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

FORM 10-Q

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

For the quarterly period ended June 30, 2009

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE 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 ☒ 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 ☐ 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 ☒

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

As of July 31, 2009, the Company had 29,352,178 shares of common stock, $0.0001 par value, issued and outstanding.

Documents incorporated by reference: None

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

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Forward-Looking Statements

This Quarterly Report on Form 10-Q 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. For example, 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. However, these forward-looking statements are inherently subject to known and unknown risks and uncertainties. Actual results or experience may differ materially from those expected or anticipated in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, regulatory policies, available cash, research 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.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY
(a development stage company)

CONDENSED CONSOLIDATED BALANCE SHEETS

	June 30, 2009 (Unaudited)	December 31, 2008
ASSETS		
Current assets:		
Cash and cash equivalents	$ 165,707	$ 10,381
Advances on research and development contract services	8,500	12,500
Prepaid expenses and other current assets	15,483	28,644
Total current assets	189,690	51,525
Office equipment, net of accumulated depreciation of $1,909 and $1,782 at June 30, 2009 and December 31, 2008, respectively	—	128
Total assets	$ 189,690	$ 51,653
LIABILITIES AND STOCKHOLDERS' DEFICIENCY		
Current liabilities:		
Accounts payable and accrued expenses	$ 48,989	$ 108,484
Note payable to consultant	—	100,000
Research and development contract liabilities	50,000	—
Liquidated damages payable under registration rights agreement	74,000	74,000
Due to stockholder	92,717	92,717
Total current liabilities	265,706	375,201
Commitments and contingencies		
Stockholders' deficiency:		
Preferred stock, $0.0001 par value; authorized - 10,000,000 shares; issued – none	—	—
Common stock, $0.0001 par value; authorized - 100,000,000 shares; issued and outstanding - 29,352,178 shares and 27,932,178 shares at June 30, 2009 and December 31, 2008, respectively	2,935	2,793
Additional paid-in capital	3,941,794	3,171,877
Deficit accumulated during the development stage	(4,020,745)	(3,498,218)
Total stockholders' deficiency	(76,016)	(323,548)
Total liabilities and stockholders' deficiency	$ 189,690	$ 51,653

See accompanying notes to condensed consolidated financial statements.

LIXTE BIOTECHNOLOGY HOLDINGS, INC. AND SUBSIDIARY
(a development stage company)

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,		Period from August 9, 2005 (Inception) to June 30, 2009
	2009	2008	2009	2008	(Cumulative)
Revenues	$ —	$ —	$ —	$ —	$ —
Costs and expenses:					
General and administrative, including $37,896 and $(100,355) of stock-based expense (income) during the three months ended June 30, 2009 and 2008, respectively, $75,410 and $64,794 of stock-based expense during the six months ended June 30, 2009 and 2008, respectively, and $1,421,241 of stock-based expense for the period from August 9, 2005 (inception) to June 30, 2009 (cumulative)	101,776	(50,947)	254,893	217,869	2,371,017
Depreciation	—	159	128	318	1,909
Research and development costs, including $57,737 and $(25,564) of stock-based expense (income) during the three months ended June 30, 2009 and 2008, respectively, $97,599 and $83,369 of stock-based expense during the six months ended June 30, 2009 and 2008, respectively, and $361,496 of stock based expense for the period from August 9, 2005 (inception) to June 30, 2009 (cumulative)	141,228	61,782	267,106	298,233	1,547,895
Reverse merger costs	—	—	—	—	50,000
Total costs and expenses	243,004	10,994	522,127	516,420	3,970,821
	(243,004)	(10,994)	(522,127)	(516,420)	(3,970,821)
Interest income	46	733	52	2,838	25,765
Interest expense	—	—	(452)	—	(1,689)
Liquidated damages under registration rights agreement	—	—	—	—	(74,000)
Net loss	$ (242,958)	$ (10,261)	$ (522,527)	$ (513,582)	$ (4,020,745)
Net loss per common share - basic and diluted	$ (0.01)	$ (0.00)	$ (0.02)	$ (0.02)	
Weighted average common shares outstanding - basic and diluted	29,319,211	27,932,178	28,849,637	27,916,793	

See accompanying notes to condensed consolidated financial statements.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY
(a development stage company)

CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY (DEFICIENCY)

Period from August 9, 2005 (Inception) to June 30, 2009

	Common Stock		Additional Paid-in Capital	Deficit Accumulated During the Development Stage	Total Stockholders' Equity (Deficiency)
	Shares	Amount			
Balance, August 9, 2005 (inception)	—	$ —	$ —	$ —	$ —
Shares issued to founding stockholder	19,021,786	1,902	(402)	—	1,500
Net loss	—	—	—	(16,124)	(16,124)
Balance, December 31, 2005	19,021,786	1,902	(402)	(16,124)	(14,624)
Shares issued in connection with reverse merger transaction	4,005,177	401	62,099	—	62,500
Shares issued in private placement, net of offering costs of $214,517	3,555,220	355	969,017	—	969,372
Stock-based compensation	—	—	97,400	—	97,400
Net loss	—	—	—	(562,084)	(562,084)
Balance, December 31, 2006	26,582,183	2,658	1,128,114	(578,208)	552,564
Shares issued in private placement, net of offering costs of $118,680	999,995	100	531,220	—	531,320
Stock-based compensation	250,000	25	890,669	—	890,694
Stock-based research and development costs	—	—	50,836	—	50,836
Net loss	—	—	—	(1,648,488)	(1,648,488)
Balance, December 31, 2007	27,832,178	2,783	2,600,839	(2,226,696)	376,926
Stock-based compensation	—	—	357,987	—	357,987
Stock-based research and development costs	100,000	10	213,051	—	213,061
Net loss	—	—	—	(1,271,522)	(1,271,522)
Balance, December 31, 2008	27,932,178	2,793	3,171,877	(3,498,218)	(323,548)
Shares issued in private placement, net of offering costs of $112,950	1,420,000	142	596,908	—	597,050
Stock-based compensation	—	—	75,410	—	75,410
Stock-based research and development costs	—	—	97,599	—	97,599
Net loss for the six months ended June 30, 2009	—	—	—	(522,527)	(522,527)
Balance, June 30, 2009 (Unaudited)	29,352,178	$ 2,935	$ 3,941,794	$ (4,020,745)	$ (76,016)

See accompanying notes to condensed consolidated financial statements.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY
(a development stage company)

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

	Six Months Ended June 30,		Period from August 9, 2005 (Inception) to June 30, 2009
	2009	2008	(Cumulative)
Cash flows from operating activities:			
Net loss	$ (522,527)	$ (513,582)	$ (4,020,745)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	128	318	1,909
Stock-based compensation	75,410	64,794	1,421,241
Stock-based research and development	97,599	83,369	361,496
Changes in operating assets and liabilities:			
(Increase) decrease in -			
Advances on research and development contract services	4,000	69,430	(8,500)
Prepaid expenses and other current assets	13,161	26,809	(15,483)
Increase (decrease) in -			
Accounts payable and accrued expenses	(59,495)	(25,548)	48,989
Liquidated damages payable under registration rights agreement	—	—	74,000
Research and development contract liabilities	50,000	(11,725)	50,000
Net cash used in operating activities	(341,724)	(306,135)	(2,087,093)
Cash flows from investing activities:			
Purchase of office equipment	—	—	(1,909)
Net cash used in investing activities	—	—	(1,909)
Cash flows from financing activities:			
Proceeds from sale of common stock to consulting firm	—	—	250
Proceeds from sale of common stock to founder	—	—	1,500
Proceeds from note payable to consultant	—	—	100,000
Repayment of note payable to consultant	(100,000)	—	(100,000)
Cash acquired in reverse merger transaction	—	—	62,500
Gross proceeds from sale of common stock	710,000	—	2,543,889
Payment of private placement offering costs	(112,950)	—	(446,147)
Advances from stockholder	—	—	92,717
Net cash provided by financing activities	497,050	—	2,254,709
Net increase (decrease) in cash	155,326	(306,135)	165,707
Cash at beginning of period	10,381	508,070	—
Cash at end of period	$ 165,707	$ 201,935	$ 165,707
Supplemental disclosures of cash flow information:			
Cash paid for -			
Interest	$ 851	$ —	$ 1,685
Income taxes	$ —	$ —	$ —

See accompanying notes to condensed consolidated financial statements.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

Three Months and Six Months Ended June 30, 2009 and 2008, and
Period from August 9, 2005 (Inception) to June 30, 2009 (Cumulative)

1. Basis of Presentation

The condensed consolidated financial statements of Lixte Biotechnology Holdings, Inc. and its wholly-owned subsidiary, Lixte Biotechnology, Inc. (the "Company") at June 30, 2009, for the three months and six months ended June 30, 2009 and 2008, and for the period from August 9, 2005 (inception) to June 30, 2009 (cumulative), are unaudited. In the opinion of management, all adjustments (including normal recurring adjustments) have been made that are necessary to present fairly the financial position of the Company as of June 30, 2009, the results of its operations for the three months and six months ended June 30, 2009 and 2008, and for the period from August 9, 2005 (inception) to June 30, 2009 (cumulative), and its cash flows for the six months ended June 30, 2009 and 2008, and for the period from August 9, 2005 (inception) to June 30, 2009 (cumulative). Operating results for the interim periods presented are not necessarily indicative of the results to be expected for a full fiscal year. The condensed balance sheet at December 31, 2008 has been derived from the audited financial statements.

The statements and related notes have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission. 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, 2008, as filed with Securities and Exchange Commission.

2. Organization and Business Operations

Organization

On June 30, 2006, Lixte Biotechnology, Inc., a privately-held Delaware corporation ("Lixte"), completed a reverse merger transaction with SRKP 7, Inc. ("SRKP"), a non-trading public shell company, whereby Lixte became a wholly-owned subsidiary of SRKP. On December 7, 2006, SRKP amended its Certificate of Incorporation to change its name to Lixte Biotechnology Holdings, Inc. ("Holdings"). Unless the context indicates otherwise, Lixte and Holdings are hereinafter referred to as the "Company".

For financial reporting purposes, Lixte was considered the accounting acquirer in the merger and the merger was accounted for as a reverse merger. Accordingly, the historical financial statements presented herein are those of Lixte and do not include the historical financial results of SRKP. The stockholders' equity section of SRKP has been retroactively restated for all periods presented to reflect the accounting effect of the reverse merger transaction. All costs associated with the reverse merger transaction were expensed as incurred.

Lixte was incorporated in Delaware on August 9, 2005 to capitalize on opportunities to develop low cost, specific and sensitive tests for the early detection of cancers to better estimate prognosis, to monitor treatment response, and to reveal targets for development of more effective treatments.

The Company is considered a "development stage company" as defined in Statement of Financial Accounting Standards ("SFAS") No. 7, "Accounting and Reporting by Development Stage Enterprises", as it has not yet commenced any revenue-generating operations, does not have any cash flows from operations, and is dependent on debt and equity funding to finance its operations. The Company has selected December 31 as its fiscal year end.

The Company's common stock was listed for trading on the OTC Bulletin Board commencing September 24, 2007.

Operating Plans

The Company is concentrating on developing 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 inhibits the growth of cell lines of breast, colon, lung, prostate, pancreas, ovary, stomach and liver cancer, as well as the major types of leukemias. Activity of lead compounds of both types of drugs was recently demonstrated against human pancreatic cancer cells in a mouse model. Because there is a great need for any kind of effective treatment for pancreatic cancer, this cancer will be studied concomitantly with the primary target of the Company's research program focused on brain cancers.

The research on brain tumors is proceeding in collaboration 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") entered into on March 22, 2006, as amended. The research at NINDS continues to be led by Dr. Zhengping Zhuang, an internationally recognized investigator in the molecular pathology of cancer. Dr. Zhuang is aided by two senior research technicians supported by the Company as part of the CRADA. The goal of the CRADA is to develop more effective drugs for the treatment of GBM through the processes required to gain Food and Drug Administration ("FDA") approval for clinical trials. The Company has entered into an amendment to the CRADA to extend its term from September 30, 2009 through September 30, 2011.

The Company filed five patent applications on August 1, 2008. Two of these patent filings deal with applications filed earlier jointly with NIH for work done under the CRADA as follows: (1) a filing entering the regional stage of a PCT application involving the use of certain compounds to treat human tumors expressing a biomarker for brain and other human cancers; and (2) an application for the treatment of the pediatric tumors, medulloblastoma (the most common brain tumor in children) and neuroblastoma (a tumor arising from neural cells outside the brain that is the most common cancer of children). The three new patent applications include: (1) a joint application with NIH identifying a new biomarker for many common human cancers that when targeted by compounds developed by the Company result in inhibition of growth and death of cancer cells; (2) an application by the Company regarding the structure, synthesis and use of a group of new homologs of its LB-1 compounds; and (3) an application by the Company for the use of certain homologs of its drugs as neuroprotective agents with potential application to common neurodegenerative conditions such as Alzheimer's and Parkinson's diseases.

During the six months ended June 30, 2009, the Company filed eight patent applications. The U.S. Patent Office Examiner began review of the initial patent submitted jointly by the Company and the NINDS. The chemical formula of one of the Company's lead compounds, LB-100, was disclosed in that patent, and was found to be novel. The Company considers this finding a milestone in the development of the Company's intellectual property. The specific claims for the structures and methods of synthesis of all compounds in the LB series were filed on the same day in a separate patent application and are the sole property of the Company. The review of this patent will be the determinant of the validity of the novelty of the LB-100 compounds, and the outcome thereof will therefore have a material impact on the future business prospects of the Company.

The results of studies characterizing the novel and potent anti-cancer activity and mechanism of action of LB-102 alone and in combination with standard chemotherapy drugs were published in a leading scientific journal, the Proceedings of the National Academy of Sciences (print version dated July 14, 2009). The primary conclusion was that one of the Company's lead compounds appears to inhibit cancer cells by stimulating cancer cells to attempt to grow in the presence of a standard cancer drug and interferes with cancer cell defense mechanisms, with the end result being much greater damage to the cancer than occurs when treatment is limited to the standard anti-cancer drug. The authors concluded that treatment with the Company's compound LB-1.2 may be a general method for enhancing the therapeutic benefit of a number of standard cancer regimens, not limited to the original targets of brain tumors of adults and children.

In addition, an abstract of the characterization of the neuroprotective effects of two lead compounds in standard assays of injury to normal embryonic mouse neurons supporting their continued development for the possible treatment of chronic neurodegenerative diseases such as Alzheimer's Disease and Parkinson's Disease has been submitted for presentation at the annual meeting of the Society for Neuroscience in November 2009.

The Company continues to evaluate compounds for activity against several types of fungi that cause serious infections, particularly in immuno-compromised individuals, such as those with HIV-AIDS, and those having bone marrow transplantations. The Company is also exploring indications that its compounds have against strains of fungi that cause the most common fungal infections of the skin and nails. Discussions are in progress with experts in fungal infections regarding the most reliable methods of assessing the potential of new agents for the management of common fungal diseases.

The Company expects that its products will derive directly from the intellectual property from its research activities. The development of lead compounds with different mechanisms of action that have activity against brain tumors and other common human cancers, as well as against serious fungal infections, originated from the discovery of a biomarker in GBM. The Company will continue to use discovery and/or recognition of molecular variants characteristic of specific human cancers as a guide to drug discovery and potentially new diagnostic tests. Examples of the productivity of this approach to discovery of new therapeutics are: (1) the recent patent application filing for a new biomarker of several common cancers that when targeted by certain of the Company's drugs results in inhibition of growth and death of cancer cells displaying the marker; and (2) the filing of a patent on certain homologs of one group of compounds as potentially useful for the treatment of neurodegenerative diseases.

Management's primary focus in 2009 is securing a strategic partnership with a pharmaceutical company with major programs in cancer, anti-fungal treatments, and/or neuroprotective measures. The significant diversity of the potential therapeutic value of the Company's compounds stems from the fact that these agents modify critical pathways in cancer cells and in microorganisms such as fungi and appear to ameliorate pathologic processes that lead to brain injury, caused by trauma or toxins or through as yet unknown mechanisms that underlie the major chronic neurologic diseases including Alzheimer's Disease, Parkinson's Disease, and Amyotrophic Lateral Sclerosis (ALS, or Lou Gherig's Disease). Studies of the potential neuroprotective effects of homologs of each class of the Company's compounds are continuing under a contract with Southern Research Institute, Birmingham, Alabama.

Going Concern

The Company's 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 is in the development stage and has not generated any revenues from operations to date. The Company has experienced continuing losses since inception and had a stockholders' deficiency at December 31, 2008 and June 30, 2009. As a result, the Company's independent registered public accounting firm, in their report on the Company's 2008 consolidated financial statements, have raised 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 develop additional sources of capital and to ultimately achieve profitable operations. The Company's consolidated financial statements do not include any adjustments that might result from the outcome of these uncertainties.

At June 30, 2009, the Company had not yet commenced any revenue-generating operations. All activity through June 30, 2009 has been related to the Company's formation, capital raising efforts and research and development activities. As such, the Company has yet to generate any cash flows from operations, and is dependent on debt and equity funding from both related and unrelated parties to finance its operations. Prior to June 30, 2006, the Company's cash requirements were funded by advances from the Company's founder.

Because the Company is currently engaged in research at an early stage, it will likely take a significant amount of time to develop any product or intellectual property capable of generating revenues. As such, the Company's business is unlikely to generate any revenue in the next several years and may never do so. Even if the Company is able to generate revenues in the future through licensing its technologies or through product sales, there can be no assurance that the Company will be able to generate a profit.

As previously disclosed, the Company estimates that it will require minimum funding in calendar 2009 of approximately $750,000 in order to fund operations and continuing drug discovery and to attempt to bring two drugs through the pre-clinical evaluation process needed for submission of an Investigational New Drug ("IND") application. Towards that objective, the Company completed a private placement of its securities, which generated net proceeds from three closings in February, March and April 2009 aggregating approximately $597,000. The Company utilized a portion of such net proceeds to repay a $100,000 short-term note in February 2009, as described at Note 6.

Since the Company did not reach its target of $750,000 in its recent private placement, the Company has modified its 2009 budget to reflect the available operating funds. The Company believes that its current resources are adequate to fund operations at most through the end of 2009 at a level that will allow the continuation of the Company's two drug development programs currently in process, but will not allow proceeding with clinical trials or expansion of its research activities. Depending on the results of the Company's efforts to enter into a strategic partnership with a large- or medium-sized pharmaceutical company that would provide adequate financial resources for the Company to continue its research and development activities, the Company may consider a further private placement later in 2009. The Company is in various preliminary discussions with regard to a potential strategic partnership. In view of the Company's limited cash resources, the failure to accomplish such a strategic partnership or to raise additional capital by the end of 2009 would seriously compromise the Company's ability to continue to conduct operations in 2010.

The amount and timing of future cash requirements will depend on the market's evaluation of the Company's technology and products, if any, and the resources that it devotes to developing and supporting its activities. The Company will need to fund these cash requirements from a combination of additional debt or equity financings, or the sale, licensing or joint venturing of its intellectual properties. Current market conditions present uncertainty as to the Company's ability to secure additional funds, as well as its ability to reach profitability. There can be no assurances that the Company will be able to secure additional financing, or obtain favorable terms on such financing if it is available, or as to the Company's ability to achieve positive earnings and cash flows from operations. Continued negative cash flows and lack of liquidity create significant uncertainty about the Company's ability to fully implement its operating plan, as a result of which the Company may have to reduce the scope of its planned operations. If cash resources are insufficient to satisfy the Company's liquidity requirements, the Company would be required to scale back or discontinue its technology and product development programs, or obtain funds, if available, through strategic alliances that may require the Company to relinquish rights to certain of its technologies products, or to discontinue its operations entirely.

3. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include the financial statements of Holdings and its wholly-owned subsidiary, Lixte. All intercompany balances and transactions have been eliminated in consolidation.

Cash and Cash Equivalents and Concentrations

The Company considers all highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents. At times, such cash and cash equivalents may exceed federally insured limits. The Company has not experienced a loss in such accounts to date. The Company maintains its accounts with financial institutions with high credit ratings.

Research and Development

Research and development costs are expensed as incurred. Research and development expenses 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.

Amounts due, pursuant to contractual commitments, on research and development contracts with third parties are recorded as a liability, with the related amount of such contracts recorded as advances on research and development contract services on the Company's balance sheet. Such advances on research and development contract services are expensed over their life on the straight-line basis, unless the achievement of milestones, the completion of contracted work, or other information indicates that a different expensing schedule is more appropriate. The Company accounts for its research and development contracts in accordance with EITF 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities".

The funds paid to NINDS of the NIH, pursuant to the CRADA effective March 22, 2006, as amended, represented an advance on research and development costs and therefore had future economic benefit. As such, such costs were being charged to expense when they were actually expended by the provider, which is, effectively, as they performed the research activities that they were contractually committed to provide. Absent information that would indicate that a different expensing schedule was more appropriate (such as, for example, from the achievement of performance milestones or the completion of contract work), such advances were expensed over the contractual service term on a straight-line basis, which reflected a reasonable estimate of when the underlying research and development costs were being incurred.

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 $13,718 and $34,224 for the three months ended June 30, 2009 and 2008, respectively, $34,484 and $74,224 for the six months ended June 30, 2009 and 2008, respectively, and $360,175 for the period from August 9, 2005 (inception) to June 30, 2009 (cumulative). Patent costs are included in research and development costs in the Company's condensed consolidated statement of operations.

Income Taxes

The Company accounts for income taxes pursuant to SFAS No. 109, "Accounting for Income Taxes" ("SFAS No. 109"), which establishes financial accounting and reporting standards for the effects of income taxes that result from an enterprise's activities during the current and preceding years. SFAS No. 109 requires 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.

For federal income tax purposes, substantially all expenses, except for interest, taxes and research and development, are deemed start-up and organization costs and must be deferred until the Company commences business operations, at which time they may be written off over a 180-month period. The Company has elected to deduct research and development costs on a current basis for federal income tax purposes.

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.

For federal income tax purposes, net operating losses can be carried forward for a period of 20 years until they are either utilized or until they expire.

On January 1, 2007, the Company adopted FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109, Accounting for Income Taxes" ("FIN 48"). FIN 48 addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under FIN 48, the Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. FIN 48 also provides guidance on de-recognition, classification, interest and penalties on income taxes, accounting in interim periods and requires increased disclosures. The adoption of the provisions of FIN 48 did not have a material effect on the Company's financial statements. As of June 30, 2009, no liability for unrecognized tax benefits was required to be recorded.

The Company files income tax returns in the U.S. federal jurisdiction and is subject to income tax examinations by federal tax authorities for the year 2005 and thereafter. The Company's policy is to record interest and penalties on uncertain tax provisions as income tax expense. As of June 30, 2009, the Company has no accrued interest or penalties related to uncertain tax positions.

Stock-Based Compensation

The Company accounts for share-based payments pursuant to SFAS No. 123 (revised 2004), "Share-Based Payment" ("SFAS No. 123R"), a revision to SFAS No. 123, "Accounting for Stock-Based Compensation". SFAS No. 123R requires that the Company measure the cost of employee services received in exchange for equity awards based on the grant date fair value of the awards, with the cost to be recognized as compensation expense in the Company's financial statements over the vesting period of the awards.

In December 2007, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 110 ("SAB 110"), which expresses the views of the staff regarding the use of a "simplified" method, as discussed in Staff Accounting Bulletin No. 107, in developing an estimate of expected term of "plain vanilla" share options in accordance with SFAS No. 123R. The staff indicated that it will accept a company's election to use the simplified method, regardless of whether the company has sufficient information to make more refined estimates of expected term. SAB 110 was effective January 1, 2008, and did not have any impact on the Company's consolidated financial statements.

The Company accounts for stock option and warrant grants issued and vesting to non-employees in accordance with EITF No. 96-18, "Accounting for Equity Instruments that are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services", and EITF 00-18, "Accounting Recognition for Certain Transactions involving Equity Instruments Granted to Other Than Employees", whereas the value of the stock compensation is based upon the measurement date as determined 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. In accordance with EITF 96-18, options granted to Scientific Advisory Board committee members and outside consultants are revalued each reporting period to determine the amount to be recorded as an expense in the respective period. As the options vest, they are valued on each vesting date and an adjustment is recorded for the difference between the value already recorded and the then current value on the date of vesting.

Earnings Per Share

The Company computes earnings per share ("EPS") in accordance with SFAS No. 128, "Earnings per Share" and SEC Staff Accounting Bulletin No. 98. SFAS No. 128 requires companies with complex capital structures to present basic and diluted EPS. Basic EPS is measured as the income (loss) available to common shareholders 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., warrants and 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 are the same for all periods presented because all warrants and stock options outstanding are anti-dilutive. The 19,021,786 shares of common stock issued to the founder of Lixte in conjunction with the closing of the reverse merger transaction on June 30, 2006 have been presented as outstanding for all periods presented.

At June 30, 2009 and 2008, 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.

	June 30,	
	2009	2008
Warrants	2,307,426	546,626
Stock options	2,540,000	2,290,000
Total	4,847,426	2,836,626

Equipment

Equipment is recorded at cost. Depreciation expense is provided on a straight-line basis using estimated useful lives of 3 years. Maintenance and repairs are charged to expense as incurred. When assets are retired or otherwise disposed of, the property accounts are relieved of costs and accumulated depreciation and any resulting gain or loss is credited or charged to operations.

Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, prepaid expenses, accounts payable, accrued expenses and due to stockholder approximate their respective fair values due to the short-term nature of these items.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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. Actual results could differ from those estimates.

Recently Adopted Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards No. 157, "Fair Value Measurements" ("SFAS No. 157"), which establishes a framework for measuring fair value in accordance with generally accepted accounting principles, clarifies the definition of fair value within that framework and expands disclosures about fair value measurements. SFAS No. 157 applies whenever other standards require (or permit) assets or liabilities to be measured at fair value, except for the measurement of share-based payments. The Company adopted SFAS No. 157 on January 1, 2008. However, since the issuance of SFAS No. 157, the FASB has issued several FASB Staff Positions (FSPs) to clarify the application of SFAS No. 157. In February 2008, the FASB released FSP No. 157-2, "Effective Date of FASB Statement No. 157", which delayed the effective date of SFAS No. 157 for all nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). In October 2008, the FASB issued FSP No. 157-3, "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active", which clarifies the application of SFAS No. 157 in a market that is not active and provides guidance in key considerations in determining the fair value of a financial asset when the market for that financial asset is not active. FSPs apply to financial assets within the scope of accounting pronouncements that require or permit fair value measurements in accordance with SFAS No. 157. In April 2009, the FASB issued FSP No. 157-4, "Determining the Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly", which provides additional guidance for estimating fair value in accordance with SFAS No. 157, when the volume and level of activity for the asset or liability have significantly decreased. FSP No. 157-4 also provides guidance on identifying circumstances that indicate a transaction is not orderly. The Company adopted FSP No. 157-4 on June 30, 2009. The adoption of SFAS No. 157 and the related FSPs did not have any impact on the Company's financial statement presentation or disclosures.

In February 2007, the FASB issued Statement of Financial Accounting Standards No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities" ("SFAS No. 159"), which provides companies with an option to report selected financial assets and liabilities at fair value. SFAS No. 159's objective is to reduce both complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. Generally accepted accounting principles have required different measurement attributes for different assets and liabilities that can create artificial volatility in earnings. SFAS No. 159 helps to mitigate this type of accounting-induced volatility by enabling companies to report related assets and liabilities at fair value, which would likely reduce the need for companies to comply with detailed rules for hedge accounting. SFAS No. 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. SFAS No. 159 requires companies to provide additional information that will help investors and other users of financial statements to more easily understand the effect of the Company's choice to use fair value on its earnings. SFAS No. 159 also requires companies to display the fair value of those assets and liabilities for which the Company has chosen to use fair value on the face of the balance sheet. SFAS No. 159 does not eliminate disclosure requirements included in other accounting standards, including requirements for disclosures about fair value measurements included in SFAS No. 157 and SFAS No. 107. The Company adopted SFAS No. 159 on January 1, 2008. The adoption of SFAS No. 159 did not have any impact on the Company's consolidated financial statement presentation or disclosures.

In December 2007, the FASB issued Statement of Financial Accounting Standards No. 141(R), "Business Combinations" ("SFAS No. 141(R)"), which requires an acquirer to recognize in its financial statements as of the acquisition date (i) the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquiree, measured at their fair values on the acquisition date, and (ii) goodwill as the excess of the consideration transferred plus the fair value of any noncontrolling interest in the acquiree at the acquisition date over the fair values of the identifiable net assets acquired. Acquisition-related costs, which are the costs an acquirer incurs to effect a business combination, will be accounted for as expenses in the periods in which the costs are incurred and the services are received, except that costs to issue debt or equity securities will be recognized in accordance with other applicable GAAP. SFAS No. 141(R) makes significant amendments to other Statement of Financial Accounting Standards and other authoritative guidance to provide additional guidance or to conform the guidance in that literature to that provided in SFAS No. 141(R). SFAS No. 141(R) also provides guidance as to what information is to be disclosed to enable users of financial statements to evaluate the nature and financial effects of a business combination. SFAS No. 141(R) is effective for financial statements issued for fiscal years beginning on or after December 15, 2008. The Company adopted SFAS No. 141(R) on January 1, 2009. The adoption of SFAS No. 141(R) will affect how the Company accounts for a business combination in the future.

In December 2007, the FASB issued Statement of Financial Accounting Standards No. 160, "Noncontrolling Interests in Consolidated Financial Statements — an amendment of ARB No. 51" ("SFAS No. 160"), which requires that ownership interests in subsidiaries held by parties other than the parent, and the amount of consolidated net income, be clearly identified, labeled and presented in the consolidated financial statements. SFAS No. 160 also requires that once a subsidiary is deconsolidated, any retained noncontrolling equity investment in the former subsidiary be initially measured at fair value. Sufficient disclosures are required to clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. SFAS No. 160 amends FASB No. 128 to provide that the calculation of earnings per share amounts in the consolidated financial statements will continue to be based on the amounts attributable to the parent. SFAS No. 160 is effective for financial statements issued for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008, and requires retroactive adoption of the presentation and disclosure requirements for existing minority interests. All other requirements are applied prospectively. The Company adopted SFAS No. 160 on January 1, 2009. The adoption of SFAS No. 160 did not have any impact on the Company's consolidated financial statement presentation or disclosures.

In March 2008, the FASB issued Statement of Financial Accounting Standards No. 161, "Disclosures about Derivative Instruments and Hedging Activities — an amendment of FASB Statement No. 133" ("SFAS No. 161"). SFAS No. 161 amends and expands the disclosure requirements of SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS No. 133"). The objective of SFAS No. 161 is to provide users of financial statements with an enhanced understanding of how and why an entity uses derivative instruments, how derivative instruments and related hedged items are accounted for under SFAS No. 133 and its related interpretations, and how derivative instruments and related hedged items affect an entity's financial position, financial performance, and cash flows. SFAS No. 161 requires qualitative disclosures about objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of and gains and losses on derivative instruments, and disclosures about credit-risk-related contingent features in derivative agreements. SFAS No. 161 applies to all derivative financial instruments, including bifurcated derivative instruments (and nonderivative instruments that are designed and qualify as hedging instruments pursuant to paragraphs 37 and 42 of SFAS No. 133) and related hedged items accounted for under SFAS No. 133 and its related interpretations. SFAS No. 161 also amends certain provisions of SFAS No. 133. SFAS No. 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. SFAS No. 161 encourages, but does not require, comparative disclosures for earlier periods at initial adoption. The Company adopted SFAS No. 161 on January 1, 2009. The adoption of SFAS No. 161 did not have any impact on the Company's consolidated financial statement presentation or disclosures.

In May 2009, the FASB issued SFAS No. 165, "Subsequent Events" ("SFAS No. 165"). SFAS No. 165 establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued. SFAS No. 165 also sets forth the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. SFAS No. 165 is effective for interim or annual financial periods ending after June 15, 2009, and shall be applied prospectively. The Company adopted SFAS No. 165 on June 30, 2009. Accordingly, subsequent events have been evaluated through August 10, 2009.

In June 2008, the FASB ratified Emerging Issues Task Force ("EITF") Issue No. 07-05, "Determining Whether an Instrument (or Embedded Feature) is Indexed to an Entity's Own Stock" ("EITF 07-05"). EITF 07-05 mandates a two-step process for evaluating whether an equity-linked financial instrument or embedded feature is indexed to the entity's own stock. Warrants that a company issues that contain a strike price adjustment feature, upon the adoption of EITF 07-05, results in the instruments no longer being considered indexed to the company's own stock. Accordingly, adoption of EITF 07-05 will change the current classification (from equity to liability) and the related accounting for such warrants outstanding at that date. EITF 07-05 is effective for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. The Company adopted EITF 07-05 on January 1, 2009. The adoption of EITF 07-05 did not have any impact on the Company's consolidated financial statement presentation or disclosures.

In April 2009, the FASB issued FSP 107-1, "Interim Disclosures about Fair Value of Financial Instruments", which requires disclosures about fair value of financial instruments for interim reporting periods of publicly traded companies as well as in annual financial statements. FSP 107-1 also amends APB Opinion No. 28, "Interim Financial Reporting", to require those disclosures in summarized financial information at interim reporting. FSP 107-1 is effective for interim reporting periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. The Company adopted FSP 107-1 on June 30, 2009. The adoption of FSP 107-1 did not have any impact on the Company's consolidated financial statement presentation or disclosures.

Recently Issued Accounting Pronouncements

In June 2009, the FASB issued SFAS No. 168, "The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles – a replacement of FASB Statement No. 162" ("SFAS No. 168"). SFAS No.168 establishes the "FASB Accounting Standards Codification" ("Codification"), which will become the source of authoritative generally accepted accounting principles ("GAAP") to be recognized by the FASB and to be applied by nongovernmental entities. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. The Codification will supersede all then-existing non-SEC accounting and reporting standards. All other non-SEC accounting literature which is not grandfathered or not included in the Codification will no longer be authoritative. Once the Codification is in effect, all of its content will carry the same level of authority. SFAS No. 168 is effective for financial statements issued for interim or annual reporting periods ending after September 15, 2009. The Company expects to adopt SFAS No. 168 on September 30, 2009.

Management does not believe that any other recently issued, but not yet effective, accounting standards or pronouncements, if currently adopted, would have a material effect on the Company's consolidated financial statements.

4. Share Exchange Agreement and Private Placement

Share Exchange Agreement

On June 30, 2006, pursuant to a Share Exchange Agreement dated as of June 8, 2006 (the "Share Exchange Agreement") by and among Holdings, Dr. John S. Kovach ("Seller") and Lixte, Holdings issued 19,021,786 shares of its common stock in exchange for all of the issued and outstanding shares of Lixte (the "Exchange"). Previously, on October 3, 2005, Lixte had issued 1,500 shares of its no par value common stock to its founder for $1,500, which constituted all of the issued and outstanding shares of Lixte prior to the Exchange. As a result of the Exchange, Lixte became a wholly-owned subsidiary of Holdings.

Pursuant to the Exchange, Holdings issued to the Seller 19,021,786 shares of its common stock. Holdings had a total of 25,000,832 shares of common stock issued and outstanding after giving effect to the Exchange and the 1,973,869 shares of common stock issued in the initial closing of the private placement.

As a result of the Exchange and the shares of common stock issued in the initial closing of the private placement, on June 30, 2006, the stockholders of the Company immediately prior to the Exchange owned 4,005,177 shares of common stock, equivalent to approximately 16% of the issued and outstanding shares of the Company's common stock, and the former stockholder of Lixte acquired control of the Company.

The Share Exchange Agreement was determined through arms-length negotiations between Holdings, the Seller and Lixte. In connection with the Exchange, the Company paid WestPark Capital, Inc. an aggregate cash fee of $50,000.

Private Placements

On June 30, 2006, concurrently with the closing of the Exchange, the Company sold an aggregate of 1,973,869 shares of its common stock to accredited investors in an initial closing of a private placement at a per share price of $0.333, resulting in aggregate gross proceeds to the Company of $657,299. The Company paid to WestPark Capital, Inc., as placement agent, a commission of 10% and a non-accountable fee of 4% of the gross proceeds of the private placement and issued five-year warrants to purchase common stock equal to (a) 10% of the number of shares sold in the private placement exercisable at $0.333 per share and (b) an additional 2% of the number of shares sold in the private placement also exercisable at $0.333 per share. A total of 236,864 warrants were issued. Net cash proceeds to the Company, after the deduction of all private placement offering costs and expenses, were $522,939.

On July 27, 2006, the Company sold an aggregate of 1,581,351 shares of its common stock to accredited investors in a second closing of the private placement at a per share price of $0.333 resulting in aggregate gross proceeds to the Company of $526,590. The Company paid to WestPark Capital, Inc., as placement agent, a commission of 10% and a non-accountable fee of 4% of the gross proceeds of the private placement and issued five-year warrants to purchase common stock equal to (a) 10% of the number of shares sold in the private placement exercisable at $0.333 per share and (b) an additional 2% of the number of shares sold in the private placement also exercisable at $0.333 per share. A total of 189,762 warrants were issued. Net cash proceeds to the Company were $446,433.

In conjunction with the private placement of common stock, the Company issued a total of 426,626 five-year warrants to WestPark Capital, Inc. exercisable at the per share price of the common stock sold in the private placement ($0.333 per share). The warrants issued to WestPark Capital, Inc. do not contain any price anti-dilution provisions. However, such warrants contain cashless exercise provisions and demand registration rights, but the warrant holder has agreed to waive any claims to monetary damages or financial penalties for any failure by the Company to comply with such registration requirements. Based on the foregoing, the warrants were accounted for as equity and were not accounted for separately from the common stock and additional paid-in capital accounts. The warrants had no accounting impact on the Company's consolidated financial statements.

As part of the Company's private placement of its securities completed on July 27, 2006, the Company entered into a registration rights agreement with the purchasers, whereby the Company agreed to register the shares of common stock sold in the private placement, and to maintain the effectiveness of such registration statement, subject to certain conditions. The agreement required the Company to file a registration statement within 45 days of the closing of the private placement and to have the registration statement declared effective within 120 days of the closing of the private placement. On September 8, 2006, the Company filed a registration statement on Form SB-2 to register 3,555,220 shares of the common stock sold in the private placement. Since the registration statement was not declared effective by the Securities and Exchange Commission within 120 days of the closing of the private placement, the Company was required to pay each investor prorated liquidated damages equal to 1.0% of the amount raised per month, payable monthly in cash.

In accordance with EITF 00-19-2, "Accounting for Registration Payment Arrangements", on the date of the closing of the private placement, the Company believed it would meet the deadlines under the registration rights agreement with respect to filing a registration statement and having it declared effective by the Securities and Exchange Commission. As a result, the Company did not record any liabilities associated with the registration rights agreement at June 30, 2006. At December 31, 2006, the Company determined that the registration statement covering the shares sold in the private placement would not be declared effective within the requisite time frame and therefore accrued six months liquidated damages under the registration rights agreement aggregating approximately $74,000, which has been presented as a current liability at December 31, 2008 and 2007. The Company's registration statement on Form SB-2 was declared effective by the Securities and Exchange Commission on May 14, 2007. At June 30, 2009 the registration penalty to the investors had not been paid.

On December 12, 2007, the Company sold an aggregate of 999,995 shares of its common stock to accredited investors in a second private placement at a per share price of $0.65, resulting in aggregate gross proceeds to the Company of $650,000. The Company paid to WestPark Capital, Inc., as placement agent, a commission of 10% and a non-accountable fee of 4% of the gross proceeds of the private placement and issued five-year warrants to purchase common stock equal to (a) 10% of the number of shares sold in the private placement exercisable at $0.65 per share and (b) an additional 2% of the number of shares sold in the private placement also exercisable at $0.65 per share. Net cash proceeds to the Company were $531,320.

In conjunction with the second private placement of common stock, the Company issued a total of 120,000 five-year warrants to WestPark Capital, Inc. exercisable at the per share price of the common stock sold in the private placement ($0.65 per share). The warrants issued to WestPark Capital, Inc. do not contain any price anti-dilution provisions. However, such warrants contain cashless exercise provisions and demand registration rights, but the warrant holder has agreed to waive any claims to monetary damages or financial penalties for any failure by the Company to comply with such registration requirements. Based on the foregoing, the warrants were accounted for as equity and were not accounted for separately from the common stock and additional paid-in capital accounts. The warrants had no accounting impact on the Company's consolidated financial statements.

As part of the Company's second private placement of its securities completed on December 12, 2007, the Company entered into a registration rights agreement with the purchasers, whereby the Company agreed to register the shares of common stock sold in the second private placement at its sole cost and expense. The registration rights agreement terminates at such time as the common shares may be sold in market transactions without regard to any volume limitations. The registration rights agreement requires the Company to file a registration statement within 75 days of receipt of written demand from holders who represent at least 50% of the common shares issued pursuant to the second private placement, provided that no demand shall be made for less than 500,000 shares, and to use its best efforts to cause such registration statement to become and remain effective for the requisite period. The registration rights agreement also provides for unlimited piggyback registration rights. The registration rights agreement does not provide for any penalties in the event that the Company is unable to comply with its terms.

On February 10, 2009, the Company sold an aggregate of 658,000 common stock units to accredited investors in a first closing of a third private placement at a per unit price of $0.50, resulting in aggregate gross proceeds to the Company of $329,000. Net cash proceeds to the Company were $269,790.

On March 2, 2009, the Company sold an aggregate of 262,000 common stock units to accredited investors in a second closing of the third private placement at a per unit price of $0.50, resulting in aggregate gross proceeds to the Company of $131,000. Net cash proceeds to the Company were $112,460.

On April 6, 2009, the Company sold an aggregate of 500,000 common stock units to accredited investors in a third closing of the third private placement at a per unit price of $0.50, resulting in aggregate gross proceeds to the Company of $250,000. Net cash proceeds to the Company were $214,800.

Each unit sold in the third private placement consists of one share of the Company's common stock and a five-year warrant to purchase an additional share of the Company's common stock on a cashless exercise basis at an exercise price of $0.50 per common share. The Company paid to WestPark Capital, Inc., as placement agent, a commission of 10% and a non-accountable fee of 4% of the gross proceeds of the third private placement and issued five-year warrants to purchase common stock equal to (a) 10% of the number of shares sold in the third private placement exercisable at $0.50 per share and 10% of the number of shares issuable upon exercise of warrants issued in the third private placement exercisable at $0.50 per share; and (b) an additional 2% of the number of shares sold in the third private placement also exercisable at $0.50 per share and 2% of the number of shares issuable upon exercise of the warrants issued in the third private placement exercisable at $0.50 per share.

In conjunction with the closings of the third private placement of common stock units during the six months ended June 30, 2009, the Company issued to investors a total of 1,420,000 shares of common stock and 1,420,000 warrants to acquire common stock. Additionally, the Company issued a total of 340,800 five-year warrants to WestPark Capital, Inc., which are exercisable at the per unit price of the common stock units sold in the third private placement ($0.50 per unit). Included in the 340,800 warrants issued to WestPark Capital, Inc. are 170,400 warrants which are only exercisable with respect to common shares that are acquired by investors upon their exercise of the warrants acquired as part of the units sold in the third private placement. The warrants issued to WestPark Capital, Inc. do not contain any price anti-dilution provisions. However, such warrants contain cashless exercise provisions and demand registration rights, but the warrant holder has agreed to waive any claims to monetary damages or financial penalties for any failure by the Company to comply with such registration requirements. Based on the foregoing, the warrants were accounted for as equity and were not accounted for separately from the common stock and additional paid-in capital accounts. The warrants had no accounting impact on the Company's consolidated financial statements.

At the request of the holders, the Company has agreed to include any shares sold in the third private placement and any shares issuable upon exercise of the related warrants to be included in any registration statement filed with the Securities and Exchange Commission permitting the resale of such shares, subject to customary cutbacks, at the Company's sole cost and expense.

5. Related Party Transactions

Prior to June 30, 2006, the Company's founding stockholder and Chief Executive Officer, Dr. John Kovach, had periodically made advances to the Company to meet operating expenses. Such advances are non-interest-bearing and are due on demand. At June 30, 2009 and 2008, stockholder advances totaled $92,717.

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

Dr. Kovach did not receive any compensation from the Company during the six months ended June 30, 2009 and 2008, and for the period from August 9, 2005 (inception) through June 30, 2009 (cumulative), in view of the Company's development stage status and limited resources. Any future compensation arrangements will be subject to the approval of the Board of Directors.

Dr. Kovach is involved in other business activities and may, in the future, become involved in other business opportunities that become available. Accordingly, he may face a conflict in selecting between the Company and his other business interests. The Company has not yet formulated a policy for the resolution of such potential conflicts.

6. Note Payable to Consultant

On October 3, 2008, the Company borrowed $100,000 from Gil Schwartzberg, a consultant to the Company (see Note 8), pursuant to an unsecured demand promissory note with interest at 5% per annum, to fund the Company's short-term working capital requirements. The note, including accrued interest of $834, was repaid on February 7, 2009. An additional interest payment of $851 was made on April 27, 2009.

7. Common Stock and Preferred Stock

The Company's Certificate of Incorporation provides for authorized capital of 110,000,000 shares, of which 100,000,000 shares consist of common stock with a par value of $0.0001 per share and 10,000,000 shares consist of preferred stock with a par value of $0.0001 per share.

The Company is authorized to issue 10,000,000 shares of preferred stock with such designations, voting and other rights and preferences as may be determined from time to time by the Board of Directors.

8. Stock Options and Warrants

On June 30, 2006, effective with the closing of the Exchange, the Company granted to Dr. Philip Palmedo, an outside director of the Company, stock options to purchase an aggregate of 200,000 shares of common stock, exercisable for a period of five years at $0.333 per share, with one-third of the options (66,666 shares) vesting immediately upon joining the Board and one-third vesting annually on each of June 30, 2007 and 2008. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $62,000 ($0.31 per share), of which $20,666 was charged to operations on June 30, 2006, and the remaining $41,334 was charged to operations ratably from July 1, 2006 through June 30, 2008. During the three month and six months ended June 30, 2008, the Company recorded a charge to operations of $5,165 and $10,332, respectively, with respect to these options.

On June 30, 2006, effective with the closing of the Exchange, the Company also granted to Dr. Palmedo additional stock options to purchase 190,000 shares of common stock exercisable for a period of five years at $0.333 per share for services rendered in developing the business plan for Lixte, all of which were fully vested upon issuance. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $58,900 ($0.31 per share), and was charged to operations at June 30, 2006.

On June 30, 2006, effective with the closing of the Exchange, the Company granted to certain members of its Scientific Advisory Committee stock options to purchase an aggregate of 100,000 shares of common stock exercisable for a period of five years at $0.333 per share, with one-half of the options vesting annually on each of June 30, 2007 and June 30, 2008. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was charged to operations ratably from July 1, 2006 through June 30, 2008. During the three months and six months ended June 30, 2008, the Company recorded a credit to operations of $17,930 and $3,336, respectively, with respect to these options.

On June 30, 2006, the fair value of the aforementioned stock options was initially calculated using the following Black-Scholes input variables: stock price - $0.333; exercise price - $0.333; expected life - 5 to 7 years; expected volatility - 150%; expected dividend yield - 0%; risk-free interest rate - 5%. On June 30, 2007, the Black-Scholes input variables utilized to determine the fair value of the aforementioned stock options were stock price - $0.333; exercise price - $0.333; expected life - 4 to 6 years; expected volatility - 150%; expected dividend yield - 0%; risk-free interest rate - 4.5%. On June 30, 2008, the fair value of the aforementioned stock options was calculated using the following Black-Scholes input variables: stock price - $0.30; exercise price - - $0.333; expected life - 3 to 5 years; expected volatility - 154.5%; expected dividend yield - 0%; risk-free interest rate - 3.28%.

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 common 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 condition, as determined by the Company's Board of Directors.

On September 12, 2007, in conjunction with his appointment as a director of the Company, the Company granted to Dr. Stephen Carter 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 $0.333 per share, with one-half (100,000 shares) vesting annually on each of September 12, 2008 and 2009. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $204,000 ($1.02 per share), and is being charged to operations ratably from September 12, 2007 through September 12, 2009. During the three months ended June 30, 2009 and 2008, the Company recorded a charge to operations of $25,430 and $25,361, respectively, with respect to these options. During the six months ended June 30, 2009 and 2008, the Company recorded a charge to operations of $50,581 and $50,722, respectively, with respect to these options.

On September 12, 2007, the Company entered into a consulting agreement with Gil Schwartzberg, pursuant to which the Company granted to Mr. Schwartzberg stock options to purchase an aggregate of 1,000,000 shares of common stock, exercisable for a period of four years from the vesting date at $1.00 per share, with one-half of the options (500,000 shares) vesting immediately and one-half (500,000 shares) vesting on September 12, 2008. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was initially determined to be $945,000 ($0.945 per share), of which $465,000 was attributed to the fully-vested options and was thus charged to operations on September 12, 2007. The remaining portion of the fair value of the options was charged to operations ratably from September 12, 2007 through September 12, 2008. On June 30, 2008, the fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $120,000 ($0.24 per share). During the three months and six months ended June 30, 2008, the Company recorded a charge (credit) to operations of $(112,951) and $7,076, respectively, with respect to these options (see Note 6).

On September 12, 2007, the Company entered into a consulting agreement with Francis Johnson, a co-owner of Chem-Master International, Inc., and granted to Professor Johnson stock options to purchase an aggregate of 300,000 shares of common stock, exercisable for a period of four years from the vesting date at $0.333 per share, with one-third (100,000 shares) vesting annually on each of September 12, 2008, 2009 and 2010. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was initially determined to be $300,000 ($1.00 per share), and is being charged to operations ratably from September 12, 2007 through September 12, 2010. On June 30, 2009 and 2008, the fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $225,000 ($0.75 per share) and $81,000 ($0.27 per share), respectively, which resulted in a charge (credit) to operations of $29,658 and $(25,139) during the three months ended June 30, 2009 and 2008, respectively, and $42,617 and $1,705 during the six months ended June 30, 2009 and 2008, respectively, .

On September 12, 2007, the fair value of the aforementioned stock options was initially calculated using the following Black-Scholes input variables: stock price - $1.05; exercise price - $0.333 to $1.00; expected life - 4 to 6 years; expected volatility - 150%; expected dividend yield - 0%; risk-free interest rate - 5%. On June 30, 2008, the fair value of the aforementioned stock options was calculated (for stock options revalued pursuant to EITF 98-16) using the following Black-Scholes input variables: stock price - $0.30; exercise price - $0.333 to $1.00; expected life – 4.20 years; expected volatility – 154.5%; expected dividend yield - 0%; risk-free interest rate - 3.28%. On June 30, 2009, the fair value of the aforementioned stock options was calculated (for stock options revalued pursuant to EITF 98-16) using the following Black-Scholes input variables: stock price - $0.75; exercise price - $0.333; expected life - 4.23 years; expected volatility – 413.7%; expected dividend yield - 0%; risk-free interest rate – 2.53%. As the Company's common stock commenced trading on September 24, 2007, the Company was able to utilize such trading data to generate revised volatility factors at June 30, 2009 and 2008.

On October 7, 2008, the Company appointed Dr. Mel Sorensen to its Board of Directors. Dr. Sorensen is a medical oncologist with extensive experience in cancer drug development, first at the National Cancer Institute, then at Bayer and GlaxoSmithKline, before becoming President and CEO of a new cancer therapeutics company, Ascenta Therapeutics, in 2004. Dr. Sorensen is being paid an annual consulting fee of $40,000, payable in quarterly installments over a one year period commencing October 7, 2008, to assist the Company in identifying a strategic partner. Dr. Sorensen was also granted a stock option to purchase 200,000 shares of the Company's common stock, exercisable at $0.50 per share for a period of five years from each tranche's vesting date. The option vests as to 25,000 shares on January 1, 2009, and a further 25,000 shares on the first day of each subsequent calendar quarter until all of the shares are vested. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $100,000 ($0.50 per share), and is being charged to operations ratably from October 7, 2008 through October 7, 2010. During the three months and six months ended June 30, 2008, the Company recorded a charge to operations of $12,486 and $24, 829, respectively, with respect to these options.

On October 7, 2008, the fair value of the aforementioned stock options was calculated using the following Black-Scholes input variables: stock price - $0.50; exercise price - $0.50; expected life - 5 years; expected volatility – 275.7%; expected dividend yield - 0%; risk-free interest rate – 2.48%.

In August 2008, a member of the Scientific Advisory Committee resigned from his position and waived his right to his vested stock option to purchase 50,000 shares of common stock.

Additional information with respect to common stock warrants and stock options issued is provided at Notes 4, 9 and 10. Warrants to purchase common stock that were issued in conjunction with the Company's private placements in 2006, 2007, 2008 and 2009 are included in the tables presented below.

If and when the aforementioned stock options and warrants are exercised, the Company expects to satisfy such stock obligations through the issuance of authorized but unissued shares of common stock.

A summary of stock option and warrant activity for the years ended December 31, 2007 and 2008, and the six months ended June 30, 2009 is presented below.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in Years)
Options and warrants outstanding at December 31, 2006	916,626	$ 0.333	4.51
Granted	1,720,000	0.743	4.35
Exercised	—	—	—
Cancelled	—	—	—
Options and warrants outstanding at December 31, 2007	2,636,626	0.600	4.32
Granted	500,000	0.927	4.71
Exercised	—	—	—
Cancelled	(50,000)	0.333	2.75
Options and warrants outstanding at December 31, 2008	3,086,626	$ 0.658	3.55
Granted	1,760,800	0.500	4.68
Exercised	—	—	—
Cancelled	—	—	—
Options and warrants outstanding at June 30, 2009	4,847,426	$ 0.600	3.65
Options and warrants exercisable at December 31, 2008	2,286,626	$ 0.641	3.06
Options and warrants exercisable at June 30, 2009	4,027,026	$ 0.576	3.48

The intrinsic value of exercisable but unexercised in-the-money stock options and warrants at June 30, 2009 was $950,283, based on a fair market value of $0.75 per share on June 30, 2009. The intrinsic value of exercisable but unexercised in-the-money stock options and warrants at December 31, 2008 was $276,490, based on a fair market value of $0.57 per share on December 31, 2008.

Total deferred compensation expense for the outstanding value of unvested stock options was approximately $253,000 at June 30, 2009, which will be recognized subsequent to June 30, 2009 over a weighted-average period of 15.1 months. Total deferred compensation expense for the outstanding value of unvested stock options was approximately $351,000 at December 31, 2008, which will be recognized subsequent to December 31, 2008 over a weighted-average period of 18.3 months.

Information regarding stock options and warrants outstanding and exercisable is summarized as follows at June 30, 2009 and December 31, 2008:

June 30, 2009:	Exercise Prices	Warrants and Options Outstanding (Shares)	Warrants and Options Exercisable (Shares)
	$ 0.333	1,566,626	1,266,626
	$ 0.500	1,960,800	1,640,400
	$ 0.650	120,000	120,000
	$ 1.000	1,000,000	1,000,000
	$ 1.650	200,000	—
		4,847,426	4,027,026

December 31, 2008:	Exercise Prices	Warrants and Options Outstanding (Shares)	Warrants and Options Exercisable (Shares)
	$ 0.333	1,566,626	1,166,626
	$ 0.500	200,000	—
	$ 0.650	120,000	120,000
	$ 1.000	1,000,000	1,000,000
	$ 1.650	200,000	—
		3,086,626	2,286,626

Outstanding options and warrants to acquire 650,000 shares and 800,000 shares of the Company's common stock had not vested at June 30, 2009 and December 31, 2008, respectively. At June 30, 2009, warrants and options exercisable do not include warrants to acquire 170,400 shares of common stock that are contingent upon the exercise of warrants contained in units sold as part of the third private placement (see Note 4).

9. Commitments and Contingencies

Effective March 22, 2006, the Company entered into a CRADA, as amended, with the NINDS of the NIH. The CRADA was for a term of 42 months from the effective date and could be unilaterally terminated by either party by providing written notice within sixty days. The CRADA provided for the collaboration between the parties in the identification and evaluation of agents that target the Nuclear Receptor CoRepressor (N-CoR) pathway for glioma cell differentiation. The CRADA also provided that NINDS and the Company would conduct research to determine if expression of N-CoR correlates with prognosis in glioma patients. Pursuant to the CRADA, the Company agreed to provide funds under the CRADA in the amount of $200,000 per year to fund two technical assistants for the technical, statistical and administrative support for the research activities, as well as to pay for supplies and travel expenses. The first $200,000 was due within 180 days of the effective date and was paid in full on July 6, 2006. The second $200,000 was paid in full on June 29, 2007. In June 2008, the CRADA was extended to September 30, 2009, with no additional funding required for the period between July 1, 2008 and September 30, 2008. For the period from October 1, 2008 through September 30, 2009, the Company agreed to provide additional funding under the CRADA of $200,000, to be paid in four quarterly installments of $50,000 each commencing on October 1, 2008. The first and second quarterly installments of $50,000 were paid on September 29, 2008 and March 5, 2009, respectively. During August 2009, the Company entered into an amendment to the CRADA to extend its term from September 30, 2009 through September 30, 2011. Pursuant to such amendment, the Company has agreed to aggregate payments of $100,000 in two installments of $50,000 payable on October 1, 2010 and January 5, 2011, inclusive of any prior unpaid commitments.

On January 5, 2007, the Company entered into a Services Agreement with The Free State of Bavaria (Germany) represented by the University of Regensburg (the "University") pursuant to which the Company retained the University to provide to it certain samples of primary cancer tissue and related biological fluids to be obtained from patients afflicted with specified types of cancer. The University also agreed to provide certain information relating to such patients. The Company agreed to pay the University 72,000 Euros in two equal installments. The first installment of 36,000 Euros ($48,902) was paid on March 7, 2007. On January 12, 2008, the Company terminated the Services Agreement in accordance with its terms, as a result of which payment of the second installment of 36,000 Euros was cancelled. The University agreed to deliver 50% of the aforementioned samples under the terminated Services Agreement.

On February 5, 2007, the Company entered into a two-year agreement (the "Chem-Master Agreement") with Chem-Master International, Inc. ("Chem-Master"), a company co-owned by Francis Johnson, a consultant to the Company, pursuant to which the Company engaged Chem-Master to synthesize a compound designated as "LB-1", and any other compound synthesized by Chem-Master pursuant to the Company's request, which have potential use in treating a disease, including, without limitation, cancers such as glioblastomas. Pursuant to the Chem-Master Agreement, the Company agreed to reimburse Chem-Master for the cost of materials, labor, and expenses for other items used in the synthesis process, and also agreed to grant Chem-Master a five-year option to purchase 100,000 shares of the Company's common stock at an exercise price of $0.333 per share. The fair value of this option, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $31,000 ($0.31 per share) using the following Black-Scholes input variables: stock price on date of grant - $0.333; exercise price - $0.333; expected life - 5 years; expected volatility - 150%; expected dividend yield - 0%; risk-free interest rate - 4.5%. The $31,000 fair value was charged to operations as research and development costs during the year ended December 31, 2007, since the option was fully vested and non-forfeitable on the date of issuance. The Company has the right to terminate the Chem-Master Agreement at any time during its term upon sixty days prior written notice. On February 5, 2009, provided that the Chem-Master Agreement had not been terminated prior to such date, the Company agreed to grant Chem-Master a second five-year option to purchase an additional 100,000 shares of the Company's common stock at an exercise price of $0.333 per share. As of September 30, 2008, the Company determined that it was likely that this option would be issued. Accordingly, the fair value of the option has been reflected as a charge to operations for the period from October 1, 2008 through February 5, 2009. On February 5, 2009, the fair value of this option, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $60,000 ($0.60 per share), which resulted in a charge to operations of $19,143 during the six months ended June 30, 2009. The Company granted the second five-year option on February 5, 2009.

On September 30, 2008, the fair value of the aforementioned stock option was initially calculated using the following Black-Scholes input variables: stock price - $0.50; exercise price - $0.333; expected life – 5.35 years; expected volatility – 275.7%; expected dividend yield - 0%; risk-free interest rate – 2.48%. On February 5, 2009, the fair value of the aforementioned stock option was calculated (for the stock option revalued pursuant to EITF 98-16) using the following Black-Scholes input variables: stock price - $0.60; exercise price - $0.333; expected life – 5 years; expected volatility – 414.1%; expected dividend yield - 0%; risk-free interest rate – 1.89%.

On January 29, 2008, the Chem-Master Agreement was amended to extend its term to February 15, 2014, and to expressly provide for the design and synthesis of a new series of compounds designated as "LB-3". Pursuant to the amendment, the Company issued 100,000 shares of its restricted common stock, valued at $75,000, and granted an option to purchase 200,000 shares of common stock. The option is exercisable for a period of two years from the vesting date at $1.65 per share, with one-half (100,000 shares) vesting on August 1, 2009, and one-half (100,000 shares) vesting on February 1, 2011. The fair value of this option, as calculated pursuant to the Black-Scholes option-pricing model, was initially determined to be $96,000 ($0.48 per share) using the following Black-Scholes input variables: stock price on date of grant - $0.75; exercise price - $1.65; expected life - 5 years; expected volatility - 120.1%; expected dividend yield - 0%; risk-free interest rate - 3.09%.

The fair value of the restricted common stock issued was charged to operations as research and development costs on January 29, 2008. On June 30, 2009, the fair value of the aforementioned stock options was determined to be $150,000 ($0.75 per share) calculated using the following Black-Scholes input variables: stock price - $0.75; exercise price - $1.65; expected life - 3.59 years; expected volatility – 413.7%; expected dividend yield - 0%; risk-free interest rate - 2.53%, which resulted in a charge to operations of $28,079 and $35,839 during the three months and six months ended June 30, 2009, respectively. On June 30, 2008, the fair value of the aforementioned stock options was determined to be $48,000 ($0.24 per share) calculated using the following Black-Scholes input variables: stock price - $0.30; exercise price - $1.65; expected life - 4.59 years; expected volatility – 154.5%; expected dividend yield - 0%; risk-free interest rate - 3.28%, which resulted in a charge (credit) to operations of $(425) and $6,664 during the three months and six months ended June 30, 2008.

Pursuant to the Chem-Master Agreement, the Company reimbursed Chem-Master for the costs of materials, labor, and expenses aggregating $15,500 and $-0- during the three months ended June 30, 2009 and 2008, respectively, and $24,250 and $9,000 during the six months ended June 30, 2009 and 2008, respectively.

On September 12, 2007, the Company entered into two consulting agreements for financial and scientific services. Compensation related to these agreements was primarily in the form of stock options (see Note 8).

On September 20, 2007, the Company entered into a one-year consulting agreement (the "Mirador Agreement") with Mirador Consulting, Inc. ("Mirador"), pursuant to which Mirador was to provide the Company with various financial services. Pursuant to the Mirador Agreement, the Company agreed to pay Mirador $5,000 per month and also agreed to sell Mirador 250,000 shares of the Company's restricted common stock for $250 ($0.001 per share). The fair value of this transaction was determined to be in excess of the purchase price by $262,250 ($1.049 per share), reflecting the difference between the $0.001 purchase price and the $1.05 price per share as quoted on the OTC Bulletin Board on the transaction date, and was charged to operations as stock-based compensation during the year ended December 31, 2007, since the shares were fully vested and non-forfeitable on the date of issuance. The Company made payments under the Mirador Agreement aggregating $10,000 during 2007. The Mirador Agreement was amended in February 2008, pursuant to which Mirador agreed to forgive all accrued but unpaid monthly fees through February 29, 2008, and the Company agreed to pay Mirador a fee of $2,000 per month for the remaining six months of the Mirador Agreement.

In September 2008, the Company engaged an internet-based investor information service to enhance awareness of the Company's progress in developing a portfolio of pharmacological agents at an initial cost of $2,500, plus $500 per month for a period of twelve months.

Effective as of September 19, 2008, the Company entered into an agreement with the NIH providing the Company with an exclusive license for all patents submitted jointly with the NIH under the CRADA. The agreement provided for an initial payment of $25,000 to NIH within 60 days of September 19, 2008, and for a minimum annual royalty of $30,000 on January 1 of each calendar year following the year in which the CRADA is terminated. The agreement also provides for the Company to pay specified royalties based on (i) net sales by the Company and its sub-licensees, (ii) the achievement of certain clinical benchmarks, and (iii) the granting of sublicenses. The Company paid the initial $25,000 obligation on November 10, 2008 and charged the amount to general and administrative costs during the year ended December 31, 2008.

During October 2008, the Company engaged Southern Research Institute, Birmingham, Alabama, to assess one lead compound from each of two classes of its proprietary pharmacological agents for effects on normal neuronal cells and to determine if the compounds protect normal brain cells from injury in several different models of chemical and traumatic brain injury. The goal is to determine if these agents have promise as potentially useful for the prevention, amelioration or delay of progression of neurodegenerative diseases such as Alzheimer's disease and other neurological diseases or impairments resulting from trauma and/or other diverse or unknown origins. The Company agreed to pay a fee not to exceed a total of $50,000 for such services. As of June 30, 2009, payments of $22,500 had been made under this agreement.

10. Subsequent Events

On July 27, 2009, the Company entered into an agreement with Pro-Active Capital Group, LLC ("Pro-Active") to retain Pro-Active on a non-exclusive basis for a period of twelve months to provide consulting advice to the Company to assist the Company in obtaining research coverage, gaining web-site exposure and coverage on financial blogs and web-sites, enhancing the Company's visibility to the institutional, retail brokerage and on-line trading communities, and organizing, or assisting in organizing, investor road-shows and presentations. In exchange for such consulting advice, at the initiation of the agreement the Company has agreed to issue to Pro-Active 150,000 shares of restricted common stock and three-year warrants to purchase an aggregate of 150,000 shares of common stock, exercisable 50,000 at $0.75 per share, 50,000 at $1.00 per share, and 50,000 at $1.25 per share.

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

Overview

On June 30, 2006, Lixte Biotechnology, Inc., a privately held Delaware corporation ("Lixte"), completed a reverse merger transaction with SRKP 7, Inc. ("SRKP"), a non-trading public shell company, whereby Lixte became a wholly owned subsidiary of SRKP. On December 7, 2006, SRKP amended its Certificate of Incorporation to change its name to Lixte Biotechnology Holdings, Inc. ("Holdings"). Unless the context indicates otherwise, Lixte and Holdings are hereinafter referred to as the "Company".

For financial reporting purposes, Lixte was considered the accounting acquirer in the merger and the merger was accounted for as a reverse merger. Accordingly, the historical financial statements presented herein are those of Lixte and do not include the historical financial results of SRKP. The stockholders' equity section of SRKP has been retroactively restated for all periods presented to reflect the accounting effect of the reverse merger transaction. All costs associated with the reverse merger transaction were expensed as incurred.

Lixte was incorporated in Delaware on August 9, 2005 to capitalize on opportunities to develop low cost, specific and sensitive tests for the early detection of cancers to better estimate prognosis, to monitor treatment response, and to reveal targets for development of more effective treatments.

The Company is considered a "development stage company" as defined in Statement of Financial Accounting Standards ("SFAS") No. 7, "Accounting and Reporting by Development Stage Enterprises", as it has not yet commenced any revenue-generating operations, does not have any cash flows from operations, and is dependent on debt and equity funding to finance its operations. The Company has selected December 31 as its fiscal year end.

Going Concern

The Company's 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 is in the development stage and has not generated any revenues from operations to date. The Company has experienced continuing losses since inception and had a stockholders' deficiency at December 31, 2008 and June 30, 2009. As a result, the Company's independent registered public accounting firm, in their report on the Company's 2008 consolidated financial statements, have raised 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 develop additional sources of capital and to ultimately achieve profitable operations. The Company's consolidated financial statements do not include any adjustments that might result from the outcome of these uncertainties.

At June 30, 2009, the Company had not yet commenced any revenue-generating operations. All activity through June 30, 2009 has been related to the Company's formation, capital raising efforts and research and development activities. As such, the Company has yet to generate any cash flows from operations, and is dependent on debt and equity funding from both related and unrelated parties to finance its operations. Prior to June 30, 2006, the Company's cash requirements were funded by advances from the Company's founder.

Because the Company is currently engaged in research at an early stage, it will likely take a significant amount of time to develop any product or intellectual property capable of generating revenues. As such, the Company's business is unlikely to generate any revenue in the next several years and may never do so. Even if the Company is able to generate revenues in the future through licensing its technologies or through product sales, there can be no assurance that the Company will be able to generate a profit.

As previously disclosed, the Company estimates that it will require minimum funding in calendar 2009 of approximately $750,000 in order to fund operations and continuing drug discovery and to attempt to bring two drugs through the pre-clinical evaluation process needed for submission of an Investigational New Drug ("IND") application. Towards that objective, the Company completed a private placement of its securities, which generated net proceeds from three closings in February, March and April 2009 aggregating approximately $597,000. The Company utilized a portion of such net proceeds to repay a $100,000 short-term note in February 2009.

Since the Company did not reach its target of $750,000 in its recent private placement, the Company has modified its 2009 budget to reflect the available operating funds. The Company believes that its current resources are adequate to fund operations at most through the end of 2009 at a level that will allow the continuation of the Company's two drug development programs currently in process, but will not allow proceeding with clinical trials or expansion of its research activities. Depending on the results of the Company's efforts to enter into a strategic partnership with a large- or medium-sized pharmaceutical company that would provide adequate financial resources for the Company to continue its research and development activities, the Company may consider a further private placement later in 2009. The Company is in various preliminary discussions with regard to a potential strategic partnership. In view of the Company's limited cash resources, the failure to accomplish such a strategic partnership or to raise additional capital by the end of 2009 would seriously compromise the Company's ability to continue to conduct operations in 2010.

The amount and timing of future cash requirements will depend on the market's evaluation of the Company's technology and products, if any, and the resources that it devotes to developing and supporting its activities. The Company will need to fund these cash requirements from a combination of additional debt or equity financings, or the sale, licensing or joint venturing of its intellectual properties. Current market conditions present uncertainty as to the Company's ability to secure additional funds, as well as its ability to reach profitability. There can be no assurances that the Company will be able to secure additional financing, or obtain favorable terms on such financing if it is available, or as to the Company's ability to achieve positive earnings and cash flows from operations. Continued negative cash flows and lack of liquidity create significant uncertainty about the Company's ability to fully implement its operating plan, as a result of which the Company may have to reduce the scope of its planned operations. If cash resources are insufficient to satisfy the Company's liquidity requirements, the Company would be required to scale back or discontinue its technology and product development programs, or obtain funds, if available, through strategic alliances that may require the Company to relinquish rights to certain of its technologies products, or to discontinue its operations entirely.

Recently Adopted Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards No. 157, "Fair Value Measurements" ("SFAS No. 157"), which establishes a framework for measuring fair value in accordance with generally accepted accounting principles, clarifies the definition of fair value within that framework and expands disclosures about fair value measurements. SFAS No. 157 applies whenever other standards require (or permit) assets or liabilities to be measured at fair value, except for the measurement of share-based payments. The Company adopted SFAS No. 157 on January 1, 2008. However, since the issuance of SFAS No. 157, the FASB has issued several FASB Staff Positions (FSPs) to clarify the application of SFAS No. 157. In February 2008, the FASB released FSP No. 157-2, "Effective Date of FASB Statement No. 157", which delayed the effective date of SFAS No. 157 for all nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). In October 2008, the FASB issued FSP No. 157-3, "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active", which clarifies the application of SFAS No. 157 in a market that is not active and provides guidance in key considerations in determining the fair value of a financial asset when the market for that financial asset is not active. FSPs apply to financial assets within the scope of accounting pronouncements that require or permit fair value measurements in accordance with SFAS No. 157. In April 2009, the FASB issued FSP No. 157-4, "Determining the Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly", which provides additional guidance for estimating fair value in accordance with SFAS No. 157, when the volume and level of activity for the asset or liability have significantly decreased. FSP No. 157-4 also provides guidance on identifying circumstances that indicate a transaction is not orderly. The Company adopted FSP No. 157-4 on June 30, 2009. The adoption of SFAS No. 157 and the related FSPs did not have any impact on the Company's financial statement presentation or disclosures.

In February 2007, the FASB issued Statement of Financial Accounting Standards No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities" ("SFAS No. 159"), which provides companies with an option to report selected financial assets and liabilities at fair value. SFAS No. 159's objective is to reduce both complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. Generally accepted accounting principles have required different measurement attributes for different assets and liabilities that can create artificial volatility in earnings. SFAS No. 159 helps to mitigate this type of accounting-induced volatility by enabling companies to report related assets and liabilities at fair value, which would likely reduce the need for companies to comply with detailed rules for hedge accounting. SFAS No. 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. SFAS No. 159 requires companies to provide additional information that will help investors and other users of financial statements to more easily understand the effect of the Company's choice to use fair value on its earnings. SFAS No. 159 also requires companies to display the fair value of those assets and liabilities for which the Company has chosen to use fair value on the face of the balance sheet. SFAS No. 159 does not eliminate disclosure requirements included in other accounting standards, including requirements for disclosures about fair value measurements included in SFAS No. 157 and SFAS No. 107. The Company adopted SFAS No. 159 on January 1, 2008. The adoption of SFAS No. 159 did not have any impact on the Company's consolidated financial statement presentation or disclosures.

In December 2007, the FASB issued Statement of Financial Accounting Standards No. 141(R), "Business Combinations" ("SFAS No. 141(R)"), which requires an acquirer to recognize in its financial statements as of the acquisition date (i) the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquiree, measured at their fair values on the acquisition date, and (ii) goodwill as the excess of the consideration transferred plus the fair value of any noncontrolling interest in the acquiree at the acquisition date over the fair values of the identifiable net assets acquired. Acquisition-related costs, which are the costs an acquirer incurs to effect a business combination, will be accounted for as expenses in the periods in which the costs are incurred and the services are received, except that costs to issue debt or equity securities will be recognized in accordance with other applicable GAAP. SFAS No. 141(R) makes significant amendments to other Statement of Financial Accounting Standards and other authoritative guidance to provide additional guidance or to conform the guidance in that literature to that provided in SFAS No. 141(R). SFAS No. 141(R) also provides guidance as to what information is to be disclosed to enable users of financial statements to evaluate the nature and financial effects of a business combination. SFAS No. 141(R) is effective for financial statements issued for fiscal years beginning on or after December 15, 2008. The Company adopted SFAS No. 141(R) on January 1, 2009. The adoption of SFAS No. 141(R) will affect how the Company accounts for a business combination in the future.

In December 2007, the FASB issued Statement of Financial Accounting Standards No. 160, "Noncontrolling Interests in Consolidated Financial Statements — an amendment of ARB No. 51" ("SFAS No. 160"), which requires that ownership interests in subsidiaries held by parties other than the parent, and the amount of consolidated net income, be clearly identified, labeled and presented in the consolidated financial statements. SFAS No. 160 also requires that once a subsidiary is deconsolidated, any retained noncontrolling equity investment in the former subsidiary be initially measured at fair value. Sufficient disclosures are required to clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. SFAS No. 160 amends FASB No. 128 to provide that the calculation of earnings per share amounts in the consolidated financial statements will continue to be based on the amounts attributable to the parent. SFAS No. 160 is effective for financial statements issued for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008, and requires retroactive adoption of the presentation and disclosure requirements for existing minority interests. All other requirements are applied prospectively. The Company adopted SFAS No. 160 on January 1, 2009. The adoption of SFAS No. 160 did not have any impact on the Company's consolidated financial statement presentation or disclosures.

In March 2008, the FASB issued Statement of Financial Accounting Standards No. 161, "Disclosures about Derivative Instruments and Hedging Activities — an amendment of FASB Statement No. 133" ("SFAS No. 161"). SFAS No. 161 amends and expands the disclosure requirements of SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS No. 133"). The objective of SFAS No. 161 is to provide users of financial statements with an enhanced understanding of how and why an entity uses derivative instruments, how derivative instruments and related hedged items are accounted for under SFAS No. 133 and its related interpretations, and how derivative instruments and related hedged items affect an entity's financial position, financial performance, and cash flows. SFAS No. 161 requires qualitative disclosures about objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of and gains and losses on derivative instruments, and disclosures about credit-risk-related contingent features in derivative agreements. SFAS No. 161 applies to all derivative financial instruments, including bifurcated derivative instruments (and nonderivative instruments that are designed and qualify as hedging instruments pursuant to paragraphs 37 and 42 of SFAS No. 133) and related hedged items accounted for under SFAS No. 133 and its related interpretations. SFAS No. 161 also amends certain provisions of SFAS No. 133. SFAS No. 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. SFAS No. 161 encourages, but does not require, comparative disclosures for earlier periods at initial adoption. The Company adopted SFAS No. 161 on January 1, 2009. The adoption of SFAS No. 161 did not have any impact on the Company's consolidated financial statement presentation or disclosures.

In May 2009, the FASB issued SFAS No. 165, "Subsequent Events" ("SFAS No. 165"). SFAS No. 165 establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued. SFAS No. 165 also sets forth the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. SFAS No. 165 is effective for interim or annual financial periods ending after June 15, 2009, and shall be applied prospectively. The Company adopted SFAS No. 165 on June 30, 2009. Accordingly, subsequent events have been evaluated through August 10, 2009.

In June 2008, the FASB ratified Emerging Issues Task Force ("EITF") Issue No. 07-05, "Determining Whether an Instrument (or Embedded Feature) is Indexed to an Entity's Own Stock" ("EITF 07-05"). EITF 07-05 mandates a two-step process for evaluating whether an equity-linked financial instrument or embedded feature is indexed to the entity's own stock. Warrants that a company issues that contain a strike price adjustment feature, upon the adoption of EITF 07-05, results in the instruments no longer being considered indexed to the company's own stock. Accordingly, adoption of EITF 07-05 will change the current classification (from equity to liability) and the related accounting for such warrants outstanding at that date. EITF 07-05 is effective for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. The Company adopted EITF 07-05 on January 1, 2009. The adoption of EITF 07-05 did not have any impact on the Company's consolidated financial statement presentation or disclosures.

In April 2009, the FASB issued FSP 107-1, “Interim Disclosures about Fair Value of Financial Instruments”, which requires disclosures about fair value of financial instruments for interim reporting periods of publicly traded companies as well as in annual financial statements. FSP 107-1 also amends APB Opinion No. 28, “Interim Financial Reporting”, to require those disclosures in summarized financial information at interim reporting. FSP 107-1 is effective for interim reporting periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. The Company adopted FSP 107-1 on June 30, 2009. The adoption of FSP 107-1 did not have any impact on the Company’s consolidated financial statement presentation or disclosures.

Recently Issued Accounting Pronouncements

In June 2009, the FASB issued SFAS No. 168, “The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles – a replacement of FASB Statement No. 162” (“SFAS No. 168”). SFAS No.168 establishes the “FASB Accounting Standards Codification” (“Codification”), which will become the source of authoritative generally accepted accounting principles (“GAAP”) to be recognized by the FASB and to be applied by nongovernmental entities. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. The Codification will supersede all then-existing non-SEC accounting and reporting standards. All other non-SEC accounting literature which is not grandfathered or not included in the Codification will no longer be authoritative. Once the Codification is in effect, all of its content will carry the same level of authority. SFAS No. 168 is effective for financial statements issued for interim or annual reporting periods ending after September 15, 2009. The Company expects to adopt SFAS No. 168 on September 30, 2009.

Management does not believe that any other recently issued, but not yet effective, accounting standards or pronouncements, if currently adopted, would have a material effect on the Company’s consolidated financial statements.

Critical Accounting Policies and Estimates

The Company prepared its 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 consolidated financial statements.

Research and Development

Research and development costs are expensed as incurred. Research and development expenses 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.

Amounts due, pursuant to contractual commitments, on research and development contracts with third parties are recorded as a liability, with the related amount of such contracts recorded as advances on research and development contract services on the Company’s balance sheet. Such advances on research and development contract services are expensed over their life on the straight-line basis, unless the achievement of milestones, the completion of contracted work, or other information indicates that a different expensing schedule is more appropriate. The Company accounts for its research and development contracts in accordance with EITF 07-3, “Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities”.

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 fees, are expensed as incurred.

Stock-Based Compensation

The Company accounts for share-based payments pursuant to SFAS No. 123 (revised 2004), "Share-Based Payment" ("SFAS No. 123R"), a revision to SFAS No. 123, "Accounting for Stock-Based Compensation". SFAS No. 123R requires that the Company measure the cost of employee services received in exchange for equity awards based on the grant date fair value of the awards, with the cost to be recognized as compensation expense in the Company's financial statements over the vesting period of the awards.

The Company accounts for stock option and warrant grants issued and vesting to non-employees in accordance with EITF No. 96-18, "Accounting for Equity Instruments that are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services", and EITF 00-18, "Accounting Recognition for Certain Transactions involving Equity Instruments Granted to Other Than Employees", whereas the value of the stock compensation is based upon the measurement date as determined 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. In accordance with EITF 96-18, options granted to Scientific Advisory Board committee members and outside consultants are revalued each reporting period to determine the amount to be recorded as an expense in the respective period. As the options vest, they are valued on each vesting date and an adjustment is recorded for the difference between the value already recorded and the then current value on the date of vesting.

Income Taxes

The Company accounts for income taxes pursuant to SFAS No. 109, "Accounting for Income Taxes" ("SFAS No. 109"), which establishes financial accounting and reporting standards for the effects of income taxes that result from an enterprise's activities during the current and preceding years. SFAS No. 109 requires 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 is concentrating on developing 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 inhibits the growth of cell lines of breast, colon, lung, prostate, pancreas, ovary, stomach and liver cancer, as well as the major types of leukemias. Activity of lead compounds of both types of drugs was recently demonstrated against human pancreatic cancer cells in a mouse model. Because there is a great need for any kind of effective treatment for pancreatic cancer, this cancer will be studied concomitantly with the primary target of the Company's research program focused on brain cancers.

The research on brain tumors is proceeding in collaboration 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") entered into on March 22, 2006, as amended. The research at NINDS continues to be led by Dr. Zhengping Zhuang, an internationally recognized investigator in the molecular pathology of cancer. Dr. Zhuang is aided by two senior research technicians supported by the Company as part of the CRADA. The goal of the CRADA is to develop more effective drugs for the treatment of GBM through the processes required to gain Food and Drug Administration ("FDA") approval for clinical trials. The Company has entered into an amendment to the CRADA to extend its term from September 30, 2009 through September 30, 2011.

The Company filed five patent applications on August 1, 2008. Two of these patent filings deal with applications filed earlier jointly with NIH for work done under the CRADA as follows: (1) a filing entering the regional stage of a PCT application involving the use of certain compounds to treat human tumors expressing a biomarker for brain and other human cancers; and (2) an application for the treatment of the pediatric tumors, medulloblastoma (the most common brain tumor in children) and neuroblastoma (a tumor arising from neural cells outside the brain that is the most common cancer of children). The three new patent applications include: (1) a joint application with NIH identifying a new biomarker for many common human cancers that when targeted by compounds developed by the Company result in inhibition of growth and death of cancer cells; (2) an application by the Company regarding the structure, synthesis and use of a group of new homologs of its LB-1 compounds; and (3) an application by the Company for the use of certain homologs of its drugs as neuroprotective agents with potential application to common neurodegenerative conditions such as Alzheimer's and Parkinson's diseases.

During the six months ended June 30, 2009, the Company filed eight patent applications. The U.S. Patent Office Examiner began review of the initial patent submitted jointly by the Company and the NINDS. The chemical formula of one of the Company's lead compounds, LB-100, was disclosed in that patent, and was found to be novel. The Company considers this finding a milestone in the development of the Company's intellectual property. The specific claims for the structures and methods of synthesis of all compounds in the LB series were filed on the same day in a separate patent application and are the sole property of the Company. The review of this patent will be the determinant of the validity of the novelty of the LB-100 compounds, and the outcome thereof will therefore have a material impact on the future business prospects of the Company.

The results of studies characterizing the novel and potent anti-cancer activity and mechanism of action of LB-102 alone and in combination with standard chemotherapy drugs were published in a leading scientific journal, the Proceedings of the National Academy of Sciences (print version dated July 14, 2009). The primary conclusion was that one of the Company's lead compounds appears to inhibit cancer cells by stimulating cancer cells to attempt to grow in the presence of a standard cancer drug and interferes with cancer cell defense mechanisms, with the end result being much greater damage to the cancer than occurs when treatment is limited to the standard anti-cancer drug. The authors concluded that treatment with the Company's compound LB-1.2 may be a general method for enhancing the therapeutic benefit of a number of standard cancer regimens, not limited to the original targets of brain tumors of adults and children.

In addition, an abstract of the characterization of the neuroprotective effects of two lead compounds in standard assays of injury to normal embryonic mouse neurons supporting their continued development for the possible treatment of chronic neurodegenerative diseases such as Alzheimer's Disease and Parkinson's Disease has been submitted for presentation at the annual meeting of the Society for Neuroscience in November 2009.

The Company continues to evaluate compounds for activity against several types of fungi that cause serious infections, particularly in immuno-compromised individuals, such as those with HIV-AIDS, and those having bone marrow transplantations. The Company is also exploring indications that its compounds have against strains of fungi that cause the most common fungal infections of the skin and nails. Discussions are in progress with experts in fungal infections regarding the most reliable methods of assessing the potential of new agents for the management of common fungal diseases.

The Company expects that its products will derive directly from the intellectual property from its research activities. The development of lead compounds with different mechanisms of action that have activity against brain tumors and other common human cancers, as well as against serious fungal infections, originated from the discovery of a biomarker in GBM. The Company will continue to use discovery and/or recognition of molecular variants characteristic of specific human cancers as a guide to drug discovery and potentially new diagnostic tests. Examples of the productivity of this approach to discovery of new therapeutics are: (1) the recent patent application filing for a new biomarker of several common cancers that when targeted by certain of the Company's drugs results in inhibition of growth and death of cancer cells displaying the marker; and (2) the filing of a patent on certain homologs of one group of compounds as potentially useful for the treatment of neurodegenerative diseases.

Management's primary focus in 2009 is securing a strategic partnership with a pharmaceutical company with major programs in cancer, anti-fungal treatments, and/or neuroprotective measures. The significant diversity of the potential therapeutic value of the Company's compounds stems from the fact that these agents modify critical pathways in cancer cells and in microorganisms such as fungi and appear to ameliorate pathologic processes that lead to brain injury, caused by trauma or toxins or through as yet unknown mechanisms that underlie the major chronic neurologic diseases including Alzheimer's Disease, Parkinson's Disease, and Amyotrophic Lateral Sclerosis (ALS, or Lou Gherig's Disease). Studies of the potential neuroprotective effects of homologs of each class of the Company's compounds are continuing under a contract with Southern Research Institute, Birmingham, Alabama.

Plans for 2009 and Beyond

The Company's primary objective is to raise funds to cover ongoing operations and development of its lead compounds for the treatment of brain cancers of adults and neuroblastoma in children. The Company also wishes to raise sufficient capital to explore, most likely in partnership with a pharmaceutical company, recently discovered activity of some derivatives of its lead drugs for the treatment of fungal diseases and neurodegenerative diseases. In this regard, the Company has made preliminary presentations to several large pharmaceutical companies with respect to one or both of its lead compounds.

The first goal is to initiate preclinical studies of two of its lead compounds required for submission of an application to the FDA for evaluation in clinical trials. The initial target cancers will be glioblastoma multiforme, neuroblastoma and/or medulloblastoma. The final choice will depend in part upon discussions at a pre-IND meeting with the FDA. Subject to the availability of sufficient resources, the Company will also initiate preclinical evaluation of a second compound.

The second goal is further characterization of the fungal activity of certain homologs of drugs of the LB-200 series. These studies will be done in collaboration with academic partners. Recently, the Company confirmed that its lead compound of the LB-200 series has potential to cure two types of fungi in a guinea pig model that are representative of the most common skin infections of humans and domestic animals. Cure was achieved by topical application of the drug on a daily basis for 14 days, with no evidence of toxicity.

The Company is also screening other homologs of lead compounds of the LB-100 and LB-200 series for neuroprotective activity in laboratory models of brain cell injury. During October 2008, the Company engaged Southern Research Institute, Birmingham, Alabama, to assess one lead compound from each of two classes of its proprietary pharmacological agents for effects on normal neuronal cells and to determine if the compounds protect normal brain cells from injury in several different models of chemical and traumatic brain injury. The goal is to determine if these agents have promise as potentially useful for the prevention, amelioration or delay of progression of neurodegenerative diseases such as Alzheimer's disease and other neurological diseases or impairments resulting from trauma and/or other diverse or unknown origins. The initial studies in the test tube support the Company's hypothesis that one of its lead compounds appears to have a beneficial effect upon the growth and differentiation of normal brain cells.

Given the progress in identifying two lead compounds with activity in animal models of GBM, the Company is devoting its resources to bring the agents to a point at which an Investigational New Drug ("IND") application can be submitted to the FDA for a Phase I clinical trial. One lead compound (LB-1) is the most advanced in the process and, subject to the availability of capital, the Company plans to be ready for IND submission in mid-2010. The other lead compound (LB-2.5), which inhibits cancer cells by a mechanism distinct from that of LB-1, is anticipated to complete its evaluation by the end of 2010, subject to the availability of capital. If the Company is able to achieve support from and/or partnership with a large pharmaceutical company to co-develop its compounds, this schedule may be accelerated. The drugs are well characterized from the standpoints of activity and mechanism of action. The pre-clinical activity toxicology and pharmacokinetic characterization, which are elements needed for IND submission, could be accomplished quickly with adequate financial resources or by a partner with expertise in characterization of drugs for introduction into the clinic.

On January 29, 2008, the Chem-Master Agreement was amended to extend its term to February 15, 2014, pursuant to which Chem-Master was engaged to synthesize certain compounds, and to expressly provide for the expansion of the Company's drug development program, through consultation with the medicinal chemists at Chem-Master. The Company is exploring the synthesis of additional novel anti-cancer drugs. Several targets for anti-cancer drug development are under consideration. When the next group of compounds is developed, it will be designated as "LB-3", as distinguished from the first two classes of compounds that were designated as "LB-1" and "LB-2". This process is currently in the planning stage and no compounds have been made as yet.

Existing resources will not permit evaluation of activity of the Company's lead drugs against all the common cancers with respect to which the Company's compounds may have anti-cancer activity. Current resources also will not be sufficient to carry out pre-clinical studies necessary to apply to the FDA for approval of drug evaluations in Phase I trials.

The Company faces several potential challenges in its efforts to achieve commercial success, including raising sufficient capital to fund its business plan, achieving commercially applicable results of its research programs, competition from more established, well-funded companies with competitive technologies, and future competition from companies that are developing new competitive technologies, some of whom are larger companies with greater capital resources than the Company. Because of these challenges, there is substantial uncertainty as to the Company's ability to fund its operations and continue as a going concern (see "Going Concern" above). Should the Company be unable to raise the required capital on a timely basis, the Company's business plans would be materially adversely affected, and the Company may not be able to continue to conduct operations.

Results of Operations

The Company is a development stage company and had not commenced revenue-generating operations at June 30, 2009.

Three Months Ended June 30, 2009 and 2008

General and Administrative Expenses. For the three months ended June 30, 2009, general and administrative expenses were $101,776, which consisted of stock-based compensation of $37,896, consulting and professional fees of $51,845, insurance expense of $5,955, travel and entertainment costs of $1,013, and other operating costs of $5,067.

For the three months ended June 30, 2008, general and administrative expenses were a credit of $50,947, which consisted of a credit to stock-based compensation of $100,355, consulting and professional fees of $34,060, insurance expense of $5,955, travel and entertainment costs of $3,340, and other operating costs of $6,053.

Depreciation. For the three months ended June 30, 2009 and 2008, depreciation expense was $-0- and $159, respectively.

Research and Development Costs. For the three months ended June 30, 2009, research and development costs were $141,228, which consisted of the vested portion of the fair value of stock options issued to a consultant and a vendor of $57,737, patent costs of $25,741, and other costs of $57,750.

For the three months ended June 30, 2008, research and development costs were $61,782, which consisted of a credit of $25,563 for the vested portion of the fair value of stock options issued to a consultant and a vendor, patent costs of $34,224, laboratory supplies of $15,500, and other costs of $37,622.

Interest Income. For the three months ended June 30, 2009, interest income was $46, as compared to interest income of $733 for the three months ended June 30, 2008.

Loss. For the three months ended June 30, 2009, the Company incurred a net loss of $242,958, as compared to a net loss of $10,261 for the three months ended June 30, 2008.

Six Months Ended June 30, 2009 and 2008

General and Administrative Expenses. For the six months ended June 30, 2009, general and administrative expenses were $254,893, which consisted of stock-based compensation of $75,410, consulting and professional fees of $148,990, insurance expense of $11,911, travel and entertainment costs of $2,414, and other operating costs of $16,168.

For the six months ended June 30, 2008, general and administrative expenses were $217,869, which consisted of stock-based compensation of $64,794, consulting and professional fees of $105,785, insurance expense of $11,911, travel and entertainment costs of $22,461, and other operating costs of $12,918.

Depreciation. For the six months ended June 30, 2009 and 2008, depreciation expense was $128 and $318, respectively.

Research and Development Costs. For the six months ended June 30, 2009, research and development costs were $267,106 which consisted of the vested portion of the fair value of stock options issued to a consultant and a vendor of $97,599, patent costs of $46,507, laboratory supplies of $9,000, and other costs of $114,000.

For the six months ended June 30, 2008, research and development costs were $298,233, which consisted of the fair value of restricted common stock issued to a vendor of $75,000, the vested portion of the fair value of stock options issued to a consultant and a vendor of $8,369, patent costs of $74,224, laboratory supplies of $24,250, and other costs of $116,390.

Interest Income. For the six months ended June 30, 2009, interest income was $52, as compared to interest income of $2,838 for the six months ended June 30, 2008.

Net Loss. For the six months ended June 30, 2009, the Company incurred a net loss of $522,527, as compared to a net loss of $513,722 for the six months ended June 30, 2008.

Liquidity and Capital Resources – June 30, 2009

The Company's 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 is in the development stage and has not generated any revenues from operations to date. Furthermore, the Company has experienced continuing losses since inception and had a stockholders' deficiency at December 31, 2008 and June 30, 2009. The Company's ability to continue as a going concern is dependent upon its ability to develop additional sources of capital and to ultimately achieve profitable operations. The Company's financial statements do not include any adjustments that might result from the outcome of these uncertainties (see "Going Concern" above").

Operating Activities. For the six months ended June 30, 2009, operating activities utilized cash of $341,724, as compared to utilizing cash of $306,135 for the six months ended June 30, 2008.

The Company had working capital deficiency of $76,016 at June 30, 2009. At December 31, 2008, the Company had working capital deficiency of $323,676. The reduction in the working capital deficiency was due primarily as a result of the sale of the Company's common stock units pursuant to three closings of a third private placement in February, March, and April 2009 that generated net proceeds of $597,050.

Investing Activities. There were no investing activities during the six months ended June 30, 2009 and 2008

Financing Activities. For the six months ended June 30, 2009, financing activities provided net cash of $497,050, consisting of the gross proceeds from the sale of common stock of $710,000, reduced by the payment of private placement offering costs of $112,950, and the repayment of a note payable to a consultant in the amount of $100,000. There were no financing activities during the six months ended June 30, 2008.

Principal Commitments

At June 30, 2009, the Company did not have any material commitments for capital expenditures. The Company's principal commitments at June 30, 2009 consisted of the liquidated damages payable under the registration rights agreement of $74,000, and the contractual obligations as summarized below.

Effective March 22, 2006, Lixte entered into a CRADA, as amended, with the NINDS of the NIH. The CRADA is for a term of 42 months from the effective date and may be unilaterally terminated by either party by providing written notice within sixty days. The CRADA provides for the collaboration between the parties in the identification and evaluation of agents that target the Nuclear Receptor CoRepressor (N-CoR) pathway for glioma cell differentiation. The CRADA also provided that NINDS and Lixte will conduct research to determine if expression of N-CoR correlates with prognosis in glioma patients. Pursuant to the CRADA, Lixte agreed to provide funds under the CRADA in the amount of $200,000 per year to fund two technical assistants for the technical, statistical and administrative support for the research activities, as well as to pay for supplies and travel expenses. The first $200,000 was due within 180 days of the effective date and was paid in full on July 6, 2006. The second $200,000 was paid in full on June 29, 2007. In June 2008, the CRADA was extended to September 30, 2009, with no additional funding required for the period between July 1, 2008 and September 30, 2008. For the period from October 1, 2008 through September 30, 2009, the Company agreed to provide additional funding under the CRADA of $200,000, to be paid in four quarterly installments of $50,000 each commencing on October 1, 2008. The first and second installments of $50,000 were paid on September 29, 2008 and March 5, 2009, respectively. During August 2009, the Company entered into an amendment to the CRADA to extend its term from September 30, 2009 through September 30, 2011. Pursuant to such amendment, the Company has agreed to aggregate payments of $100,000 in two installments of $50,000 payable on October 1, 2010 and January 5, 2011, inclusive of any prior unpaid commitments.

On February 5, 2007, Lixte entered into a two-year agreement (the "Chem-Master Agreement") with Chem-Master International, Inc. ("Chem-Master"), a company co-owned by Francis Johnson, a consultant to the Company, pursuant to which Lixte engaged Chem-Master to synthesize a compound designated as "LB-1", and any other compound synthesized by Chem-Master pursuant to Lixte's request, which have potential use in treating a disease, including, without limitation, cancers such as glioblastomas. Pursuant to the Chem-Master Agreement, Lixte agreed to reimburse Chem-Master for the cost of materials, labor, and expenses for other items used in the synthesis process, and also agreed to grant Chem-Master a five-year option to purchase 100,000 shares of the Company's common stock at an exercise price of $0.333 per share. Lixte has the right to terminate the Chem-Master Agreement at any time during its term upon sixty days prior written notice. On February 5, 2009, provided that the Chem-Master Agreement had not been terminated, the Company agreed to grant Chem-Master a second five-year option to purchase an additional 100,000 shares of the Company's common stock at an exercise price of $0.333 per share. The Company granted the second five-year option on February 5, 2009.

On January 29, 2008, the Chem-Master Agreement was amended to extend its term to February 15, 2014, and to expressly provide for the design and synthesis of a new series of compounds designated as "LB-3". Pursuant to the amendment, the Company issued 100,000 shares of its restricted common stock and granted an option to purchase 200,000 shares of common stock. The option is exercisable for a period of two years from vesting date at $1.65 per share, with one-half (100,000 shares) vesting on August 1, 2009, and one-half (100,000 shares) vesting on February 1, 2011.

Pursuant to the Chem-Master Agreement, the Company reimbursed Chem-Master for the costs of materials, labor, and expenses aggregating $15,500 and $-0- during the three months ended June 30, 2009 and 2008, respectively, and $24,250 and $9,000 during the six months ended June 30, 2009 and 2008, respectively.

During September 2008, the Company engaged an internet-based investor information service, to enhance awareness of the Company's progress in developing a portfolio of pharmacological agents at an initial cost of $2,500, plus $500 per month for a period of twelve months.

Effective as of September 19, 2008, the Company entered into an agreement with the NIH providing the Company with an exclusive license for all patents submitted jointly with the NIH under the CRADA. The agreement provided for an initial payment of $25,000 to NIH within 60 days of September 19, 2008, and for a minimum annual royalty of $30,000 on January 1 of each calendar year following the year in which the CRADA is terminated. The agreement also provides for the Company to pay specified royalties based on (i) net sales by the Company and its sub-licensees, (ii) the achievement of certain clinical benchmarks, and (iii) the granting of sublicenses. The Company paid the initial $25,000 obligation on November 10, 2008.

During October 2008, the Company engaged Southern Research Institute, Birmingham, Alabama, to assess one lead compound from each of two classes of its proprietary pharmacological agents for effects on normal neuronal cells and to determine if the compounds protect normal brain cells from injury in several different models of chemical and traumatic brain injury. The goal is to determine if these agents have promise as potentially useful for the prevention, amelioration or delay of progression of neurodegenerative diseases such as Alzheimer's disease and other neurological diseases or impairments resulting from trauma and/or other diverse or unknown origins. The Company agreed to pay a fee not to exceed a total of $50,000 for such services. As of June 30, 2009, payments of $22,500 had been made under this agreement.

On October 7, 2008, the Company appointed Dr. Mel Sorensen to its Board of Directors. Dr. Sorensen is a medical oncologist with extensive experience in cancer drug development, first at the National Cancer Institute, then at Bayer and GlaxoSmithKline, before becoming President and CEO of a new cancer therapeutics company, Ascenta Therapeutics, in 2004. Dr. Sorensen is being paid an annual consulting fee of $40,000, payable in quarterly installments over a one-year period commencing October 7, 2008, to assist the Company in identifying a strategic partner. Dr. Sorensen was also granted a stock option to purchase 200,000 shares of the Company's common stock, exercisable at $0.50 per share for a period of five years from each tranche's vesting date. The option vests as to 25,000 shares on January 1, 2009, and a further 25,000 shares on the first day of each subsequent calendar quarter until all of the shares are vested.

Off-Balance Sheet Arrangements

At June 30, 2009, the Company did not have any transactions, obligations or relationships that could be considered off-balance sheet arrangements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 4T. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

Disclosure Controls and procedures are designed to ensure that information required to be disclosed in the reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports filed under the Exchange Act is accumulated and communicated to management.

As of June 30, 2009, the Company's Chief Executive Officer and Chief Financial Officer (who is the same individual) evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based upon and as of the date of that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective to ensure that the information required to be disclosed in the reports the Company files and submits under the Exchange Act is recorded, processed, summarized, and reported as and when required.

(b) Changes in Internal Controls Over Financial Reporting

There were no changes in the Company's internal control over financial reporting or in other factors that materially affect, or are reasonably likely to materially affect, those controls subsequent to the date of the Company's most recent evaluation.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

The Company is currently not a party to any pending or threatened legal proceedings.

Item 1A. Risk Factors

Not applicable.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Not applicable.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Submission of Matters to a Vote of Security Holders

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 immediately precedes such exhibits, 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: August 11, 2009

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

INDEX TO EXHIBITS

Exhibit Number	Description of Document
31.1	Certifications under Section 302 of the Sarbanes-Oxley Act of 2002. (1)
32.1	Certifications under Section 906 of the Sarbanes-Oxley Act of 2002. (1)

(1) Filed herewith.

CERTIFICATIONS OF THE 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 for the quarterly period ended June 30, 2009 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)) for the registrant and I 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 the registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: August 11, 2009

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

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

In connection with the filing by Lixte Biotechnology Holdings, Inc. (the "Registrant") of its Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009 (the "Quarterly Report") with the Securities and Exchange Commission, I, John S. Kovach, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

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

Date: August 11, 2009

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