	62.9%
Net loss	\$ (3,182,215)	\$ (2,728,777)	\$ (453,438)	16.6%

### Revenue

No revenue was recognized during the three months ended September 30, 2014 and 2013.

### Cost of Revenue

The Company incurred no cost of revenue for the quarters ended September 30, 2014 and 2013.

### Research and Development

The Company engages in independent research and development ("R&D") in connection with its various technologies.

The total R&D spend by subsidiary location for the quarters ended September 30, 2014 and 2013 is set forth in the table below:

Subsidiary Location	Quarter ended,	
	September 30, 2014	September 30, 2013
United States	\$ 1,300,778	\$ 133,677
United Kingdom	604,456	904,121
Germany	-	-
Total research and development expense	\$ 1,905,234	\$ 1,037,798

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Overall, our corporate R&D expenses for the quarter ended September 30, 2014 increased by approximately \$867,436, or 84% to \$1,905,234 from \$1,037,798 in the comparable quarter in 2013. As reflected in the above table, the location of research activities is being migrated into the United States, under the overall authority, direction and control of Lipoxen Technologies Limited ("Lipoxen"). As reflected in the table, the US-based subsidiary research expenditures are up approximately 873% while UK-based subsidiary research expenditures are down approximately 33%. This is consistent with the opening of a US-based lab and closing down the UK-based lab in the fourth quarter of 2013. The September 30, 2014 UK-based R&D expense is comprised principally of approximately \$108,000 in remaining UK-based salaries and wages and approximately \$323,000 in payments to Contract Research Organizations ("CRO") while the US-based R&D for the same period is comprised principally of approximately \$100,000 in salaries and wages, \$852,000 in payments to other external service providers, \$232,000 in payments to Contract Manufacturer Organizations ("CMO"), and approximately \$38,000 in rents, utilities and maintenance.

The September 30, 2013 UK-based R&D expense is comprised principally of approximately \$151,000 in salaries and wages, \$542,000 in payments to CRO's, and approximately \$60,000 in rent expense while the US-based R&D expense for the same period is comprised principally of \$115,000 of salaries and wages and approximately \$12,000 of stock-based compensation and other benefits.

The US-based expenditures include expenditures paid to CRO's, where the underlying research is being supervised in the US under the overall authority, direction and control of Lipoxen.

No R&D expenditures were incurred in Germany during the three months ended September 30, 2014 or 2013 as the location of research activities is being moved out of Germany as part of the Company's plans subsequent to the acquisition of SymbioTec GmbH in 2012.

The table below sets forth the R&D costs incurred by the Company, by category of expense, for the quarters ended September 30, 2014 and 2013:

Category of Expense	Quarter ended,	
	September 30, 2014	September 30, 2013
Outside services, Contract Research and Manufacturer Organizations	\$ 1,449,913	\$ 551,037
Salaries and wages	207,801	266,201
Share-based compensation expense	155,892	14,959
Rent	22,645	62,643
Lab consumables	-	84,980
Other	68,983	57,978
Total research and development expense	\$ 1,905,234	\$ 1,037,798

### **Research and Development by Subsidiary Location**

During the second half of 2013, we began the process of relocating our R&D laboratory facilities to the US, leading to a gradual reduction in salaries and wages, rent expenses and non-program specific related costs incurred in the UK, with a corresponding increase in costs incurred in the US. As reflected in the above table, there is a trend towards the use of increased outside services and CRO's over in-house staffing.

### **Research and Development by Category of Expense**

#### *Outside Services, CRO and CMO Costs*

This item is substantially related to CRO, CMO and consultant costs, approximately \$1,449,913 and \$551,037 for the quarters ended September 30, 2014 and 2013, respectively, incurred in connection with preclinical work being performed related to the Company's OncoHist™ AML program and the Company's PSA-EPO ErepoXen® human clinical trials being conducted in Australia under the supervision of the US-based subsidiary. This period over period fluctuation in this expense category primarily relates to the planned increase in the current period of pre-clinical development activities related to the progression of the OncoHist™ AML program, partially offset by expected decreases in PSA EPO human clinical trials. PSA-EPO costs vary normally from quarter to quarter depending on the progress of the trials and number of patient enrolled in the study.

#### *Salaries and Wages*

In aggregate, salaries and wages reflect a decrease of approximately 22%, which is related to the reduction of the UK-based research personnel by the end of 2013 without a corresponding proportionate increase in US-based research personnel through September 30, 2014. Along with the reduced salaries and wages, the relocation of our R&D laboratory facilities has resulted in a shift in the subsidiary location in which the expense is incurred.

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### *Rent*

During the quarter ended September 30, 2013, the Company operated from two sites in London, a laboratory facility, which has since been closed, and a general and administrative office. As of December 31, 2013 the London laboratory facility was completely closed down with its equipment being sold, disposed or transferred to the US-based laboratory. For the quarter ended September 30, 2014, the Company incurred no R&D rent in London and a full quarter of R&D rent in the US resulting in overall lower rent expenses compared to the quarter ended September 30, 2013. In September 2014, the Company served notice to the landlord of the general and administrative office in London in accordance with the terms of the break clause in the lease, with a termination date of March 20, 2015.

### *Lab Consumables*

The decrease in lab consumables expense is correlative to progressively engaging outside services, CRO's and CMO's to perform R&D activities over in-house staffing and the Company's US-based lab during the quarter ended September 30, 2014 as compared to the comparable period in 2013.

### *Other*

The change in other expense results from the net aggregate change of all other miscellaneous R&D costs.

## **General and Administrative**

General and administrative expenses decreased by approximately \$289,000, or 19% for the quarter ended September 30, 2014 to \$1.20 million from \$1.49 million in the comparable quarter in 2013. The most significant drivers of the change were decreases of approximately \$314,000 in contractors and consultant fees, \$110,000 in legal fees and \$20,000 in accounting fees incurred during the quarter ended September 30, 2014 primarily associated with the Company's strategic decision to move from a UK-based, London AIM quoted organization, to a US-based, publicly traded company, as described in the "Significant Transactions and Recent Developments" section of Management's Discussion and Analysis. There were no costs associated with this strategic decision during the comparable quarter in 2013. These increases were offset in part by increases of approximately \$42,000 in directors and officers insurance fees, \$30,000 in investor relations expenses, \$30,000 in general repairs and maintenance and \$23,000 in payroll processing fees.

## **Other Income (Expense)**

Other income increased by \$133,669, or approximately 64%, from an expense of \$206,546 to an expense of \$72,877 in connection with foreign currency exchange gains and losses.

## **Interest Income**

Interest income decreased by \$7,525, or approximately 97%, to \$218 for the quarter ended September 30, 2014 from \$7,743 in the comparable quarter in 2013. The decrease is related to decreases in average cash balances maintained in interest bearing accounts.

## **Interest Expense**

Interest expense increased by \$1,196 for the quarter ended September 30, 2014 from \$0 in the comparable quarter in 2013. The interest expense is related to a financing arrangement with the landlord of the Company's office and lab lease in the US, which commenced in January 2014.

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The comparison of our historical results of operations for the nine months ended September 30, 2014 to the nine months ended September 30, 2013 is set forth below:

Description	Nine		Increase (Decrease)	Percentage Change
	Months Ended September 30, 2014	Months Ended September 30, 2013		
Revenue	\$ -	\$ 1,000,000	\$ (1,000,000)	100.0%
Cost of revenue	-	-	-	-
Gross profit	-	1,000,000	(1,000,000)	100.0%
Operating costs and expenses:				
Research and development	3,502,805	2,614,714	888,091	34.0%
General and administrative	5,204,541	3,450,103	1,754,438	50.9%
Loss from operations	(8,707,346)	(5,064,817)	(3,642,529)	71.9%
Loss on disposal of subsidiaries	(1,069,675)	-	(1,069,675)	100.0%
Other income (expense)	(235,484)	(5,191)	(230,293)	4436.4%
Interest income	11,960	27,924	(15,964)	57.2%
Interest expense	(3,569)	(632)	(2,937)	464.7%
	(1,296,768)	22,101	(1,318,869)	5967.5%
Net loss	\$ (10,004,114)	\$ (5,042,716)	\$ (4,961,398)	98.4%

### Revenue

Revenue decreased to \$0 for the nine months ended September 30, 2014 from \$1,000,000 in the nine months ended September 30, 2013. Revenue for the nine months ended September 30, 2013 is comprised of a single transaction consisting of an upfront non-refundable license fee in the amount of \$1 million received from Baxter. This amount was recognized in revenue during the period received as the Company's continued performance or future obligations were considered inconsequential or perfunctory. We did not record any revenue during the nine months ended September 30, 2014.

### Cost of Revenue

The Company incurred no cost of revenue for the nine months ended September 30, 2014 and September 30, 2013.

### Research and Development

The Company engages in independent R&D in connection with its various technologies.

The total R&D spend by subsidiary location for the nine months ended September 30, 2014 and 2013 is set forth in the table below:

Subsidiary Location	Nine months ended,	
	September 30, 2014	September 30, 2013
United States	\$ 2,226,574	\$ 278,370
United Kingdom	1,275,167	2,328,276
Germany	1,064	8,068
Total research and development expense	\$ 3,502,805	\$ 2,614,714

Overall, corporate R&D expenses for the nine months ended September 30, 2014 increased by approximately \$888,000, or 34% to \$3,502,805 from \$2,614,714 in the nine months ended September 30, 2013. However, as reflected in the above table, the trend in expenditures is away from the UK and into the US. US-based expenditures increased 700% while UK-based expenses decreased by approximately 45%. This is consistent with the opening of a US-based lab and closing down the UK-based lab in the fourth quarter of 2013. The US-based expenditures include expenditures paid to CRO's where the underlying research is being supervised in the US under the overall authority, direction and control of Lipoxen.

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The table below sets forth the R&D costs incurred by the Company, by category of expense, for the nine months ended September 30, 2014 and 2013:

Category of Expense	Nine months ended,	
	September 30, 2014	September 30, 2013
Outside services, Contract Research and Manufacturer Organizations	\$ 2,452,259	\$ 1,284,994
Salaries and wages	487,934	813,925
Share-based compensation expense	186,886	51,636
Rent	54,851	188,617
Lab consumables	19,966	120,116
Other	300,909	155,426
Total research and development expense	\$ 3,502,805	\$ 2,614,714

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### ***Research and Development by Subsidiary Location***

During 2013 we began the process of transitioning our R&D laboratory facilities to the US, leading to a reduction in salaries and wages, rent expenses and non-program specific related costs incurred in the UK, with a corresponding increase in costs incurred in the US.

### ***Research and Development by Category of Expense***

#### *Outside Services, CRO and CMO Costs*

This item is substantially related to CRO, CMO and consultant costs, approximately \$2,452,259 and \$1,284,994 for nine months ended September 30, 2014 and 2013, respectively, incurred in connection with preclinical work being performed related to the Company's OncoHist™ AML program and the Company's PSA-EPO ErepoXen® human clinical trials being conducted in Australia under the supervision of the US-based subsidiary. This period over period fluctuation in this expense category primarily relates to the planned increase in the current period of pre-clinical development activities related to the progression of the OncoHist™ AML program, partially offset by expected decreases in PSA-EPO human clinical trials. PSA-EPO costs vary normally from quarter to quarter depending on the progress of the trials and number of patient enrolled in the study.

#### *Salaries and Wages*

In aggregate, salaries and wages reflect a decrease of approximately 40%, which is related to the reduction of the UK-based research personnel by the end of 2013 without a corresponding proportionate increase in US-based research personnel during the first nine months of 2014. Along with the reduced salaries and wages, the relocation of our R&D laboratory facilities has resulted in a shift in the subsidiary location in which the expense is incurred.

#### *Rent*

During the nine months ended September 30, 2013, the Company operated from two sites in London, a laboratory facility, which has since been closed, and a general and administrative office. As of December 31, 2013 the London laboratory facility was completely closed down with its equipment being sold, disposed or transferred to the US-based laboratory. For the nine months ended September 30, 2014, the Company incurred no R&D rent in London and nine months of R&D rent in the US resulting in overall lower rent expenses compared to the nine months ended September 30, 2013. In September 2014, the Company served notice to the landlord of the general and administrative office in London in accordance with the terms of the break clause in the lease, with a termination date of March 20, 2015.

#### *Lab Consumables*

The decrease in lab consumables expense is correlative to progressively engaging outside services, CRO's and CMO's to perform R&D activities over in-house staffing and the Company's US-based lab during the nine months ended September 30, 2014 as compared to the comparable period in 2013.

#### *Other*

The increase in other expense results from the net aggregate change of all other miscellaneous R&D costs, including approximately \$49,000 in computer equipment, support and software, approximately \$22,000 in depreciation, approximately \$15,000 in travel and lodging, approximately \$11,000 in repairs and maintenance, a one-time \$30,000 staff recruiting charge and a net of approximately \$18,000 in other general R&D expenses.

### **General and Administrative**

General and administrative expenses increased by approximately \$1.75 million, or 50.9%, for the nine months ended September 30, 2014 to \$5.20 million from \$3.45 million in the comparable nine months in 2013. The most significant drivers of the change were increases of approximately \$631,000 in accounting and tax professional fees, \$430,000 in legal fees, \$277,000 in salaries, wages, employee fringe benefits and related taxes, \$142,000 in investor relations fees, \$113,000 in corporate insurances, \$99,000 in regulatory fees, \$88,000 in general travel and lodging expenses, incurred during the nine months ended September 30, 2014, net by a decrease of approximately \$377,000 in contractors and consultant costs. These costs were associated with the Company's strategic decision to move from a UK-based, London AIM quoted, organization, to a US-based, publicly traded company. There were fewer costs associated with this strategic decision during the comparable nine months in 2013. Charges for salaries included in

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general and administrative expenses increased for the nine months ended September 30, 2014 over the nine months ended September 30, 2013 due to the hiring of additional general and administrative staff at the Company's Lexington, MA location and charges related to the severance payments of several UK-based employees. In addition, charges for share-based compensation included in general and administrative expenses increased approximately \$192,000 for the nine months ended September 30, 2014 over the nine months ended September 30, 2013, which is primarily related to the accelerated vesting of the 2012 Joint Share Ownership Plan awards in the first quarter of 2014.

### **Loss on Disposal of Subsidiaries**

The loss on disposal of subsidiaries in the amount of \$1,069,675 for the nine months ended September 30, 2014 arose in connection with the Hive Out Agreement in January 2014. Pursuant to the Hive Out Agreement the Company received ten million outstanding shares of its common stock in exchange for 100% of the outstanding common stock of the subsidiaries and cash in the amount of \$430,000. The nine months ended September 30, 2013 had no comparable transaction. The Company does not currently intend to dispose of any other subsidiaries in the near future.

### **Interest Income**

Interest income decreased by \$15,964, or approximately 57.2%, to \$11,960 for the nine months ended September 30, 2014 from \$27,924 during the nine months ended September 30, 2013. The decrease is related to decreases in average cash balances maintained in interest bearing accounts.

### **Interest Expense**

Interest expense increased by \$2,937 for the nine months ended September 30, 2014 to \$3,569 from \$632 during the nine months ended September 30, 2013. The increase in interest expense is related to a financing arrangement with the landlord of the Company's office and lab lease in the US, which commenced in January 2014.

### **Liquidity and Capital Resources**

We estimate that as of the date of the filing of this Form 10-Q we have working capital available to fund our current business plan to the middle of the first quarter of 2015. Our ability to execute on our business plan, including maintaining our current level of basic operations and the continuation and/or acceleration of our drug development programs, is dependent on our ability to raise additional working capital, through debt (convertible or otherwise), by means of an equity-based instrument, or a combination thereof.

As a result of current spending levels and, given the available working capital as of the date of the filing of this Form 10-Q, a continuation on planned programs will cause the Company to have consumed its current working capital during the middle of the first quarter of 2015. However, the Company believes that it is in the best interests of its shareholders to continue its expenditure plans and therefore every effort is being made to raise the capital necessary to proceed as currently planned.

During September 2014, the Company entered into a non-exclusive financial advisory and placement agent agreement with an investment bank firm. Through introductions made by that firm and through other sources, the Company has met with and presented its business plan to potential investors for the purpose of raising working capital through a private placement transaction. Based upon the progress of ongoing discussions, the Company has a reasonable expectation that it will raise sufficient working capital to meet its obligations over the next twelve months, and therefore, has prepared the financial statements on the going concern basis.

Although we are optimistic about our ability to raise additional working capital, we do not presently have any commitments. There can be no assurance at this time that we will be successful in doing so, or that, if we are successful, we will be able to do so on commercially reasonable terms. If we are unsuccessful in raising capital, our development plans for our drug candidates and our shareholder value will be adversely affected. Under such circumstances, the Company would first expect to reduce the scale of its pre-clinical programs from the currently planned levels, which would likely compel it to reduce general and administrative expenses, defer or cease research and development projects, and delay or cease the purchase of significant clinical research services until it is able to obtain sufficient financing.

At September 30, 2014 and December 31, 2013 we had working capital of approximately \$3.3 million and \$1.7 million, respectively. At September 30, 2014 we had approximately \$4.8 million in cash and \$2.0 million in total current liabilities. As of December 31, 2013 we had cash and current liabilities of \$4.8 million and \$3.6 million, respectively. Our working capital decreased during the nine months ended September 30, 2014 from our net loss of approximately \$10.0

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million and cash used in operating activities of approximately \$9.5 million that includes significant costs incurred in connection with the Acquisition and the relocation of the Company's laboratory facilities to the US. Working capital was increased from the sale of our common stock to Baxter Healthcare SA resulting in net proceeds of \$10 million in January 2014. Please refer to Part II, Item 2 – Unregistered Sales of Equity Securities and Use of Proceeds in this Quarterly Report on Form 10-Q for further information about this sale of our common stock.

### **Cash Flows Used in Operating Activities**

Cash flows used in operating activities for the nine months ended September 30, 2014 totaled approximately \$9.5 million, which includes a net loss of approximately \$10.0 million, partially offset by \$1.7 million in non-cash charges for share-based compensation and loss on disposal of subsidiaries and reduced by approximately \$1.4 million in net increase in account receivable and reductions in accounts payable and accrued expenses. The \$9.5 million includes cash expenses of approximately \$1.8 million in salaries, wages, employee fringe benefits and related taxes, including scientific staff, \$1.9 million in professional consultants, \$1.2 million in program-specific clinical development costs, \$944,000 in legal fees, \$881,000 in accounting and tax consultants, \$550,000 in regulatory, investor relations and travel expenses and \$154,000 in corporate insurance.

Cash flows used in operating activities for the nine months ended September 30, 2013 totaled approximately \$4.0 million, which includes a net loss of approximately \$5.0 million, partially offset by approximately \$371,000 in non-cash charges and also by approximately \$631,000 net decrease in accounts received and increases in accounts payable and accrued expenses. The \$4.0 million includes cash expenses of approximately \$1.9 million in salaries, wages, employee fringe benefits and related taxes, including scientific staff, \$1.0 million in professional consultants, \$1.2 million in program-specific clinical development costs, \$526,000 in legal fees, \$250,000 in accounting and tax consultants, \$184,000 in regulatory, investor relations costs and travel expenses and \$41,000 in corporate insurance.

We expect our 2014 cash used in operating activities to be higher than comparable periods in 2013 predominantly as a result of planned increased spending on R&D activities including outside services, CRO's and CMO's. Since there are no milestone receipts expected to fall due during 2014, we do not expect any significant cash sources to be derived from revenues in 2014.

### **Cash Flows from Investing Activities**

Cash flows used in investing activities included \$430,000, net, paid out in connection with the Hive Out Agreement for the nine months ended September 30, 2014.

For the nine months ended September 30, 2013, there were no significant cash sources or uses from investing activities.

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### **Cash Flow from Financing Activities**

For the nine months ended September 30, 2014, we raised \$10 million in financing activities from the sale of approximately 10.7 million shares of common stock to Baxter Healthcare SA. We also raised approximately \$102,000 from proceeds in connection with the exercise of approximately 1.98 million stock options by our Chief Executive Officer in January 2014. These proceeds were net by a payment of approximately \$286,000 on a related party loan. There were no cash flows from financing activities in the nine month period ended September 30, 2013.

### **Off Balance Sheet Arrangements**

The Company has no off balance sheet financing arrangements. The Company has two facility lease obligations and written employment agreements with three key employees.

### **Recent Accounting Pronouncements**

In August 2014, the Financial Accounting Standard Board (FASB) issued ASU 2014-15, *Presentation of Financial Statements – Going Concern* (Subtopic 205-40) (“ASU 2014-15”). ASU 2014-15 defines management’s responsibility to evaluate whether there is substantial doubt about an organization’s ability to continue as a going concern and provides guidance on the related footnote disclosures. This guidance is effective for annual reporting periods beginning after December 15, 2016, and interim periods within annual periods beginning after December 15, 2016. Early application is permitted. The Company is currently evaluating the impact of this new standard.

In May 2014, the Financial Accounting Standard Board (FASB) issued ASU 2014-09, *Revenue from Contracts with Customers* (Topic 606) (“ASU 2014-09”). ASU 2014-09 supersedes the revenue recognition requirements in ASC Topic 605, *Revenue Recognition*, and most industry-specific guidance. The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. This guidance is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period, under either full or modified retrospective approach. Early application is not permitted. The Company is currently evaluating the impact of this new standard on its revenue recognition policy.

We have considered other recent accounting pronouncements and concluded that they are either not applicable to our business, or that no material effect is expected on the consolidated financial statements as a result of future adoption.

### **Available Information**

Our website address is [www.xeneticbio.com](http://www.xeneticbio.com). The information in, or that can be accessed through, our website is not part of this Quarterly Report on Form 10-Q. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K and amendments to those reports are available, free of charge, on or through our website as soon as practicable after we electronically file such forms, or furnish them to, the U.S. Securities and Exchange Commission (the “SEC”). The public may read and copy any materials we file with the SEC at the SEC’s Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information on the operations of the Public Reference Room can be obtained by calling 1-800-SEC-0330. The SEC maintains an internet site that contains reports, proxy and information statements and other information regarding our filings at [www.sec.gov](http://www.sec.gov).

**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.

## **ITEM 4 – CONTROLS AND PROCEDURES**

### **Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) or 15d-15(e) under the Securities Exchange Act of 1934, as amended (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 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 have been no changes in our internal control over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**PART II – OTHER INFORMATION**

**ITEM 1 – LEGAL PROCEEDINGS**

We are not currently subject to any material legal proceedings, nor, to our knowledge, is any material legal proceeding threatened against us. From time to time, we may be a party to certain legal proceedings, incidental to the normal course of our business. While the outcome of these legal proceedings cannot be predicted with certainty, we do not expect that these proceedings will have a material effect upon our financial condition or results of operations.

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**ITEM 1A – RISK FACTORS**

Other than as disclosed below, there were no material changes to the risk factors described in Part 1, Item 1A – Risk Factors of our Annual Report on Form 10-K for the year ended December 31, 2013 (except to the extent additional factual information disclosed elsewhere in this Quarterly Report on Form 10-Q relates to such risk factors (including, without limitation, the matters discussed in Part 1, Item 2 – Management’s Discussion and Analysis of Financial Condition and Results of Operations)).

***We have insufficient cash flow to fund our current business plan beyond the middle of the first quarter of 2015 which raises substantial doubt about our ability to continue as a going concern beyond that date.***

Our total current assets, cash and working capital were approximately \$5.4, \$4.8 and \$3.3 million, respectively, at September 30, 2014. We estimate that we have enough cash on hand to fund our current business plan to the middle of the first quarter of 2015. We will need to raise additional working capital either through equity or debt or a combination of equity and debt during 2014 to continue our current business plan.

Our recurring operating losses and past liquidity issues raise substantial doubt about our ability to continue as a going concern beyond the middle of the first quarter of 2015. Our ability to continue as a going concern and the appropriateness of using the going concern basis of accounting depends upon, among other things, our ability to generate sufficient cash from operations and financing sources to meet our obligations. There can be no assurance that we will be able to generate positive cash flows from operations. Further, there can be no assurance that we will be able to obtain additional financing or that, even if we do obtain additional financing, it will be on terms that allow us to continue to fund our current business plan.

While these financial statements have been prepared on a going concern basis, if the Company does not raise additional working capital by the end of 2014, there is no assurance that the Company would be able to continue its operations as now currently planned beyond the middle of the first quarter of 2015 and could ultimately limit the Company’s ability to continue as a going concern. If we are unsuccessful in raising capital, our development plans for our drug candidates and our shareholder value will be adversely affected. Under such circumstances, the Company would first expect to reduce the scale of its pre-clinical programs from the currently planned levels, which would likely compel it to reduce general and administrative expenses, defer or cease research and development projects, and delay or cease the purchase of significant clinical research services until it is able to obtain sufficient financing, if ever.

Concern about our ability to fund our base business plan beyond the middle of the first quarter of 2015 could adversely affect our ability to attract and retain key employees and to attract and retain key collaboration partners and as such could adversely affect our business and adversely impact the price of our stock. Our ability to meet future obligations will be dependent upon our future performance, which will be subject to financial, business and other factors affecting our operations, many of which are beyond our control.

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

None.

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**ITEM 3 – DEFAULTS UPON SENIOR SECURITIES**

Not applicable.

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**ITEM 4 – MINE SAFETY DISCLOSURES**

Not applicable.

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**ITEM 5 – OTHER INFORMATION**

None.

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**ITEM 6 – EXHIBITS**

The attached list of exhibits in the “Exhibit Index” immediately preceding the exhibits to this Quarterly Report on Form 10-Q is incorporated herein by reference to this item.

**SIGNATURES**

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

XENETIC BIOSCIENCES, INC.

November 14, 2014

By:

/S/ MICHAEL SCOTT MAGUIRE

Michael Scott Maguire  
*Chief Executive Officer and President*

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**EXHIBIT INDEX**

<b>EXHIBIT NUMBER</b>	<b>DESCRIPTION</b>
31.1 *	Certification of Michael Scott Maguire, Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2 *	Certification of Colin W. Hill, Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1 **	Certifications of Michael Scott Maguire, Chief Executive Officer, and Colin William Hill, Chief Financial Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101 *	XBRL (eXtensible Business Reporting Language). The following materials from Xenetic Biosciences, Inc.'s Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2014, formatted in XBRL: (i) the Condensed Consolidated Balance Sheets, (ii) the Condensed Consolidated Statements of Comprehensive Loss, (iii) the Condensed Consolidated Statements of Cash Flows, and (iv) Notes to Condensed Consolidated Financial Statements.

\* Exhibit filed with this report

\*\* 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 exhibit 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

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

I, Michael Scott Maguire, certify that:

1. I have reviewed this 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 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. 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
  - d. 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 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.

Dated: November 14, 2014

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

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

I, Colin William Hill, 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 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. 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
  - d. 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 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.

Dated: November 14, 2014

By: /s/ Colin William Hill  
Colin William Hill  
Chief Financial Officer

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Xenetic Biosciences, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2014, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, the undersigned officers of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of our knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 14, 2014

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

By: /s/ Colin William Hill  
Colin William Hill  
Chief Financial Officer