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

FORM 10-Q

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2017

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number: 000-51476

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**20-2903526**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

248 Route 25A, No. 2
East Setauket, New York 11733
(Address of principal executive offices)

(631) 942-7959
(Registrant's telephone number, including area code)

Not applicable
(Former name, former address and former fiscal year, if changed since last report)

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 [X] 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 during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes [X] No [ ]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer (as defined in Rule 12b-2 of the Exchange Act).

Large accelerated filer [ ]	Accelerated filer [ ]
Non-accelerated filer [ ]	Smaller reporting company [X]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes [ ] No [X]

As of May 1, 2017, the Company had 57,875,814 shares of common stock, $0.0001 par value, issued and outstanding.

Documents incorporated by reference: None

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY

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Forward-Looking Statements

This Quarterly Report on Form 10-Q of Lixte Biotechnology Holdings, Inc. (the "Company") contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934. These might include statements regarding the Company's financial position, business strategy and other plans and objectives for future operations, and assumptions and predictions about future product demand, supply, manufacturing, costs, marketing and pricing factors are all forward-looking statements. These statements are generally accompanied by words such as "intend," "anticipate," "believe," "estimate," "potential(ly)," "continue," "forecast," "predict," "plan," "may," "will," "could," "would," "should," "expect" or the negative of such terms or other comparable terminology. The Company believes that the assumptions and expectations reflected in such forward-looking statements are reasonable, based on information available to it on the date hereof, but the Company cannot provide assurances that these assumptions and expectations will prove to have been correct or that the Company will take any action that the Company may presently be planning. These forward-looking statements are inherently subject to known and unknown risks and uncertainties. Actual results or experience may differ materially from those expected, anticipated or implied in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, regulatory policies or changes thereto, available cash, research and development results, competition from other similar businesses, and market and general economic factors. This discussion should be read in conjunction with the condensed consolidated financial statements and notes thereto included in Item 1 of this Quarterly Report on Form 10-Q and the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016, including the section entitled "Item 1A. Risk Factors". The Company does not intend to update or revise any forward-looking statements to reflect new information, future events or otherwise.

PART I - FINANCIAL INFORMATION

ITEM 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY

CONDENSED CONSOLIDATED BALANCE SHEETS

	March 31, 2017 (Unaudited)	December 31, 2016
ASSETS		
Current assets:		
Cash	$ 870,936	$ 199,929
Advances on research and development contract services, including $181,510 made to or through Theradex at December 31, 2016	—	183,490
Prepaid expenses and other current assets	49,630	49,992
Total current assets	920,566	433,411
Total assets	$ 920,566	$ 433,411
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	$ 212,225	$ 159,595
Research and development contract liabilities, including $26,199 and $33,216 to Theradex at March 31, 2017 and December 31, 2016, respectively	42,234	59,056
Total current liabilities	254,459	218,651
Commitments and contingencies		
Stockholders' equity:		
Series A Convertible Preferred Stock, $0.0001 par value, $10.00 per share stated value, $50.00 per share redemption value; 350,000 shares authorized, issued and outstanding; aggregate redemption value of $17,500,000; liquidation preference based on assumed conversion into common shares; 4,375,000 shares of common stock issuable upon conversion	3,500,000	3,500,000
Common stock, $0.0001 par value; authorized – 100,000,000 shares; issued and outstanding – 51,875,814 shares and 47,875,814 shares at March 31, 2017 and December 31, 2016, respectively	5,187	4,787
Additional paid-in capital	18,488,513	17,416,974
Accumulated deficit	(21,327,593)	(20,707,001)
Total stockholders' equity	666,107	214,760
Total liabilities and stockholders' equity	$ 920,566	$ 433,411

See accompanying notes to condensed consolidated financial statements.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended March 31,	
	2017	**2016**
Revenues	$ —	$ —
Costs and expenses:		
General and administrative costs, including $15,844 and $18,250 to related parties for the three months ended March 31, 2017 and 2016, respectively	317,749	152,057
Research and development costs, including $64,615 and $116,633 to Theradex for the three months ended March 31, 2017 and 2016, respectively	302,855	264,497
Total costs and expenses	620,604	416,554
Loss from operations	(620,604)	(416,554)
Interest income	12	11
Net loss	$ (620,592)	$ (416,543)
Net loss per common share – basic and diluted	$ (0.01)	$ (0.01)
Weighted average common shares outstanding – basic and diluted	49,431,370	47,875,814

See accompanying notes to condensed consolidated financial statements.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY

CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
(Unaudited)

Three Months Ended March 31, 2017

	Series A Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Par Value			
Balance, December 31, 2016	350,000	$ 3,500,000	47,875,814	$ 4,787	$ 17,416,974	$ (20,707,001)	$ 214,760
Sale of common stock	—	—	4,000,000	400	999,600	—	1,000,000
Stock-based compensation expense	—	—	—	—	71,939	—	71,939
Net loss	—	—	—	—	—	(620,592)	(620,592)
Balance, March 31, 2017	350,000	$ 3,500,000	51,875,814	$ 5,187	$ 18,488,513	$ (21,327,593)	$ 666,107

See accompanying notes to condensed consolidated financial statements.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Three Months Ended March 31,	
	2017	**2016**
Cash flows from operating activities:		
Net loss	$ (620,592)	$ (416,543)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense included in -		
General and administrative costs	3,844	—
Research and development costs	68,095	(30,370)
Changes in operating assets and liabilities:		
(Increase) decrease in -		
Licensing fee receivable	—	200,000
Advances on research and development contract services	183,490	7,279
Prepaid expenses and other current assets	362	6,776
Increase (decrease) in -		
Accounts payable and accrued expenses	52,630	(75,673)
Research and development contract liabilities	(16,822)	(17,354)
Net cash used in operating activities	(328,993)	(325,885)
Cash flows from investing activities:		
Increase in money market funds	—	(766,678)
Net cash used in investing activities	—	(766,678)
Cash flows from financing activities:		
Proceeds from sale of common stock	1,000,000	—
Cash received from sale of Series A Convertible Preferred Stock	—	1,166,668
Net cash provided by financing activities	1,000,000	1,166,668
Cash:		
Net increase	671,007	95,690
Balance at beginning of period	199,929	25,281
Balance at end of period	$ 870,936	$ 99,386
Supplemental disclosures of cash flow information:		
Cash paid for -		
Interest	$ —	$ —
Income taxes	$ —	$ —
Non-cash financing activities:		
Sale of Series A Convertible Preferred Stock under stock subscription	$ —	$ 1,750,000

See accompanying notes to condensed consolidated financial statements.

1. Organization and Basis of Presentation

The condensed consolidated financial statements of the Lixte Biotechnology Holdings, Inc., a Delaware corporation ("Holdings"), including its wholly-owned Delaware subsidiary, Lixte Biotechnology, Inc. ("Lixte") (collectively, the "Company"), at March 31, 2017, and for the three months ended March 31, 2017 and 2016, are unaudited. In the opinion of management of the Company, all adjustments, including normal recurring accruals, have been made that are necessary to present fairly the financial position of the Company as of March 31, 2017, and the results of its operations for the three months ended March 31, 2017 and 2016, and its cash flows for the three months ended March 31, 2017 and 2016. Operating results for the interim periods presented are not necessarily indicative of the results to be expected for a full fiscal year. The consolidated balance sheet at December 31, 2016 has been derived from the Company's audited financial statements at such date.

The statements and related notes have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC"). Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been omitted pursuant to such rules and regulations. These financial statements should be read in conjunction with the financial statements and other information included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016, as filed with the SEC.

2. Business

The Company is a drug discovery company that uses biomarker technology to identify enzyme targets associated with serious common diseases and then designs novel compounds to attack those targets. The Company's product pipeline encompasses two major categories of compounds at various stages of pre-clinical and clinical development that the Company believes have broad therapeutic potential not only for cancer but also for other debilitating and life-threatening diseases.

The Company's activities are subject to significant risks and uncertainties, including the need for additional capital, as described below. The Company has not yet commenced any sustainable revenue-generating operations, does not have positive cash flows from operations, and is dependent on periodic infusions of equity capital to fund its operating requirements.

The Company's common stock is traded on the OTCQB operated by the OTC Markets under the symbol "LIXT".

Going Concern

The Company's condensed consolidated financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company has not generated any sustainable revenues from operations to date, and does not expect to do so in the foreseeable future. The Company has experienced recurring operating losses and negative operating cash flows since inception, and has financed its working capital requirements during this period primarily through the recurring sale of its equity securities and the exercise of outstanding common stock purchase warrants.

As a result, management has concluded that there is substantial doubt about the Company's ability to continue as a going concern within one year of the date that the consolidated financial statements were issued. In addition, the Company's independent registered public accounting firm, in their report on the Company's consolidated financial statements for the year ended December 31, 2016, has expressed substantial doubt about the Company's ability to continue as a going concern.

The Company's ability to continue as a going concern is dependent upon its ability to raise additional equity capital to fund its research and development activities and to ultimately achieve sustainable operating revenues and profits. The Company's consolidated financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Because the Company is currently engaged in research at a relatively early stage, it will likely take a significant amount of time to develop any product or intellectual property capable of generating sustainable revenues. Accordingly, the Company's business is unlikely to generate any sustainable operating revenues in the next several years, and may never do so. In addition, to the extent that the Company is able to generate revenues through licensing its technologies or through product sales, there can be no assurance that the Company will be able to achieve positive earnings and operating cash flows.

At March 31, 2017, the Company had cash of $870,936. Effective April 3, 2017, the Company sold 6,000,000 shares of common stock at $0.25 per share price for an aggregate purchase price of $1,500,000. Accordingly, the Company believes that it has sufficient working capital resources to fund the Company's ongoing business activities, including maintaining its clinical trial program and patent portfolio, through at least June 30, 2018.

The amount and timing of future cash requirements in 2018 and thereafter will depend on the pace and design of the Company's clinical trial program. As market conditions present uncertainty as to the Company's ability to secure additional funds, there can be no assurances that the Company will be able to secure additional financing on acceptable terms, or at all, as and when necessary to continue to conduct operations. If cash resources are insufficient to satisfy the Company's ongoing cash requirements, the Company would be required to scale back or discontinue its technology and product development programs and/or clinical trials, or obtain funds, if available (although there can be no certainty), through strategic alliances that may require the Company to relinquish rights to certain of its compounds, or to discontinue its operations entirely.

3. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying condensed consolidated financial statements of the Company are prepared in accordance with United States generally accepted accounting principles ("GAAP") and include the financial statements of Holdings and its wholly-owned subsidiary, Lixte. Intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Significant estimates include the accounting for potential liabilities, the assumptions utilized in valuing stock-based compensation issued for services, and the realization of deferred tax assets. Actual results could differ from those estimates.

Cash Concentrations

The Company maintains cash balances with financial institutions in federally-insured accounts. The Company may periodically have cash balances in banks in excess of FDIC insurance limits. The Company maintains its accounts with financial institutions with high credit ratings. The Company has not experienced any losses to date resulting from this practice.

Research and Development

Research and development costs consist primarily of fees paid to consultants and outside service providers, patent fees and costs, and other expenses relating to the acquisition, design, development and testing of the Company's treatments and product candidates.

Research and development costs are expensed ratably over the life of the underlying contracts, unless the achievement of milestones, the completion of contracted work, or other information indicates that a different expensing schedule is more appropriate.

The Company retained Theradex Systems, Inc. ("Theradex"), an international contract research organization ("CRO") that provides professional services for the clinical research and development of pharmaceutical compounds, to be responsible for managing and administering the Company's Phase 1 clinical trial of LB-100. The costs of the Phase 1 clinical trial of LB-100 that were paid through Theradex were recorded and expensed based upon the documentation provided by the CRO.

Payments made pursuant to research and development contracts are initially recorded as advances on research and development contract services in the Company's balance sheet and then charged to research and development costs in the Company's statement of operations as those contract services are performed. Expenses incurred under research and development contracts in excess of amounts advanced are recorded as research and development contract liabilities in the Company's balance sheet, with a corresponding charge to research and development costs in the Company's statement of operations. The Company reviews the status of its research and development contracts on a quarterly basis.

Patent Costs

Due to the significant uncertainty associated with the successful development of one or more commercially viable products based on the Company's research efforts and any related patent applications, all patent costs, including patent-related legal and filing fees, are expensed as incurred. Patent costs were $159,611 and $101,956 for the three months ended March 31, 2017 and 2016, respectively. Patent costs are included in research and development costs in the Company's condensed consolidated statements of operations.

Accounting for Preferred Stock

The Company accounts for preferred stock as either equity or debt, depending on the specific characteristics of the security issued. The Series A Convertible Preferred Stock issued by the Company in January 2016 and March 2015 has been classified in stockholders' equity, as described at Note 4.

Concentration of Risk

The Company periodically contracts with directors, including companies controlled by or associated with directors, to provide consulting services related to the Company's research and development and clinical trial activities. Agreements for these services can be for a specific time period (typically one year) or for a specific project or task, and can include both cash and non-cash compensation. The only such contract that represents 10% or more of general and administrative or research and development costs is described below.

On September 21, 2012, the Company entered into a work order agreement with Theradex, the CRO responsible for the clinical development of the Company's lead anti-cancer compound LB-100, to manage and administer the Phase 1 clinical trial of LB-100. The Phase 1 clinical trial of LB-100, which began during April 2013 with the entry of patients into the clinical trial, was carried out by nationally recognized comprehensive cancer centers. The patient accrual goal was reached in April 2016 and the clinical trial was closed to further patient enrollment at that time. All patients completed treatment with LB-100 and were off study by the end of May 2016. The Company estimates that it will continue to incur costs through May 2017 to complete the analysis of the clinical data, reconcile and pay the remaining costs owed to the participating clinical sites, and prepare and submit the required Clinical Study Report to the United States Food and Drug Administration ("FDA") on the completed Phase 1 clinical trial of LB-100.

The Phase 1 clinical trial was estimated to cost a total of approximately $2,200,000, with such payments expected to be allocated approximately 60% for services provided by Theradex and approximately 40% for pass-through costs for clinical center laboratory costs and investigator costs over the life of the clinical trial. Total costs charged to operations from 2013 through March 31, 2017 for services paid to or through Theradex pursuant to this arrangement aggregated $2,192,165.

During the three months ended March 31, 2017 and 2016, the Company incurred $64,615 and $116,633, respectively, of such clinical trial costs, representing approximately 22% and 44% of research and development costs for such periods. Costs pursuant to this agreement are included in research and development costs in the Company's condensed consolidated statements of operations.

Income Taxes

The Company accounts for income taxes under an asset and liability approach for financial accounting and reporting for income taxes. Accordingly, the Company recognizes deferred tax assets and liabilities for the expected impact of differences between the financial statements and the tax basis of assets and liabilities.

The Company has elected to deduct research and development costs on a current basis for federal income tax purposes. For federal tax purposes, start-up and organization costs were deferred until January 1, 2008 at which time the Company began to amortize such costs over a 180-month period.

The Company records a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized. In the event the Company was to determine that it would be able to realize its deferred tax assets in the future in excess of its recorded amount, an adjustment to the deferred tax assets would be credited to operations in the period such determination was made. Likewise, should the Company determine that it would not be able to realize all or part of its deferred tax assets in the future, an adjustment to the deferred tax assets would be charged to operations in the period such determination was made.

The Company is subject to U.S. federal income taxes and income taxes of various state tax jurisdictions. As the Company's net operating losses have yet to be utilized, all previous tax years remain open to examination by Federal authorities and other jurisdictions in which the Company currently operates or has operated in the past. The Company had no unrecognized tax benefits as of March 31, 2017 and December 31, 2016 and does not anticipate any material amount of unrecognized tax benefits within the next 12 months.

The Company accounts for uncertainties in income tax law under a comprehensive model for the financial statement recognition, measurement, presentation and disclosure of uncertain tax positions taken or expected to be taken in income tax returns as prescribed by GAAP. The tax effects of a position are recognized only if it is "more-likely-than-not" to be sustained by the taxing authority as of the reporting date. If the tax position is not considered "more-likely-than-not" to be sustained, then no benefits of the position are recognized. As of March 31, 2017, the Company had not recorded any liability for uncertain tax positions. In subsequent periods, any interest and penalties related to uncertain tax positions will be recognized as a component of income tax expense.

Stock-Based Compensation

The Company periodically issues common stock and stock options to officers, directors, Scientific Advisory Committee members and consultants for services rendered. Options vest and expire according to terms established at the issuance date of each grant.

The Company accounts for stock-based payments to officers and directors by measuring the cost of services received in exchange for equity awards based on the grant date fair value of the awards, with the cost recognized as compensation expense on the straight-line basis in the Company's financial statements over the vesting period of the awards. The Company accounts for stock-based payments to Scientific Advisory Committee members and consultants by determining the value of the stock compensation based upon the measurement date at either (a) the date at which a performance commitment is reached or (b) at the date at which the necessary performance to earn the equity instruments is complete.

Stock grants, which are generally time vested, are measured at the grant date fair value and charged to operations ratably over the vesting period.

Stock options granted to members of the Company's Scientific Advisory Committee and to outside consultants are revalued each reporting period to determine the amount to be recorded as an expense in the respective period. As the stock options vest, they are valued on each vesting date and an adjustment is recorded for the difference between the value already recorded and the value on the date of vesting.

The fair value of common stock issued as stock-based compensation is determined by reference to the closing price of the Company's common stock on the date of issuance. The fair value of stock options granted as stock-based compensation is determined utilizing the Black-Scholes option-pricing model, and is affected by several variables, the most significant of which are the life of the equity award, the exercise price of the stock option as compared to the fair market value of the common stock on the grant date, and the estimated volatility of the common stock over the term of the equity award. Estimated volatility is based on the historical volatility of the Company's common stock. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant. The fair market value of common stock is determined by reference to the quoted market price of the Company's common stock.

The Company recognizes the fair value of stock-based compensation awards in general and administrative costs and in research and development costs, as appropriate, in the Company's condensed consolidated statement of operations. The Company issues new shares of common stock to satisfy stock option exercises.

Revenue Recognition

The Company recognizes revenue when all four of the following criteria are met: (i) persuasive evidence that an arrangement exists; (ii) delivery of the products and/or services has occurred; (iii) the fees earned can be readily determined; and (iv) collectability of the fees is reasonably assured.

Comprehensive Income (Loss)

Components of comprehensive income or loss, including net income or loss, are reported in the financial statements in the period in which they are recognized. Comprehensive income or loss is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources. Net income (loss) and other comprehensive income (loss) are reported net of any related tax effect to arrive at comprehensive income (loss). The Company did not have any items of comprehensive income (loss) for the three months ended March 31, 2017 and 2016.

Earnings (Loss) Per Share

The Company's computation of earnings (loss) per share ("EPS") includes basic and diluted EPS. Basic EPS is measured as the income (loss) attributable to common stockholders divided by the weighted average common shares outstanding for the period. Diluted EPS is similar to basic EPS but presents the dilutive effect on a per share basis of potential common shares (e.g., preferred shares, warrants and stock options) as if they had been converted at the beginning of the periods presented, or issuance date, if later. Potential common shares that have an anti-dilutive effect (i.e., those that increase income per share or decrease loss per share) are excluded from the calculation of diluted EPS.

Loss per common share is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the respective periods. Basic and diluted loss per common share is the same for all periods presented because all preferred shares, warrants and stock options outstanding are anti-dilutive.

At March 31, 2017 and 2016, the Company excluded the outstanding securities summarized below, which entitle the holders thereof to acquire shares of common stock, from its calculation of earnings per share, as their effect would have been anti-dilutive.

	March 31,	
	2017	**2016**
Series A Convertible Preferred Stock	4,375,000	4,375,000
Common stock options	8,600,000	7,950,000
Total	12,975,000	12,325,000

Fair Value of Financial Instruments

The authoritative guidance with respect to fair value established a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three levels, and requires that assets and liabilities carried at fair value be classified and disclosed in one of three categories, as presented below. Disclosure as to transfers in and out of Levels 1 and 2, and activity in Level 3 fair value measurements, is also required.

Level 1. Observable inputs such as quoted prices in active markets for an identical asset or liability that the Company has the ability to access as of the measurement date. Financial assets and liabilities utilizing Level 1 inputs include active-exchange traded securities and exchange-based derivatives.

Level 2. Inputs, other than quoted prices included within Level 1, which are directly observable for the asset or liability or indirectly observable through corroboration with observable market data. Financial assets and liabilities utilizing Level 2 inputs include fixed income securities, non-exchange based derivatives, mutual funds, and fair-value hedges.

Level 3. Unobservable inputs in which there is little or no market data for the asset or liability which requires the reporting entity to develop its own assumptions. Financial assets and liabilities utilizing Level 3 inputs include infrequently-traded non-exchange-based derivatives and commingled investment funds, and are measured using present value pricing models.

The Company determines the level in the fair value hierarchy within which each fair value measurement falls in its entirety, based on the lowest level input that is significant to the fair value measurement in its entirety. In determining the appropriate levels, the Company performs an analysis of the assets and liabilities at each reporting period end.

The carrying value of financial instruments (consisting of cash and accounts payable and accrued expenses) is considered to be representative of their respective fair values due to the short-term nature of those instruments.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2014-09 (ASU 2014-09), Revenue from Contracts with Customers. ASU 2014-09 will eliminate transaction- and industry-specific revenue recognition guidance under current GAAP and replace it with a principle based approach for determining revenue recognition. ASU 2014-09 will require that companies recognize revenue based on the value of transferred goods or services as they occur in the contract. ASU 2014-09 also will require additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. The FASB has recently issued ASU 2016-08, ASU 2016-10, ASU 2016-11, ASU 2016-12, and ASU 2016-20, all of which clarify certain implementation guidance within ASU 2014-09. ASU 2014-09 is effective for reporting periods beginning after December 15, 2017, with early adoption permitted only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. Entities will be able to transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. The Company will adopt the provisions of ASU 2014-09 in the quarter beginning January 1, 2018. The adoption of ASU 2014-09 is not expected to have any impact on the Company's financial statement presentation or disclosures.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02 (ASU 2016-02), Leases (Topic 842). ASU 2016-02 requires a lessee to record a right-of-use asset and a corresponding lease liability, initially measured at the present value of the lease payments, on the balance sheet for all leases with terms longer than 12 months, as well as the disclosure of key information about leasing arrangements. ASU 2016-02 requires recognition in the statement of operations of a single lease cost, calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. ASU 2016-02 requires classification of all cash payments within operating activities in the statement of cash flows. Disclosures are required to provide the amount, timing and uncertainty of cash flows arising from leases. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early application is permitted. The Company will adopt the provisions of ASU 2016-02 in the quarter beginning January 1, 2019. The adoption of ASU 2016-02 is not expected to have any impact on the Company's financial statement presentation or disclosures.

Management does not believe that any other recently issued, but not yet effective, authoritative guidance, if currently adopted, would have a material impact on the Company's financial statement presentation or disclosures.

4. Stockholders' Equity

Preferred Stock

The Company has authorized a total of 10,000,000 shares of preferred stock, par value $0.001 per share. On March 17, 2015, the Company filed a Certificate of Designations, Preferences, Rights and Limitations (the "Certificate of Designations") of its Series A Convertible Preferred Stock with the Delaware Secretary of State to amend the Company's certificate of incorporation. The Company designated 175,000 shares as Series A Convertible Preferred Stock, which are non-voting and are not subject to increase without the written consent of a majority of the holders of the Series A Convertible Preferred Stock or as otherwise set forth in the Certificate of Designations. The holders of each 175,000 share tranche of the Series A Convertible Preferred Stock are entitled to receive a per share dividend equal to 1% of the annual net revenue of the Company divided by 175,000, until converted or redeemed.

Effective January 28, 2016, the Series A Convertible Preferred Stock Certificate of Designations was amended to increase the authorized shares of Series A Convertible Preferred Stock from 175,000 shares to 350,000 shares. Accordingly, as of March 31, 2017, 9,650,000 shares of preferred stock were undesignated and may be issued with such rights and powers as the Board of Directors may designate.

Effective March 17, 2015, the Company entered into a Securities Purchase Agreement with a stockholder of the Company who owned 10.6% of the Company's issued and outstanding shares of common stock immediately prior to this transaction, pursuant to which such stockholder purchased 175,000 shares of the Company's Series A Convertible Preferred Stock at $10.00 per share for an aggregate purchase price of $1,750,000.

Effective January 21, 2016, the Company entered into a Securities Purchase Agreement with the holder of the Series A Convertible Preferred Stock previously sold on March 17, 2015, pursuant to which the Company sold an additional 175,000 shares of Series A Convertible Preferred Stock at $10.00 per share for an aggregate purchase price of $1,750,000.

Based on the Company's net revenues of $200,000 for the year ended December 31, 2015, the Company recorded a dividend of $2,000 on the shares of Series A Convertible Preferred Stock issued and outstanding at December 31, 2015. The dividend was paid in cash on May 1, 2016.

Each share of Series A Convertible Preferred Stock may be converted, at the option of the holder, into 12.5 shares of common stock (subject to customary anti-dilution provisions) and the Series A Convertible Preferred Stock is subject to mandatory conversion at the conversion rate in the event of a merger or sale transaction resulting in gross proceeds to the Company of at least $21,875,000. The Series A Convertible Preferred Stock has a liquidation preference based on its assumed conversion into shares of common stock.

If fully converted, the Series A Convertible Preferred Stock sold in the March 17, 2015 closing would convert into 2,187,500 shares of common stock, representing an effective price per share of common stock of $0.80. On March 17, 2015, the closing price of the Company's common stock was $0.25 per share. If fully converted, the Series A Convertible Preferred Stock sold in the January 21, 2016 closing would also convert into 2,187,500 shares of common stock, representing an effective price per share of common stock of $0.80. On January 21, 2016, the closing price of the Company's common stock was $0.22 per share. The Company has the right to redeem the Series A Convertible Preferred Stock up to the fifth anniversary of the respective closing dates at a price per share equal to $50.00. The Series A Convertible Preferred Stock has no right to cash, except for the payment of the aforementioned dividend based on the generation of revenues by the Company, and does not have any registration rights.

Based on the attributes of the Series A Convertible Preferred Stock described above, the Company determined to account for the Series A Convertible Preferred Stock as a permanent component of stockholders' equity. Legal costs of $12,608 incurred with respect to the issuance of the Series A Convertible Preferred Stock on March 17, 2015 were charged directly to additional paid-in capital. The Company did not incur any material costs with respect to the sale of the Convertible Preferred Stock on January 21, 2016.

Common Stock

Effective February 24, 2017, the Company entered into a Securities Purchase Agreement with an accredited investor pursuant to which the purchaser purchased 4,000,000 shares of the Company's common stock at a price of $0.25 per share for an aggregate purchase price of $1,000,000. The proceeds from the sale of the shares of common stock will be used for working capital and general corporate purposes principally in connection with the Company's ongoing clinical trials.

The shares issued to the investor were not registered under the Securities Act of 1933, as amended (the "Act"), in reliance upon the exemption from registration contained in Section 4(a)(2) of the Act. Such securities may not be re-offered or sold in the United States in the absence of a registration statement or exemption from the registration requirements of the Act.

Information with respect to the issuance of common stock in connection with various stock-based compensation arrangements is provided at Note 6.

Common Stock Warrants

At March 31, 2017 and December 31, 2016, there were no warrants outstanding to purchase common stock.

5. Related Party Transactions

The Company's Chairman and major stockholder, Dr. John Kovach, was paid a salary of $15,000 for the three months ended March 31, 2017 and 2016, which amounts are included in general and administrative costs in the Company's condensed consolidated statements of operations. Beginning in late February 2017, Dr. Kovach began devoting 100% of his time to the Company's business activities.

The Company's principal office facilities are being provided without charge by Dr. Kovach. Such costs were not material to the Company's condensed consolidated financial statements and, accordingly, have not been reflected therein.

On January 28, 2014, the Company approved a second amendment to the Company's consulting agreement with Gil Schwartzberg, a significant stockholder of and consultant to the Company, dated September 12, 2007 to extend it for an additional four years to January 28, 2019.

Legal and consulting fees charged to operations for services rendered by the Eric Forman Law Office were $12,000 for the three months ended March 31, 2017 and 2016. Eric J. Forman is the son-in-law of Gil Schwartzberg, a significant stockholder of and consultant to the Company, and is the son of Dr. Stephen J. Forman, who was elected to the Company's Board of Directors on May 13, 2016. Julie Forman, the wife of Eric Forman and the daughter of Gil Schwartzberg, is Vice President of Morgan Stanley Wealth Management, where the Company maintains a banking relationship.

Effective January 1, 2014, the Company entered into an Advisory Agreement with Dr. Kathleen P. Mullinix, a member of the Board of Directors of the Company at that time, effective for an initial term of one year through December 31, 2014 to advise on business development matters. The Advisory Agreement provided for annual cash compensation of $25,000, to be paid in full at the beginning of each year. The term of the Advisory Agreement was automatically extended for a term of one year annually unless a notice of intent to terminate was given by either party at least 90 days before the end of the applicable term. Accordingly, the Advisory Agreement was extended for additional terms of one year effective January 1, 2015 and 2016. Effective November 22, 2016, Dr. Mullinix resigned from the Company's Board of Directors. For the three months ended March 31, 2016, the Company recognized a charge to operations of $6,250 as consulting and advisory fees pursuant to this Advisory Agreement, which is included in general and administrative costs in the Company's condensed consolidated statements of operations.

Stock-based compensation arrangements involving members of the Company's Board of Directors and affiliates are described at Note 6. Total stock-based compensation expense relating to directors, officers, affiliates and related parties was $3,844 and $0 for the three months ended March 31, 2017 and 2016, respectively.

6. Stock-Based Compensation

The Company issues common stock and stock options as incentive compensation to directors and as compensation for the services of independent contractors and consultants of the Company.

On June 20, 2007, the Board of Directors of the Company approved the 2007 Stock Compensation Plan (the "2007 Plan"), which provides for the granting of awards, consisting of stock options, stock appreciation rights, performance shares, or restricted shares of common stock, to employees and independent contractors, for up to 2,500,000 shares of the Company's common stock, under terms and conditions as determined by the Company's Board of Directors, through June 19, 2017. As of March 31, 2017, unexpired stock options for 1,700,000 shares were issued and outstanding under the 2007 Plan and stock options for 800,000 were available for issuance under the 2007 Plan.

The fair value of each stock option awarded is estimated on the date of grant and subsequent measurement dates using the Black-Scholes option-pricing model. The expected dividend yield assumption is based on the Company's expectation of dividend payouts. The expected volatilities are based on historical volatility of the Company's stock. The risk-free interest rate is based on the U.S. treasury yield curve in effect as of the grant date. The expected life of the stock options is the average of the vesting term and the full contractual term of the stock options.

For stock options requiring an assessment of value during the three months ended March 31, 2017, the fair value of each stock option award was estimated using the Black-Scholes option-pricing model with the following assumptions:

Risk-free interest rate	1.18%
Expected dividend yield	0%
Expected volatility	311.11%
Expected life	1.7 to 3.5 years

For stock options requiring an assessment of value during the three months ended March 31, 2016, the fair value of each stock option award was estimated using the Black-Scholes option-pricing model with the following assumptions:

Risk-free interest rate	0.74% to 1.23%
Expected dividend yield	0%
Expected volatility	196.75%
Expected life	2.7 to 4.7 years

On December 24, 2013, the Company entered into an agreement with NDA Consulting Corp. ("NDA") for consultation and advice in the field of oncology research and drug development. As part of the agreement, NDA also agreed to cause its president, Dr. Daniel D. Von Hoff, M.D., to become a member of the Company's Scientific Advisory Committee. In connection with this agreement, NDA was granted stock options to purchase 100,000 shares of the Company's common stock, vesting 25,000 shares on June 24, 2014, and thereafter 25,000 shares annually on June 24, 2015, 2016 and 2017, exercisable for a period of five years from the date of grant at $0.13 per share, which was the fair market value of the Company's common stock on the grant date. The fair value of these stock options, as calculated pursuant to the Black-Scholes option-pricing model, was initially determined to be $12,960 ($0.13 per share). The Company re-measures the non-vested options to fair value at the end of each reporting period. At March 31, 2017, the fair value of non-vested options was determined to be $784 which will be charged to operations through June 24, 2017. During the three months ended March 31, 2017 and 2016, the Company recorded a charge (credit) to operations of $12,138 and $(10,796), respectively, with respect to these stock options.

Effective September 14, 2015, the Company entered into a Collaboration Agreement with BioPharmaWorks LLC ("BioPharmaWorks"), pursuant to which the Company engaged BioPharmaWorks to perform certain services for the Company as described at Note 7. In connection with the Collaboration Agreement, the Company agreed to issue to BioPharmaWorks 1,000,000 fully-vested shares of the Company's common stock, valued at $260,000, based upon the closing price of the Company's common stock of $0.26 per share, on September 14, 2015. Additionally, the Company issued to BioPharmaWorks two options in the form of warrants to purchase 1,000,000 shares (500,000 shares per warrant) of the Company's common stock. The first warrant vested on September 14, 2016, and is exercisable for a period of five years from the date of grant at $1.00 per share. The second warrant will vest on September 14, 2017, and is exercisable for a period of five years from the date of grant at $2.00 per share. The fair value of the first and second warrants, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $128,400 ($0.2568 per share) and $127,850 ($0.2557 per share), respectively. The Company re-measures the non-vested options to fair value at the end of each reporting period. At March 31, 2017, the fair value of non-vested options was determined to be $28,271 which will be charged to operations through September 14, 2017. During the three months ended March 31, 2017 and 2016, the Company recorded a charge (credit) to operations of $55,957 and $(20,733), respectively, with respect to these common shares and warrants.

On November 28, 2015, the Company entered into a two-year advisory agreement with Dr. Fritz Henn, M.D., Ph.D., for consultation and advice on the development of certain of the Company's products for clinical neurological and neuropsychiatric applications. Dr. Henn is an internationally recognized investigative neuroscientist and psychiatrist. In connection with the advisory agreement, and as sole compensation, Dr. Henn was granted stock options to purchase 200,000 shares of the Company's common stock, with 100,000 shares vesting on November 28, 2015, and 100,000 shares vesting on November 28, 2016. The stock options are exercisable for a period of five years from the grant date at $0.50 per share. The fair value of these stock options, as calculated pursuant to the Black-Scholes option-pricing model, was initially determined to be $103,360 ($0.5168 per share), of which $51,680 was attributable to the stock options fully-vested on November 28, 2015 and was therefore charged to operations on that date. The remaining unvested portion of the fair value of the stock options was charged to operations ratably from November 28, 2015 through November 28, 2016. During the three months ended March 31, 2016, the Company recorded a charge to operations of $1,159 with respect to these stock options.

Effective April 25, 2016, in connection with her continuing role as a member of the Company's Board of Directors, Dr. Kathleen P. Mullinix was granted fully-vested stock options under the 2007 Plan to purchase 150,000 shares of the Company's common stock. The stock options are exercisable for a period of five years from the date of grant at $0.12 per share, which was the fair market value of the Company's common stock on such date. The fair value of these stock options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $17,535 ($0.1169 per share), which was charged to operations on the date of grant. Effective November 22, 2016, Dr. Mullinix resigned as a Director of the Company. Consequently, pursuant to the stock option agreement, Dr. Mullinix has twelve months from November 22, 2016 to exercise her stock options to acquire 150,000 shares of the Company's common stock.

Effective April 25, 2016, in connection with his continuing role as a member of the Company's Board of Directors, Dr. Philip F. Palmedo was granted fully-vested stock options under the 2007 Plan to purchase 450,000 shares of the Company's common stock. The stock options are exercisable for a period of five years from the date of grant at $0.12 per share, which was the fair market value of the Company's common stock on such date. The fair value of these stock options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $52,604 ($0.1169 per share), which was charged to operations on the date of grant.

Effective May 13, 2016, in conjunction with his appointment as a director of the Company, the Company granted to Dr. Stephen J. Forman stock options to purchase an aggregate of 200,000 shares of common stock under the 2007 Plan, exercisable for a period of five years from vesting date at $0.16 per share, which was the fair market value of the Company's common stock on such date. One-half of such shares (100,000 shares) vested on May 13, 2016 and the remaining one-half of such shares (100,000 shares) will vest on May 13, 2017. The fair value of these stock options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $31,180 ($0.1559 per share), of which $15,590 was attributable to the stock options fully-vested on May 13, 2016 and was therefore was charged to operations on that date. The Company re-measures the non-vested options to fair value at the end of each reporting period. At March 31, 2017, the fair value of non-vested options was determined to be $1,837 which will be charged to operations through May 13, 2017. During the three months ended March 31, 2017, the Company recorded a total charge to operations of $3,844 with respect to these stock options.

Effective June 7, 2016, in connection with his continuing role as a consultant to the Company, Eric Forman was granted fully-vested stock options under the 2007 Plan to purchase 100,000 shares of the Company's common stock. The stock options are exercisable for a period of five years from the date of grant at $0.15 per share. The fair market value of the Company's common stock on the date of grant was $0.14 per share. The fair value of these stock options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $13,625 ($0.1363 per share), which was charged to operations on the date of grant.

Effective September 12, 2016, in connection with his continuing role as a consultant to the Company, Francis Johnson was granted fully-vested stock options under the 2007 Plan to purchase 500,000 shares of the Company's common stock. The stock options are exercisable for a period of five years from the date of grant at $0.25 per share. The fair market value of the Company's common stock on the date of grant was $0.25 per share. The fair value of these stock options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $98,901 ($0.1978 per share), which was charged to operations on the date of grant.

Total stock-based compensation expense (credit) was $71,939 and $(30,370) for the three months ended March 31, 2017 and 2016, respectively.

A summary of stock option activity during the three months ended March 31, 2017 is presented in the tables below.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in Years)
Stock options outstanding at December 31, 2016	8,600,000	$ 0.583	
Granted	—	—	
Exercised	—	—	
Expired	—	—	
Stock options outstanding at March 31, 2017	8,600,000	$ 0.583	2.30
Stock options exercisable at December 31, 2016	7,975,000	$ 0.501	
Stock options exercisable at March 31, 2017	7,975,000	$ 0.501	2.20

Total deferred compensation expense for the outstanding value of unvested stock options was $31,522 at March 31, 2017, which is being recognized subsequent to March 31, 2017 over a weighted-average period of approximately five months.

The exercise prices of common stock options outstanding and exercisable are as follows at March 31, 2017:

Exercise Prices	Options Outstanding (Shares)	Options Exercisable (Shares)
$ 0.120	600,000	600,000
$ 0.130	100,000	75,000
$ 0.150	100,000	100,000
$ 0.160	200,000	100,000
$ 0.200	500,000	500,000
$ 0.250	500,000	500,000
$ 0.500	4,400,000	4,400,000
$ 0.650	700,000	700,000
$ 1.000	1,000,000	1,000,000
$ 2.000	500,000	—
	8,600,000	7,975,000

The intrinsic value of exercisable but unexercised in-the-money stock options at March 31, 2017 was approximately $131,000, based on a fair market value of $0.2500 per share on March 31, 2017.

The intrinsic value of exercisable but unexercised in-the-money stock options at December 31, 2016 was approximately $12,800, based on a fair market value of $0.1401 per share on December 31, 2016.

Outstanding options to acquire 625,000 shares of the Company's common stock had not vested at March 31, 2017.

The Company expects to satisfy such stock obligations through the issuance of authorized but unissued shares of common stock.

7. Commitments and Contingencies

The Company is not currently subject to any pending or threatened legal actions or claims.

Significant agreements and contracts are summarized as follows:

On September 21, 2012, the Company entered into a work order agreement with Theradex, the CRO responsible for the clinical development of the Company's lead anti-cancer compound LB-100, to manage and administer the Phase 1 clinical trial of LB-100. The Phase 1 clinical trial of LB-100, which began during April 2013 with the entry of patients into the clinical trial, was carried out by nationally recognized comprehensive cancer centers. The patient accrual goal was reached in April 2016 and the clinical trial was closed to further patient enrollment at that time. All patients completed treatment with LB-100 and were off study by the end of May 2016. The Company estimates that it will continue to incur costs through May 2017 to complete the analysis of the clinical data, reconcile and pay the remaining costs owed to the participating clinical sites, and prepare and submit the required Clinical Study Report to the FDA on the completed Phase 1 clinical trial of LB-100.

The Phase 1 clinical trial was estimated to cost a total of approximately $2,200,000, with such payments expected to be allocated approximately 60% for services provided by Theradex and approximately 40% for pass-through costs for clinical center laboratory costs and investigator costs over the life of the clinical trial. Total costs charged to operations from 2013 through March 31, 2017 for services paid to or through Theradex pursuant to this arrangement aggregated $2,192,165.

On December 24, 2013, the Company entered into an agreement with NDA Consulting Corp. ("NDA") for consultation and advice in the field of oncology research and drug development. As part of the agreement, NDA also agreed to cause its president, Dr. Daniel D. Von Hoff, M.D., to become a member of the Company's Scientific Advisory Committee. The term of the agreement was for one year and provided for a quarterly cash fee of $4,000. In 2014, 2015 and 2016, the agreement has been automatically renewed on its anniversary date for an additional one-year term. Consulting and advisory fees charged to operations pursuant to this agreement were $4,000 during the three months ended March 31, 2017 and 2016.

Effective January 1, 2014, the Company entered into an Advisory Agreement with Dr. Kathleen P. Mullinix, a member of the Board of Directors of the Company at that time, effective for an initial term of one year through December 31, 2014 to advise on business development matters. The Advisory Agreement provided for annual cash compensation of $25,000, to be paid in full at the beginning of each year. The term of the Advisory Agreement was automatically extended for a term of one year annually unless a notice of intent to terminate was given by either party at least 90 days before the end of the applicable term. Accordingly, the Advisory Agreement was extended for additional terms of one year effective January 1, 2015 and 2016. Effective November 22, 2016, Dr. Mullinix resigned from the Company's Board of Directors. For the three months ended March 31, 2016, the Company recognized a charge to operations of $6,250 as consulting and advisory fees pursuant to this Advisory Agreement, which is included in general and administrative costs in the Company's condensed consolidated statements of operations.

Effective September 14, 2015, the Company entered into a Collaboration Agreement with BioPharmaWorks, pursuant to which the Company engaged BioPharmaWorks to perform certain services for the Company. Those services include, among other things: (a) assisting the Company to (i) commercialize its products and strengthen its patent portfolio, (ii) identify large pharmaceutical companies with potential interest in the Company's product pipeline, and (iii) prepare and deliver presentations concerning the Company's products; (b) at the request of the Board of Directors, serving as backup management for up to three months should the Company's Chief Executive Officer and scientific leader be temporarily unable to carry out his duties; (c) being available for consultation in drug discovery and development; and (d) identifying providers and overseeing tasks relating to clinical use and commercialization of new compounds.

BioPharmaWorks was founded in 2015 by former Pfizer scientists with extensive multi-disciplinary research and development and drug development experience. The Collaboration Agreement was for an initial term of two years and automatically renews for subsequent annual periods unless terminated by a party not less than 60 days prior to the expiration of the applicable period. In connection with the Collaboration Agreement, the Company agreed to pay BioPharmaWorks a monthly fee of $10,000, subject to the right of the Company to pay a negotiated hourly rate in lieu of the monthly payment, and agreed to issue to BioPharmaWorks certain equity-based compensation as described at Note 6. The Company recorded a charge to operations pursuant to this Collaboration Agreement of $0 and $30,000 during the three months ended March 31, 2017 and 2016, respectively. In November 2016, it was mutually agreed to suspended services and payments pursuant to this agreement, without extending the term of the agreement, for the period from November 1, 2016 through March 31, 2017. The agreement resumed as scheduled on April 1, 2017.

Summary of Principal Cash Obligations and Commitments

The following table sets forth the Company's principal cash obligations and commitments for the next five fiscal years as of March 31, 2017 aggregating $120,761, of which $42,233 is included in current liabilities in the Company's condensed consolidated balance sheet at March 31, 2017. Amounts included in the 2017 column represent amounts due at March 31, 2017 for the remainder of the 2017 fiscal year ending December 31, 2017.

		Payments Due By Year				
	Total	2017	2018	2019	2020	2021
Research and development contracts	$ 35,813	$ 35,813	$ —	$ —	$ —	$ —
Clinical trial agreements	17,948	17,948	—	—	—	—
Consulting agreements	67,000	67,000	—	—	—	—
Total	$ 120,761	$ 120,761	$ —	$ —	$ —	$ —

8. Subsequent Events

Sale of Common Stock

Effective April 3, 2017, the Company entered into a Securities Purchase Agreement with an accredited investor pursuant to which the purchaser purchased 6,000,000 shares of the Company's common stock at a price of $0.25 per share for an aggregate purchase price of $1,500,000. The proceeds from the sale of the shares of common stock will be used for working capital and general corporate purposes principally in connection with the Company's ongoing clinical trials.

The shares issued to the investor were not registered under the Securities Act of 1933, as amended (the "Act"), in reliance upon the exemption from registration contained in Section 4(a)(2) of the Act. Such securities may not be re-offered or sold in the United States in the absence of a registration statement or exemption from the registration requirements of the Act.

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

Overview

The Company is a drug discovery company that uses biomarker technology to identify enzyme targets associated with serious common diseases and then designs novel compounds to attack those targets. The Company's product pipeline encompasses two major categories of compounds at various stages of pre-clinical and clinical development that the Company believes have broad therapeutic potential not only for cancer but also for other debilitating and life-threatening diseases.

The Company's activities are subject to significant risks and uncertainties, including the need for additional capital, as described below. The Company has not yet commenced any sustainable revenue-generating operations, does not have positive cash flows from operations, and is dependent on periodic infusions of equity capital to fund its operating requirements.

The Company's common stock is traded on the OTCQB operated by the OTC Markets under the symbol "LIXT".

Recent Developments

National Cancer Institute Clinical Trial

In April 2017, the Company entered into a Cooperative Research and Development Agreement ("CRADA") for Intramural-Public Health Service Clinical Research with the National Cancer Institute ("NCI"). The goal of this research is to elucidate the pharmacologic profile of LB-100 in patients with recurrent glioblastoma, the most lethal form of brain tumors in adults. Under this CRADA, the NCI will conduct a 'Phase 0' clinical trial of LB-100 approved by the United States Food and Drug Administration ("FDA"). In a Phase 0 clinical trial only a known non-toxic dose of a drug is administered, in this case, a dose level of LB-100 that was shown to have no toxicity in the Company's recently completed Phase 1 clinical trial. The data gained in the Phase 0 clinical trial, however, may assist in determining whether LB-100 merits consideration as a component of novel treatments for glioblastoma in future studies. This clinical trial will be funded by the NCI.

Abstract on the Company's Lead Clinical Compound, LB-100, a Protein Phosphatase 2A Inhibitor, in Combination with a PD-1 Inhibitor in an Animal Model, Presented at the American Association for Cancer Research Annual Meeting 2017 in Washington, D.C. on April 4, 2017

The Company presented a late-breaking abstract entitled "Protein phosphatase 2A inhibition with a novel small molecule inhibitor, LB-100 achieves durable immune-mediated anti-tumor activity when combined with PD-1 blockade in a pre-clinical model" as a poster (abstract number LB-193) at the American Association for Cancer Research ("AACR") Annual Meeting 2017 in Washington, D.C. on April 4, 2017. This research was done in collaboration with scientists at the National Institute of Neurological Disorders and Stroke at the National Institutes of Health.

The research showed that, in an animal model, the Company's lead clinical compound, LB-100, has synergistic potential, in conjunction with immune checkpoint blockade, to support the investigation of its ability to enhance immunotherapy in the clinic. LB-100 is a novel, first-in-class, small molecule inhibitor of protein phosphatase 2A (PP2A) that recently completed a Phase 1 clinical trial in patients with advanced cancer.

Based on a number of published pre-clinical studies, the Company had expected that LB-100 would be therapeutically most useful when combined with cytotoxic anti-cancer drugs and x-ray. However, the new pre-clinical immunotherapy data presented at AACR raises the possibility that LB-100 also enhances the efficacy of so-called 'immune checkpoint blockers' — agents that allow the patients' own immune system to attack their own cancers. If LB-100 potentiates the effectiveness of immunotherapy in the clinic, the scope of its potential applications in cancer treatment would be significantly increased.

Sale of Common Stock

Effective April 3, 2017, the Company entered into a Securities Purchase Agreement with an accredited investor pursuant to which the purchaser purchased 6,000,000 shares of the Company's common stock at a price of $0.25 per share for an aggregate purchase price of $1,500,000. The proceeds from the sale of the shares of common stock will be used for working capital and general corporate purposes principally in connection with the Company's ongoing clinical trials.

Going Concern

The Company's condensed consolidated financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company has not generated any sustainable revenues from operations to date, and does not expect to do so in the foreseeable future. The Company has experienced recurring operating losses and negative operating cash flows since inception, and has financed its working capital requirements during this period primarily through the recurring sale of its equity securities and the exercise of outstanding common stock purchase warrants.

As a result, management has concluded that there is substantial doubt about the Company's ability to continue as a going concern within one year of the date that the consolidated financial statements were issued. In addition, the Company's independent registered public accounting firm, in their report on the Company's consolidated financial statements for the year ended December 31, 2016, has expressed substantial doubt about the Company's ability to continue as a going concern.

The Company's ability to continue as a going concern is dependent upon its ability to raise additional equity capital to fund its research and development activities and to ultimately achieve sustainable operating revenues and profits. The Company's consolidated financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Because the Company is currently engaged in research at a relatively early stage, it will likely take a significant amount of time to develop any product or intellectual property capable of generating sustainable revenues. Accordingly, the Company's business is unlikely to generate any sustainable operating revenues in the next several years, and may never do so. In addition, to the extent that the Company is able to generate revenues through licensing its technologies or through product sales, there can be no assurance that the Company will be able to achieve positive earnings and operating cash flows.

At March 31, 2017, the Company had cash of $870,936. Effective April 3, 2017, the Company sold 6,000,000 shares of common stock at $0.25 per share price for an aggregate purchase price of $1,500,000. Accordingly, the Company believes that it has sufficient working capital resources to fund the Company's ongoing business activities, including maintaining its clinical trial program and patent portfolio, through at least June 30, 2018.

The amount and timing of future cash requirements in 2018 and thereafter will depend on the pace and design of the Company's clinical trial program. As market conditions present uncertainty as to the Company's ability to secure additional funds, there can be no assurances that the Company will be able to secure additional financing on acceptable terms, or at all, as and when necessary to continue to conduct operations. If cash resources are insufficient to satisfy the Company's ongoing cash requirements, the Company would be required to scale back or discontinue its technology and product development programs and/or clinical trials, or obtain funds, if available (although there can be no certainty), through strategic alliances that may require the Company to relinquish rights to certain of its compounds, or to discontinue its operations entirely.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2014-09 (ASU 2014-09), Revenue from Contracts with Customers. ASU 2014-09 will eliminate transaction- and industry-specific revenue recognition guidance under current GAAP and replace it with a principle based approach for determining revenue recognition. ASU 2014-09 will require that companies recognize revenue based on the value of transferred goods or services as they occur in the contract. ASU 2014-09 also will require additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. The FASB has recently issued ASU 2016-08, ASU 2016-10, ASU 2016-11, ASU 2016-12, and ASU 2016-20, all of which clarify certain implementation guidance within ASU 2014-09. ASU 2014-09 is effective for reporting periods beginning after December 15, 2017, with early adoption permitted only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. Entities will be able to transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. The Company will adopt the provisions of ASU 2014-09 in the quarter beginning January 1, 2018. The adoption of ASU 2014-09 is not expected to have any impact on the Company's financial statement presentation or disclosures.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02 (ASU 2016-02), Leases (Topic 842). ASU 2016-02 requires a lessee to record a right-of-use asset and a corresponding lease liability, initially measured at the present value of the lease payments, on the balance sheet for all leases with terms longer than 12 months, as well as the disclosure of key information about leasing arrangements. ASU 2016-02 requires recognition in the statement of operations of a single lease cost, calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. ASU 2016-02 requires classification of all cash payments within operating activities in the statement of cash flows. Disclosures are required to provide the amount, timing and uncertainty of cash flows arising from leases. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early application is permitted. The Company will adopt the provisions of ASU 2016-02 in the quarter beginning January 1, 2019. The adoption of ASU 2016-02 is not expected to have any impact on the Company's financial statement presentation or disclosures.

Management does not believe that any other recently issued, but not yet effective, authoritative guidance, if currently adopted, would have a material impact on the Company's financial statement presentation or disclosures.

Concentration of Risk

The Company periodically contracts with directors, including companies controlled by or associated with directors, to provide consulting services related to the Company's research and development and clinical trial activities. Agreements for these services can be for a specific time period (typically one year) or for a specific project or task, and can include both cash and non-cash compensation. The only such contract that represents 10% or more of general and administrative or research and development costs is described below.

On September 21, 2012, the Company entered into a work order agreement with Theradex Systems, Inc. ("Theradex"), the contract research organization ("CRO") responsible for the clinical development of the Company's lead anti-cancer compound LB-100, to manage and administer the Phase 1 clinical trial of LB-100. The Phase 1 clinical trial of LB-100, which began during April 2013 with the entry of patients into the clinical trial, was carried out by nationally recognized comprehensive cancer centers. The patient accrual goal was reached in April 2016 and the clinical trial was closed to further patient enrollment at that time. All patients completed treatment with LB-100 and were off study by the end of May 2016. The Company estimates that it will continue to incur costs through May 2017 to complete the analysis of the clinical data, reconcile and pay the remaining costs owed to the participating clinical sites, and prepare and submit the required Clinical Study Report to the FDA on the completed Phase 1 clinical trial of LB-100.

The Phase 1 clinical trial was estimated to cost a total of approximately $2,200,000, with such payments expected to be allocated approximately 60% for services provided by Theradex and approximately 40% for pass-through costs for clinical center laboratory costs and investigator costs over the life of the clinical trial. Total costs charged to operations from 2013 through March 31, 2017 for services paid to or through Theradex pursuant to this arrangement aggregated $2,192,165.

During the three months ended March 31, 2017 and 2016, the Company incurred $64,615 and $116,633, respectively, of such clinical trial costs, representing approximately 22% and 44% of research and development costs for such periods. Costs pursuant to this agreement are included in research and development costs in the Company's condensed consolidated statements of operations.

Critical Accounting Policies and Estimates

The Company prepared its condensed consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Management periodically evaluates the estimates and judgments made. Management bases its estimates and judgments on historical experience and on various factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates as a result of different assumptions or conditions.

The following critical accounting policies affect the more significant judgments and estimates used in the preparation of the Company's condensed consolidated financial statements.

Research and Development

Research and development costs consist primarily of fees paid to consultants and outside service providers, patent fees and costs, and other expenses relating to the acquisition, design, development and testing of the Company's treatments and product candidates.

Research and development costs are expensed ratably over the life of the underlying contracts, unless the achievement of milestones, the completion of contracted work, or other information indicates that a different expensing schedule is more appropriate.

The Company retained Theradex, an international CRO that provides professional services for the clinical research and development of pharmaceutical compounds, to be responsible for managing and administering the Company's Phase 1 clinical trial of LB-100. The costs of the Phase 1 clinical trial of LB-100 paid through Theradex were recorded and expensed based upon the documentation provided by the CRO.

Payments made pursuant to research and development contracts are initially recorded as advances on research and development contract services in the Company's balance sheet and then charged to research and development costs in the Company's statement of operations as those contract services are performed. Expenses incurred under research and development contracts in excess of amounts advanced are recorded as research and development contract liabilities in the Company's balance sheet, with a corresponding charge to research and development costs in the Company's statement of operations. The Company reviews the status of its research and development contracts on a quarterly basis.

Patent Costs

Due to the significant uncertainty associated with the successful development of one or more commercially viable products based on the Company's research efforts and any related patent applications, all patent costs, including patent-related legal and filing fees, are expensed as incurred.

Stock-Based Compensation

The Company periodically issues common stock and stock options to officers, directors, Scientific Advisory Committee members and consultants for services rendered. Options vest and expire according to terms established at the issuance date of each grant.

The Company accounts for stock-based payments to officers and directors by measuring the cost of services received in exchange for equity awards based on the grant date fair value of the awards, with the cost recognized as compensation expense on the straight-line basis in the Company's financial statements over the vesting period of the awards. The Company accounts for stock-based payments to Scientific Advisory Committee members and consultants by determining the value of the stock compensation based upon the measurement date at either (a) the date at which a performance commitment is reached or (b) at the date at which the necessary performance to earn the equity instruments is complete.

Stock grants, which are generally time vested, are measured at the grant date fair value and charged to operations ratably over the vesting period.

Stock options granted to members of the Company's Scientific Advisory Committee and to outside consultants are revalued each reporting period to determine the amount to be recorded as an expense in the respective period. As the stock options vest, they are valued on each vesting date and an adjustment is recorded for the difference between the value already recorded and the value on the date of vesting.

The fair value of common stock issued as stock-based compensation is determined by reference to the closing price of the Company's common stock on the date of issuance. The fair value of stock options granted as stock-based compensation is determined utilizing the Black-Scholes option-pricing model, and is affected by several variables, the most significant of which are the life of the equity award, the exercise price of the stock option as compared to the fair market value of the common stock on the grant date, and the estimated volatility of the common stock over the term of the equity award. Estimated volatility is based on the historical volatility of the Company's common stock. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant. The fair market value of common stock is determined by reference to the quoted market price of the Company's common stock.

The Company recognizes the fair value of stock-based compensation awards in general and administrative costs and in research and development costs, as appropriate, in the Company's condensed consolidated statement of operations. The Company issues new shares of common stock to satisfy stock option exercises.

Income Taxes

The Company accounts for income taxes under an asset and liability approach for financial accounting and reporting for income taxes. Accordingly, the Company recognizes deferred tax assets and liabilities for the expected impact of differences between the financial statements and the tax basis of assets and liabilities.

The Company records a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized. In the event the Company was to determine that it would be able to realize its deferred tax assets in the future in excess of its recorded amount, an adjustment to the deferred tax assets would be credited to operations in the period such determination was made. Likewise, should the Company determine that it would not be able to realize all or part of its deferred tax assets in the future, an adjustment to the deferred tax assets would be charged to operations in the period such determination was made.

Plan of Operation

General Overview of Plans

The Company's original focus was the development of new treatments for the most common and most aggressive type of brain cancer of adults, glioblastoma multiforme ("GBM"), and the most common cancer of children, neuroblastoma. The Company has expanded the scope of its anti-cancer investigational activities to include the most common brain tumor of children, medulloblastoma, and also to several other types of more common cancers. This expansion of activity is based on documentation that each of two distinct types of drugs being developed by the Company has activity against cell lines of breast, colon, lung, prostate, pancreas, ovary, stomach and liver cancer, as well as against the major types of leukemia. LB-100 has now been shown to have activity in animal models of brain tumors of adults and children, and against melanomas and sarcomas. Studies in animal models of human melanoma, lymphoma, sarcoma, brain tumors, and the rare neuroendocrine cancer, pheochromocytoma, have demonstrated marked potentiation by LB-100 of the anti-tumor activity of the widely used standard chemotherapeutic drugs. These studies confirm that the LB-100 compounds, in combination with any of several standard anti-cancer drugs, have broad activity affecting many different cell types of cancer.

The Company's focus has been to determine the safety and appropriate dose of LB-100 when used alone and in combination with widely used anti-cancer drugs in its Phase 1 clinical trial. A Phase 1 clinical trial of LB-100 alone given daily for 3 days every 3 weeks (one cycle) in patients with progressing advanced cancer has been completed. A total of 10 of 21 patients with evaluable (measurable) disease had stable disease for 4 or more cycles with some patients remaining stable for more than 10 cycles, including a patient with advanced pancreatic cancer who had objective regression of the cancer after 10 cycles, which lasted for a total of 14 cycles. The next steps in the development of LB-100 are to evaluate its anti-cancer effects in Phase 1b/2 clinical trials in which LB-100 is given alone and in others, in combination with a standard anti-cancer drug and/radiation whose effects have been shown to be enhanced by LB-100 in animal models. The Company's Phase 1b/2 clinical trials will require additional financing. The Company's longer-term objective is to secure one or more strategic partnerships with pharmaceutical companies with major programs in cancer.

Operating Plans

The Company's primary focus is developing new treatments for human cancers for which better therapies are urgently needed. The scope of potential applications of the Company's products has expanded to other common non-malignant diseases, including vascular diseases (heart attacks and stroke), diabetes, genetic diseases, such as Gaucher's disease, and recently to depression and potentially post-traumatic stress syndrome. This has occurred because the targets selected by the Company have multiple functions in the cell, which, when altered, result in different disorders that may benefit by treatment from the Company's products.

The Company's drug discovery process is based on discerning clues to potential new targets for disease treatments reported in the increasingly large body of literature identifying the molecular variants which characterize human cancers and other non-cancer disorders. The Company designs drugs for which there are existing data suggesting that they may affect the altered pathways of the cancer cell and may be given safely to humans. The Company seeks to rapidly arrive at patentable structures through analysis of the literature rather than screening of thousands of structures for activity against a particular biochemical pathway.

This approach has led to the development of two classes of drugs for the treatment of cancer, consisting of protein phosphatase inhibitors (PTase-i), designated by the Company as the LB-100 series of compounds, and histone deacetylase inhibitors (HDACi), designated by the Company as the LB-200 series of compounds. Compounds of both types also have potential use in the prevention and treatment of neurodegenerative diseases.

The LB-100 series consists of novel structures, which have the potential to be first in their class, and may be useful in the treatment of not only several types of cancer but also vascular and metabolic diseases. The LB-200 series contains compounds which have the potential to be the most effective in its class and may be useful for the treatment of chronic hereditary diseases, such as Gaucher's disease, in addition to cancer and neurodegenerative diseases.

The Company has demonstrated that lead compounds of both series of drugs are active against a broad spectrum of human cancers in cell culture and against several types of human cancers in animal models. The research on new drug treatment was initiated in 2006 with the National Institute of Neurological Disorders and Stroke ("NINDS") of the National Institutes of Health ("NIH") under a Cooperative Research and Development Agreement ("CRADA") effective March 22, 2006. The research at NINDS was led by Dr. Zhengping Zhuang, an internationally recognized investigator in the molecular pathology of cancer. The initial focus of the CRADA was on the most common and uniformly fatal brain tumor of adults, GBM. The work at NIH was then extended to the most common brain tumor of children, medulloblastoma, and to the most common extracranial solid tumor of children, neuroblastoma. The CRADA was extended through a series of amendments and remained in effect until April 1, 2013, when it was terminated as scheduled.

Effective October 18, 2013, the Company entered into a Materials Cooperative Research and Development Agreement (M-CRADA) with the National Institute of Neurological Disorders and Stroke of the National Institutes of Health (NINDS, NIH) for a term of four years. The Surgical Neurology Branch of NINDS, NIH will conduct research characterizing a variety of compounds proprietary to the Company, and will examine the compounds' potential for anti-cancer activity, reducing neurological deficit due to ischemia and brain injury, and stabilizing catalytic function of misfolded proteins for inborn brain diseases. Under an M-CRADA, a party provides research material, in this case proprietary compounds from the Company's pipeline, for study by scientists at NIH. The exchange of material is for research only and implies no endorsement of the material on the part of either party. Under the M-CRADA the NIH grants a collaborator an exclusive option to elect an exclusive or non-exclusive commercialization license. The M-CRADA does not generate any incremental cost to the Company.

Effective treatment of brain tumors depends upon the ability of compounds to penetrate a physiological barrier known as the "blood-brain barrier", which protects the brain from exposure to potentially toxic substances in the blood. Because there is no certainty that the Company's compounds will be active against tumors confined to the brain, the LB-100 compounds have been studied against a variety of common and rare cancer types and have been shown to potentiate the activity of standard anti-cancer drugs in animal models of breast and pancreatic cancer, melanoma, pheochromcytomas and sarcomas. Because the LB-100 compounds appear to exert their ability to improve the effectiveness of different forms of chemotherapy and radiation therapy by inhibiting a process upon which most, if not all, cancer cell types depend on to survive treatment, the Company believes the LB-100 series of compounds may be useful against most, if not all, cancer types.

The second class of drugs under development by the Company, referred to as LB-200, is the histone deacetylase inhibitors. Many pharmaceutical companies are also developing drugs of this type, and at least two companies have HDACi approved for clinical use, in both cases for the treatment of a type of lymphoma. Despite this significant competition, the Company has demonstrated that its HDACi has broad activity against many cancer types, has neuroprotective activity, and has anti-fungal activity. In addition, these compounds have low toxicity, making them attractive candidates for development. It appears that one type of molecule has diverse effects, affecting biochemical processes that are fundamental to the life of the cell, whether they are cancer cells, nerve cells, or even fungal cells. The neuroprotective activity of the Company's HDACi has been demonstrated in the test tube in model systems that mimic injury to brain cells, such as occurs in stroke and Alzheimer's disease. This type of protective activity may have potential application to a broad spectrum of other chronic neurodegenerative diseases, including Parkinson's disease and Amytrophic Lateral Sclerosis (ALS, or Lou Gehrig's disease).

As a compound moves through the FDA approval process, it becomes an increasingly valuable property, but at a cost of additional investment at each stage. As the potential effectiveness of LB-100 has been documented at the clinical trial level, the Company has allocated resources to expand the depth and extent of its patent portfolio. The Company's approach has been to operate with a minimum of overhead, moving compounds forward as efficiently and inexpensively as possible, and to raise funds to support each of these stages as certain milestones are reached.

Results of Operations

At March 31, 2017, the Company had not yet commenced any sustainable revenue-generating operations, does not have positive cash flows from operations, and is dependent on its ability to raise equity capital to fund its operating requirements.

The Company's condensed consolidated statements of operations as discussed herein are presented below.

	Three Months Ended March 31,	
	2017	2016
Revenues	$ —	$ —
Costs and expenses:		
General and administrative costs	317,749	152,057
Research and development costs	302,855	264,497
Total costs and expenses	620,604	416,554
Loss from operations	(620,604)	(416,554)
Interest income	12	11
Net loss	$ (620,592)	$ (416,543)
Net loss per common share – basic and diluted	$ (0.01)	$ (0.01)
Weighted average common shares outstanding – basic and diluted	49,431,370	47,875,814

Three Months Ended March 31, 2017 and 2016

Revenues. The Company did not have any revenues for the three months ended March 31, 2017 and 2016.

General and Administrative. For the three months ended March 31, 2017, general and administrative costs were $317,749 which consisted of the fair value of stock options issued to directors and consultants of $3,844, consulting and professional fees of $259,508, insurance expense of $13,453, officer's salary and related costs of $17,023, stock transfer fees of $2,338, conference fees of $6,922, filing fees of $5,299, travel and entertainment costs of $2,264, listing fees of $2,500 and other operating costs of $4,598.

For the three months ended March 31, 2016, general and administrative costs were $152,057, which consisted of consulting and professional fees of $104,553, insurance expense of $14,915, officer's salary and related costs of $16,967, stock transfer fees of $2,937, filing fees of $5,598, travel and entertainment costs of $2,897, listing fees of $1,250 and other operating costs of $2,940.

General and administrative costs increased by $165,692 or 109.0% in 2017 as compared to 2016, primarily as a result of an increase of $154,955 in consulting and professional fees principally due to one-time legal fees incurred in connection with the review of Company licenses.

Research and Development. For the three months ended March 31, 2017, research and development costs were $302,855, which consisted of the vested portion of the fair value of common stock options and warrants of $68,095, patent costs of $159,611, and contractor costs of $75,149, including $64,615 to Theradex in connection with the Phase 1 clinical trial of LB-100. Contractor costs during the three months ended March 31, 2017 also include $10,534 incurred with other vendors, primarily in connection with the Company's pre-clinical research focused on the development of additional novel anti-cancer compounds to add to its clinical pipeline.

The patient accrual goal was reached in April 2016 and the Phase 1 clinical trial of LB-100 was closed to further patient enrollment at that time. All patients completed treatment with LB-100 and were off study by the end of May 2016. The Company estimates that it will continue to incur costs through May 2017 to complete the analysis of the clinical data, reconcile and pay the remaining costs owed to the participating clinical sites, and prepare and submit the required Clinical Study Report to the FDA on the completed Phase 1 clinical trial of LB-100.

For the three months ended March 31, 2016, research and development costs were $264,497, which consisted of a credit for the vested portion of the fair value of stock options of $30,370, patent costs of $101,956, and contractor costs of $192,911, including $116,633 to Theradex in connection with the Phase 1 clinical trial of LB-100. Contractor costs during the three months ended March 31, 2016 also include $76,278 incurred with other vendors, primarily in connection with the Company's pre-clinical research focused on the development of additional novel anti-cancer compounds to add to its clinical pipeline.

Research and development costs increased by $38,358 or 14.5% in 2017 as compared to 2016, as a result of an increase of $98,465 in stock based compensation, an increase of $57,655 in patent costs, offset by a decrease of $117,762 in contractor costs, including a decrease of $52,018 attributable to Theradex, reflecting the wind down of the Phase 1 clinical trial of LB-100, and a decrease of $65,744 in costs incurred with other vendors.

A significant component of the fair value of stock options issued to directors and consultants of $68,095 for the three months ended March 31, 2017 was $55,957 charged to operations for the amortization of vesting stock options to acquire 500,000 shares of the Company's common stock that were issued to BioPharmaWorks on September 14, 2015.

The credit for the vested portion of the fair value of common stock options and warrants of $30,370 for the three months ended March 31, 2016 was primarily attributable to a decline in the Company's stock price from December 31, 2015 to March 31, 2016.

Net Loss. For the three months ended March 31, 2017, the Company incurred a net loss of $620,592, as compared to a net loss of $416,543 for the three months ended March 31, 2016.

Liquidity and Capital Resources – March 31, 2017

The Company's condensed consolidated financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company has not generated any sustainable revenues from operations to date, and does not expect to do so in the foreseeable future. The Company has experienced recurring operating losses and negative operating cash flows since inception, and has financed its working capital requirements during this period primarily through the recurring sale of its equity securities and the exercise of outstanding warrants. As a result, management has concluded that there is substantial doubt about the Company's ability to continue as a going concern within one year of the date that the consolidated financial statements were issued. In addition, the Company's independent registered public accounting firm, in their report on the Company's consolidated financial statements for the year ended December 31, 2016, has expressed substantial doubt about the Company's ability to continue as a going concern (see "Going Concern" above).

At March 31, 2017, the Company had working capital of $666,107, as compared to working capital of $214,760 at December 31, 2016 (including advances on research and development contract services of $183,490), an increase in working capital of $451,347 for the three months ended March 31, 2017. The increase in working capital during the three months ended March 31, 2017 was primarily the result of proceeds from the sale of the Company's common stock in the amount of $1,000,000, offset by amounts being utilized to fund the Company's Phase 1 clinical trial and its ongoing operating expenses, including maintaining its patent portfolio.

At March 31, 2017, the Company had cash of $870,936. Effective April 3, 2017, the Company sold 6,000,000 shares of common stock at $0.25 per share price for an aggregate purchase price of $1,500,000. Accordingly, the Company believes that it has sufficient working capital resources to fund the Company's ongoing business activities, including maintaining its clinical trial program and patent portfolio, through at least June 30, 2018.

The amount and timing of future cash requirements in 2018 and thereafter will depend on the pace and design of the Company's clinical trial program. As market conditions present uncertainty as to the Company's ability to secure additional funds, there can be no assurances that the Company will be able to secure additional financing on acceptable terms, or at all, as and when necessary to continue to conduct operations. If cash resources are insufficient to satisfy the Company's ongoing cash requirements, the Company would be required to scale back or discontinue its technology and product development programs and/or clinical trials, or obtain funds, if available (although there can be no certainty), through strategic alliances that may require the Company to relinquish rights to certain of its compounds, or to discontinue its operations entirely.

Operating Activities. For the three months ended March 31, 2017, operating activities utilized cash of $328,993, as compared to utilizing cash of $325,885 for the three months ended March 31, 2016, to fund the Company's Phase 1 clinical trial of LB-100, to support its other ongoing research and development activities, and to fund its other ongoing operating expenses, including maintaining its patent portfolio.

Investing Activities. For the three months ended March 31, 2017, the Company had no investing activities. For the three months ended March 31, 2016, investing activities consisted of an increase in money market funds of $766,678 as a result of the sale of shares of the Company's Series A Convertible Preferred Stock during January 2016, and a commensurate decrease in cash.

Financing Activities. For the three months ended March 31, 2017, financing activities consisted of the receipt of $1,000,000 of proceeds from the sale of 4,000,000 shares of the Company's common stock at $0.25 per share in January 2017. For the three months ended March 31, 2016, financing activities consisted of the receipt of subscription payments totaling $1,166,668 relating to the sale on January 20, 2016 of 175,000 shares of the Company's Series A Convertible Preferred Stock at an aggregate purchase price of $1,750,000.

Principal Commitments

On September 21, 2012, the Company entered into a work order agreement with Theradex, the CRO responsible for the clinical development of the Company's lead anti-cancer compound LB-100, to manage and administer the Phase 1 clinical trial of LB-100. The Phase 1 clinical trial of LB-100, which began during April 2013 with the entry of patients into the clinical trial, was carried out by nationally recognized comprehensive cancer centers. The patient accrual goal was reached in April 2016 and the clinical trial was closed to further patient enrollment at that time. All patients completed treatment with LB-100 and were off study by the end of May 2016. The Company estimates that it will continue to incur costs through May 2017 to complete the analysis of the clinical data, reconcile and pay the remaining costs owed to the participating clinical sites, and prepare and submit the required Clinical Study Report to the FDA on the completed Phase 1 clinical trial of LB-100.

On December 24, 2013, the Company entered into an agreement with NDA Consulting Corp. ("NDA") for consultation and advice in the field of oncology research and drug development. As part of the agreement, NDA also agreed to cause its president, Dr. Daniel D. Von Hoff, M.D., to become a member of the Company's Scientific Advisory Committee. The term of the agreement was for one year and provided for a quarterly cash fee of $4,000. In 2014, 2015 and 2016, the agreement has been automatically renewed on its anniversary date for an additional one-year term. Consulting and advisory fees charged to operations pursuant to this agreement were $4,000 during the three months ended March 31, 2017 and 2016.

Effective January 1, 2014, the Company entered into an Advisory Agreement with Dr. Kathleen P. Mullinix, a member of the Board of Directors of the Company, effective for an initial term of one year through December 31, 2014 to advise on business development matters. The Advisory Agreement provided for annual cash compensation of $25,000. The term of the Advisory Agreement was automatically extended for a term of one year annually unless a notice of intent to terminate was given by either party at least 90 days before the end of the applicable term. Accordingly, the Advisory Agreement was extended for additional terms of one year effective January 1, 2015 and 2016. Effective November 22, 2016, Dr. Mullinix resigned from the Company's Board of Directors.

Effective September 14, 2015, the Company entered into a Collaboration Agreement with BioPharmaWorks, pursuant to which the Company engaged BioPharmaWorks to perform certain services for the Company. Those services include, among other things: (a) assisting the Company to (i) commercialize its products and strengthen its patent portfolio, (ii) identify large pharmaceutical companies with potential interest in the Company's product pipeline, and (iii) prepare and deliver presentations concerning the Company's products; (b) at the request of the Board of Directors, serving as backup management for up to three months should the Company's Chief Executive Officer and scientific leader be temporarily unable to carry out his duties; (c) being available for consultation in drug discovery and development; and (d) identifying providers and overseeing tasks relating to clinical use and commercialization of new compounds. BioPharmaWorks was founded in 2015 by former Pfizer scientists with extensive multi-disciplinary research and development and drug development experience. The Collaboration Agreement was for an initial term of two years and automatically renews for subsequent annual periods unless terminated by a party not less than 60 days prior to the expiration of the applicable period. In connection with the Collaboration Agreement, the Company agreed to pay BioPharmaWorks a monthly fee of $10,000, subject to the right of the Company to pay a negotiated hourly rate in lieu of the monthly payment, and agreed to issue to BioPharmaWorks certain equity-based compensation. The Company recorded a charge to operations pursuant to this Collaboration Agreement of $0 and $30,000 during the three months ended March 31, 2017 and 2016, respectively. In November 2016, it was mutually agreed to suspended services and payments pursuant to this agreement, without extending the term of the agreement, for the period from November 1, 2016 through March 31, 2017. The agreement resumed as scheduled on April 1, 2017.

Summary of Principal Cash Obligations and Commitments

The following table sets forth the Company's principal cash obligations and commitments for the next five fiscal years as of March 31, 2017 aggregating $120,761, of which $42,233 is included in current liabilities in the Company's condensed consolidated balance sheet at March 31, 2017. Amounts included in the 2017 column represent amounts due at March 31, 2017 for the remainder of the 2017 fiscal year ending December 31, 2017.

		Payments Due By Year				
	Total	2017	2018	2019	2020	2021
Research and development contracts	$ 35,813	$ 35,813	$ —	$ —	$ —	$ —
Clinical trial agreements	17,948	17,948	—	—	—	—
Consulting agreements	67,000	67,000	—	—	—	—
Total	$ 120,761	$ 120,761	$ —	$ —	$ —	$ —

Off-Balance Sheet Arrangements

At March 31, 2017, the Company did not have any transactions, obligations or relationships that could be considered off-balance sheet arrangements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Not applicable.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

The Company carried out an evaluation, under the supervision and with the participation of its management, consisting of its principal executive officer and principal financial officer (who is the same person), of the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act (defined below)). Based upon that evaluation, the Company's principal executive officer and principal financial officer concluded that, as of the end of the period covered in this report, the Company's disclosure controls and procedures were effective to ensure that information required to be disclosed in reports filed under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the required time periods and is accumulated and communicated to the Company's management, consisting of the Company's principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

The Company's management, consisting of its principal executive officer and principal financial officer, does not expect that its disclosure controls and procedures or its internal controls will prevent all error or fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Furthermore, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Due to the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. In addition, as conditions change over time, so too may the effectiveness of internal controls. However, management believes that the financial statements included in this report fairly present, in all material respects, the Company's financial condition, results of operations and cash flows for the periods presented.

(b) Changes in Internal Controls Over Financial Reporting

The Company's management, consisting of its principal executive officer and principal financial officer, has determined that no change in the Company's internal control over financial reporting (as that term is defined in Rules 13(a)-15(f) and 15(d)-15(f) of the Securities Exchange Act of 1934) occurred during or subsequent to the end of the period covered in this report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

The Company is not currently subject to any pending or threatened legal actions or claims.

ITEM 1A. RISK FACTORS

As of the date of this filing, there have been no material changes to the Risk Factors included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016, as filed with the SEC on March 29, 2017 (the "2016 Form 10-K"). The Risk Factors set forth in the 2016 Form 10-K should be read carefully in connection with evaluating the Company's business and in connection with the forward-looking statements contained in this Quarterly Report on Form 10-Q. Any of the risks described in the 2016 Form 10-K could materially adversely affect the Company's business, financial condition or future results and the actual outcome of matters as to which forward-looking statements are made. These are not the only risks that the Company faces. Additional risks and uncertainties not currently known to the Company or that the Company currently deems to be immaterial also may materially adversely affect the Company's business, financial condition and/or operating results.

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

Effective February 24, 2017, the Company entered into a Securities Purchase Agreement with an accredited investor pursuant to which the purchaser purchased 4,000,000 shares of the Company's common stock at a price of $0.25 per share for an aggregate purchase price of $1,000,000. The proceeds from the sale of the shares of common stock will be used for working capital and general corporate purposes principally in connection with the Company's ongoing clinical trials.

The shares issued to the investor were not registered under the Securities Act of 1933, as amended (the "Act"), in reliance upon the exemption from registration contained in Section 4(a)(2) of the Act. Such securities may not be re-offered or sold in the United States in the absence of a registration statement or exemption from the registration requirements of the Act.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not applicable.

ITEM 6. EXHIBITS

A list of exhibits required to be filed as part of this report is set forth in the Index to Exhibits, which is presented elsewhere in this document, and is incorporated herein by reference.

SIGNATURES

In accordance with the requirements of the Securities and Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
(Registrant)

Date: May 10, 2017

By: */s/ JOHN S. KOVACH*
John S. Kovach
Chief Executive Officer and Chief Financial Officer
(Principal financial and accounting officer)

INDEX TO EXHIBITS

The following documents are filed as part of this report:

Exhibit Number	Description of Document
31.1*	Officer's Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Officer's Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document

* Filed herewith.

** In accordance with Regulation S-T, the XBRL related information on Exhibit No. 101 to this Quarterly Report on Form 10-Q shall be deemed "furnished" herewith but not "filed".

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John S. Kovach, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Lixte Biotechnology Holdings, 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. I am 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 my supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to me 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 my 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 my 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. I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's Board of Directors (or persons performing the equivalent functions):

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

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

Date: May 10, 2017

By: */s/ JOHN S. KOVACH*
John S. Kovach
Chief Executive Officer and Chief Financial Officer

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
UNDER SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, John S. Kovach, the Chief Executive Officer and Chief Financial Officer of Lixte Biotechnology Holdings, Inc. (the "Company"), certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

(i) The Quarterly Report on Form 10-Q of the Company for the quarterly period ended March 31, 2017 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and

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

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Date: May 10, 2017

By: */s/ JOHN S. KOVACH*
John S. Kovach
Chief Executive Officer and Chief Financial Officer