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

FORM 10-K/A
(Amendment No. 1)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2011

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**
FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NUMBER 000-52089

INVIVO THERAPEUTICS HOLDINGS CORP.
(Exact Name of Registrant as specified in its charter)

Nevada **(State or other jurisdiction of incorporation or organization)**	**36-4528166** **(I.R.S. Employer Identification No.)**
One Broadway, 14th Floor **Cambridge, Massachusetts** **(Address of principal executive offices)**	**02142** **(Zip Code)**

Registrant's telephone number, including area code: (617) 475-1520

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

Securities registered pursuant to Section 12(g) of the Act:

Title of each class
Common Stock, par value $0.00001 per share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates based on the closing price of such stock on the Over-the-Counter Bulletin Board on June 30, 2011 was $ 24,020,023

As of March 12, 2012, the number of shares outstanding of the registrant's common stock, $0.00001 par value per share, was 63,781,404.

DOCUMENTS INCORPORATED BY REFERENCE

None.

Explanatory Note

This Amendment No. 1 (the "Amendment") to the Annual Report on Form 10-K for the fiscal year ended December 31, 2011 of InVivo Therapeutics Holdings Corp. (the "Company"), originally filed with the Securities and Exchange Commission on March 15, 2012 (the "Original Filing"), is being filed solely for the purpose of providing an updated audit report in which the Company's auditor has revised its opinion in the audit report filed with the Original Filing to clarify the inclusion of the cumulative period from November 28, 2005 (inception) to December 31, 2011. In accordance with rule 12b-15, the Company has included in this Amendment the complete text of Item 8 with the revised audit report, however no changes have been made to the financial statements appearing herein.

Other than as expressly set forth in this Amendment, the Company is not amending any other part of the Original Filing. This Amendment continues to speak as of the date of the Original Filing, except as amended by this Amendment, and does not reflect events occurring after the date of the Original Filing, or modify or update any related or other disclosures.

Item 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

To the Board of Directors of InVivo Therapeutics Holdings Corp.:

We have audited the accompanying consolidated balance sheets of InVivo Therapeutics Holdings Corp. as of December 31, 2011 and 2010, and the related consolidated statements of operations, changes in stockholders' deficit and cash flows for the years then ended and for the period from November 28, 2005 (inception) to December 31, 2011. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of InVivo Therapeutics Holdings Corp. as of December 31, 2011 and 2010, and the results of its operations and its cash flows for the years then ended and the period from November 28, 2005 (inception) to December 31, 2011, in conformity with U.S. generally accepted accounting principles.

/s/ Wolf & Company, P.C.
Boston, Massachusetts
March 14, 2012

InVivo Therapeutics Holdings Corp.
(A Development Stage Company)
Consolidated Balance Sheets

	December 31, 2011	December 31, 2010
ASSETS:		
Current assets:		
Cash and cash equivalents	$ 4,363,712	$ 8,964,194
Restricted cash	547,883	—
Prepaid expenses	104,022	81,166
Total current assets	5,015,617	9,045,360
Property and equipment, net	520,482	280,181
Other assets	166,139	53,639
Total assets	$ 5,702,238	$ 9,379,180
LIABILITIES AND STOCKHOLDERS' DEFICIT:		
Current liabilities:		
Accounts payable	$ 567,195	$ 336,945
Loan payable-current portion	50,578	—
Capital lease payable-current portion	30,724	—
Derivative warrant liability	35,473,230	10,647,190
Accrued expenses	618,369	247,547
Total current liabilities	36,740,096	11,231,682
Loan payable-less current portion	83,794	—
Capital lease payable-less current portion	38,042	—
Total liabilities	36,861,932	11,231,682
Commitments and contingencies		
Stockholders' deficit:		
Common stock, $0.00001 par value, authorized 200,000,000 and 100,000,000 shares at December 31, 2011 and December 31, 2010, respectively; issued and outstanding 53,760,471 and 51,647,171 shares at December 31, 2011 and 2010, respectively.	538	516
Additional paid-in capital	16,656,830	11,235,829
Deficit accumulated during the development stage	(47,817,062)	(13,088,847)
Total stockholders' deficit	(31,159,694)	(1,852,502)
Total liabilities and stockholders' deficit	$ 5,702,238	$ 9,379,180

See notes to consolidated financial statements.

InVivo Therapeutics Holdings Corp.
(A Development Stage Company)

Consolidated Statements of Operations

	Years Ended December 31, 2011	Years Ended December 31, 2010	Period from November 28, 2005 (inception) to December 31, 2011
Operating expenses:			
Research and development	$ 4,102,847	$ 1,673,202	$ 8,883,834
General and administrative	4,555,872	1,724,102	8,251,537
Total operating expenses	8,658,719	3,397,304	17,135,371
Operating loss	(8,658,719)	(3,397,304)	(17,135,371)
Other income (expense):			
Other income	—	—	383,000
Interest income	8,759	3,379	20,049
Interest expense	(12,676)	(564,443)	(1,066,331)
Derivatives losses	(26,065,579)	(3,952,582)	(30,018,161)
Other income (expense), net	(26,069,496)	(4,513,646)	(30,681,443)
Net loss	$ (34,728,215)	$ (7,910,950)	$ (47,816,814)
Net loss per share, basic and diluted	$ (0.67)	$ (0.24)	$ (1.56)
Weighted average number of common shares outstanding, basic and diluted	51,894,871	33,367,239	30,707,308

See notes to the consolidated financial statements.

InVivo Therapeutics Holdings Corp.

(A Development Stage Company)

Consolidated Statements of Changes in Stockholders' Deficit

	Common Stock		Additional Paid-in Capital	Deficit Accumulated During the Development Stage	Total Stockholders' Deficit
	Shares	Amount			
Balance on inception date, November 28, 2005	—	$ —	$ —	$ —	$ —
Issuance of founders stock	24,787,080	248	—	(248)	—
Share-based compensation expense	—	—	18,347	—	18,347
Net loss	—	—	—	(1,097,702)	(1,097,702)
Balance as of December 31, 2007	24,787,080	248	18,347	(1,097,950)	(1,079,355)
Share-based compensation expense	—	—	24,526	—	24,526
Net loss				(1,564,069)	(1,564,069)
Balance as of December 31, 2008	24,787,080	248	42,873	(2,662,019)	(2,618,898)
Share-based compensation expense	—	—	171,059	—	171,059
Conversion of convertible notes payable and accrued interest	1,472,435	15	1,344,351	—	1,344,366
Net loss	—	—	—	(2,515,878)	(2,515,878)
Balance as of December 31, 2009	26,259,515	263	1,558,283	(5,177,897)	(3,619,351)
Share-based compensation expense	—	—	664,908	—	664,908
Issuance of common stock in March 2010	1,095,258	10	999,990	—	1,000,000
Conversion of convertible notes payable and accrued interest	3,792,417	38	3,328,090	—	3,328,128
Issuance of common stock in reverse merger	6,999,981	70	(70)	—	—
Beneficial conversion feature on notes payable	—	—	272,762	—	272,762
Issuance of common stock in private placement, net of stock issuance costs of $2,072,117 and non stock issuance costs of $5,369,570	12,995,403	130	3,907,274	—	3,907,404
Conversion of convertible bridge notes in conjunction with the private placement	504,597	5	504,592	—	504,597
Net loss	—	—	—	(7,910,950)	(7,910,950)
Balance as of December 31, 2010	51,647,171	516	11,235,829	(13,088,847)	(1,852,502)
Share-based compensation expense	—	—	921,512	—	921,512
Issuance of common stock in private placement	980,392	10	1,999,990	—	2,000,000
Issuance of common stock for services	215,000	3	209,448	—	209,451
Issuance of common stock upon exercise of warrants	734,329	7	988,367	—	988,374
Issuance of common stock upon exercise of stock options	143,731	1	10,433	—	10,434
Issuance of common stock to 401(k) plan	39,848	1	41,661	—	41,662
Fair value of warrants issued for services			10,051		10,051
Fair value of derivative warrant liability reclassified to additional paid-in capital	—	—	1,239,539	—	1,239,539
Net loss	—	—	—	(34,728,215)	(34,728,215)
Balance as of December 31, 2011	53,760,471	$ 538	$ 16,656,830	$ (47,817,062)	$ (31,159,694)

See notes to the consolidated financial statements.

InVivo Therapeutics Holdings Corp.
(A Development Stage Company)

Consolidated Statements of Cash Flows

	Years Ended December 31,		Period from November 28, 2005 (inception) to December 31, 2011
	2011	2010	
Cash flows from operating activities:			
Net loss	$(34,728,215)	$ (7,910,950)	$(47,816,814)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization expense	144,662	44,878	237,627
Non-cash derivatives losses	26,065,579	3,952,582	30,018,161
Non-cash interest expense	—	528,535	962,834
Common stock issued to 401(k) plan	41,662	—	41,662
Common stock issued for services	209,451	—	209,451
Share-based compensation expense	921,512	664,908	1,800,352
Changes in operating assets and liabilities:			—
Restricted cash	(547,883)	—	(547,883)
Prepaid expenses	(12,805)	(70,268)	(93,971)
Other assets	(125,000)	—	(200,000)
Accounts payable	230,250	255,770	567,195
Accrued interest payable	—	(67,931)	(15,256)
Accrued expenses	370,822	(46,037)	618,369
Net cash used in operating activities	(7,429,965)	(2,648,513)	(14,218,273)
Cash flows from investing activities:			
Purchases of property and equipment	(278,923)	(146,262)	(630,708)
Net cash used in investing activities	(278,923)	(146,262)	(630,708)
Cash flows from financing activities:			
Proceeds from issuance of convertible notes payable	—	200,000	4,181,000
Proceeds from convertible bridge notes	—	500,000	500,000
Principle payments on capital lease obligation	(24,774)	—	(24,774)
Proceeds from (repayment of) from loans payable	134,372	(590,985)	134,372
Proceeds from issuaance of common stock and warrants	2,998,808	11,423,287	14,422,095
Net cash provided by financing activities	3,108,406	11,532,302	19,212,693
(Decrease) increase in cash and cash equivalents	(4,600,482)	8,737,527	4,363,712
Cash and cash equivalents at beginning of period	8,964,194	226,667	—
Cash and cash equivalents at end of period	$ 4,363,712	$ 8,964,194	$ 4,363,712
Supplemental disclosure of cash flow information and non-cash transactions:			
Cash paid for interest	$ 8,530	$ 34,204	$ 106,047
Conversion of convertible notes payable and accrued interest into common stock	$ —	$ 3,323,128	$ 4,672,484
Conversion of convertible bridge note payable and accrued interest into common stock	$ —	$ 504,597	$ 504,597
Asset acquired through capital lease obligation	$ 93,540	$ —	$ 93,540
Beneficial conversion feature on convertible and bridge notes payable	$ —	$ 272,762	$ 134,410
Fair value of warrants issued with bridge notes payable	$ —	$ 178,726	$ 178,726
Fair value of warrants issued in connection with loan agreement	$ 10,051	$ —	$ 10,051
Issuance of founders shares	$ —	$ —	$ 248
Reclassification of derivative warrant liability to additional paid-in capital	$ 1,239,539	$ —	$ 1,239,539

See notes to the consolidated financial statements.

1. NATURE OF OPERATIONS

Business

InVivo Therapeutics Corporation ("InVivo") was incorporated on November 28, 2005 under the laws of the State of Delaware. InVivo is developing and commercializing biopolymer scaffolding devices for the treatment of spinal cord injuries. The biopolymer devices are designed to protect the damaged spinal cord from further secondary injury and promote neuroplasticity, a process where functional recovery can occur through the rerouting of signaling pathways to the spared healthy tissue.

Since its inception, InVivo has devoted substantially all of its efforts to business planning, research and development, recruiting management and technical staff, acquiring operating assets and raising capital. Accordingly, InVivo is considered to be in the development stage.

Reverse Merger

On October 26, 2010, InVivo completed a reverse merger transaction (the "Merger") with InVivo Therapeutics Holdings Corp. (formerly Design Source, Inc.) ("ITHC"), a publicly traded company incorporated under the laws of the State of Nevada. InVivo became a wholly owned subsidiary of ITHC, which continues to operate the business of InVivo. As part of the Merger, ITHC issued 31,147,190 shares of its Common Stock to the holders of InVivo common stock on October 26, 2010 in exchange for the 2,261,862 outstanding common shares of InVivo and also issued 500,000 shares to its legal counsel in consideration for legal services provided. All share and per share amounts presented in these consolidated financial statements have been retroactively restated to reflect the 13.7706 to 1 exchange ratio of InVivo shares for ITHC shares in the Merger. Immediately prior to the Merger, ITHC had 6,999,981 shares of Common Stock outstanding.

The Merger was accounted for as a "reverse merger," and InVivo is deemed to be the accounting acquirer. The Merger was recorded as a reverse recapitalization, equivalent to the issuance of common stock by InVivo for the net monetary assets of ITHC accompanied by a recapitalization. At the date of the Merger, the 6,999,981 outstanding ITHC shares were reflected as an issuance of InVivo common stock to the prior shareholders of ITHC. ITHC had no net monetary assets as of the Merger so this issuance was recorded as a reclassification between additional paid-in capital and par value of Common Stock.

The historical consolidated financial statements are those of InVivo as the accounting acquirer. The post-merger combination of ITHC and InVivo is referred to throughout these notes to consolidated financial statements as the "Company." Subsequent to the Merger, the Company completed three closings as part of a private placement.

On October 26, 2010, in connection with the Merger described above, ITHC transferred all of its operating assets and liabilities to its wholly-owned subsidiary, D Source Split Corp., a company organized under the laws of Nevada ("DSSC"). DSSC was then split-off from ITHC through the sale of all outstanding shares of DSSC (the "Split-Off"). The assets and liabilities of ITHC were transferred to the Split-Off Shareholders in the Split-Off. ITHC executed a split off agreement with the Split-Off Shareholders which obligates the Split-Off Shareholders to assume all prior liabilities associated with Design Source, Inc. and all DSSC liabilities. In conjunction with the Split-Off, certain shareholders of ITHC surrendered for cancellation shares of ITHC common stock for no additional consideration. The purpose of the Split-Off was to make ITHC a shell company with no assets or liabilities in order to facilitate the Merger. Although all transactions

NATURE OF OPERATIONS (continued)

related to the Merger occurred simultaneously, the Split-Off, including the cancellation of shares, was considered to have occurred immediately prior to the Merger for accounting purposes. As the accounting acquiree in a reverse merger with a shell company, the historical financial statements of ITHC are not presented and these ITHC transactions are not reflected in the Company's accompanying consolidated financial statements.

2. SIGNIFICANT ACCOUNTING POLICIES

A summary of the significant accounting policies followed by the Company in the preparation of the financial statements is as follows:

Use of estimates

The process of preparing 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 and disclosure of assets and liabilities at the date of financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates and changes in estimates may occur.

Principles of consolidation

The consolidated financial statements include the accounts of InVivo Therapeutics Holdings Corp. and its wholly-owned subsidiary, InVivo Therapeutics Corporation. All significant intercompany balances and transactions have been eliminated in consolidation.

Cash and cash equivalents

As of December 31, 2011, the Company held approximately $4,364,000 in cash and cash equivalents. From time to time, the Company may have cash balances in financial institutions in excess of insurance limits. The Company has never experienced any losses related to these balances. All of the Company's non-interest bearing cash balances were fully insured at December 31, 2011 due to a temporary federal program in effect from December 31, 2010 through December 31, 2012. Under the program, there is no limit on the amount of insurance for eligible accounts. Beginning in 2013, insurance coverage will revert to $250,000 per depositor at each financial institution, and non-interest bearing cash balances may again exceed federally insured limits. The Company's cash equivalents are in money market funds and certificates of deposit. The cash and cash equivalents in interest-bearing accounts and non-interest bearing accounts ineligible under the program amounted to approximately $4,231,000 as of December 30, 2011.

Restricted cash

Restricted cash of $548,000 represents a $105,000 security deposit related to the Company's credit card account, a $50,000 minimum balance in a checking account that is required as part of a loan agreement, and a $393,000 standby letter of credit in favor of a landlord (see Note 18). This letter of credit expires December 22, 2012 and may be extended through July 31, 2023.

SIGNIFICANT ACCOUNTING POLICIES (continued)

Property and equipment

Property and equipment are carried at cost. Depreciation expense is provided over the estimated useful lives of the assets using the straight-line method. A summary of the estimated useful lives is as follows:

Classification	Estimated Useful Life
Computer hardware	5 years
Software	3 years
Research and lab equipment	5 years

Depreciation expense for the years ended December 31, 2011 and 2010 was $132,162 and $39,878, respectively. Maintenance and repairs are charged to expense as incurred, while any additions or improvements are capitalized.

Research and development expenses

Costs incurred for research and development are expensed as incurred. During 2010, the Company applied for a grant under the IRS Qualifying Therapeutic Discovery Project (QTDP) program. The application was approved and the Company received a grant for $244,500 under the program. This amount was recorded as a reduction in research and development expenses.

Concentrations of credit risk

The Company has no significant off-balance-sheet concentration of credit risk such as foreign exchange contracts, option contracts or other hedging arrangements. The Company may from time to time have cash in banks in excess of FDIC insurance limits.

Segment information

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker, or decision making group, in making decisions regarding resource allocation and assessing performance. To date, the Company has viewed its operations and manages its business as principally one operating segment, which is developing and commercializing biopolymer scaffolding devices for the treatment of spinal cord injuries. As of December 31, 2011 and 2010 all of the Company's assets were located in the United States.

Income taxes

For federal and state income taxes, deferred tax assets and liabilities are recognized based upon temporary differences between the financial statement and the tax basis of assets and liabilities. Deferred income taxes are based upon prescribed rates and enacted laws applicable to periods in which differences are expected to reverse. A valuation allowance is recorded when it is more likely than not that some portion or all of the deferred tax assets will not be realized. Accordingly, the Company provides a valuation allowance, if necessary, to reduce deferred tax assets to amounts that are realizable. Tax positions taken or expected to be taken in the course of preparing the Company's tax returns are required to be evaluated to determine whether the tax positions are "more-likely-than-not" of being sustained by the applicable tax authority. Tax

SIGNIFICANT ACCOUNTING POLICIES (continued)

positions not deemed to meet a more-likely-than-not threshold would be recorded as a tax expense in the current year. There were no uncertain tax positions that require accrual or disclosure to the financial statements as of December 31, 2011 or 2010. Tax returns for all years are still open for examination.

Impairment of long-lived assets

The Company continually monitors events and changes in circumstances that could indicate that carrying amounts of long-lived assets may not be recoverable. An impairment loss is recognized when expected cash flows are less than an asset's carrying value. Accordingly, when indicators of impairment are present, the Company evaluates the carrying value of such assets in relation to the operating performance and future undiscounted cash flows of the underlying assets. The Company's policy is to record an impairment loss when it is determined that the carrying value of the asset may not be recoverable. No impairment charges were recorded for the years ended December 31, 2011 and 2010.

Share-based payments

The Company recognizes compensation costs resulting from the issuance of stock-based awards to employees, non-employees and directors as an expense in the statement of operations over the service period based on a measurement of fair value for each stock-based award. The fair value of each option grant is estimated as of the date of grant using the Black-Scholes option-pricing model. The fair value is amortized as compensation cost on a straight-line basis over the requisite service period of the awards, which is generally the vesting period. Due to its limited operating history, limited number of sales of its Common Stock and limited history of its shares being publicly traded, the Company estimates its volatility in consideration of a number of factors including the volatility of comparable public companies.

Derivative instruments

The Company generally does not use derivative instruments to hedge exposures to cash-flow or market risks; however, certain warrants to purchase Common Stock that do not meet the requirements for classification as equity are classified as liabilities. In such instances, net-cash settlement is assumed for financial reporting purposes, even when the terms of the underlying contracts do not provide for a net-cash settlement. Such financial instruments are initially recorded at fair value with subsequent changes in fair value charged (credited) to operations in each reporting period. If these instruments subsequently meet the requirements for classification as equity, the Company reclassifies the fair value to equity.

Net Loss per Common Share

Basic and diluted net loss per share of Common Stock has been computed by dividing the net loss in each period by the weighted average number of shares of Common Stock outstanding during such period. For the periods presented, options, warrants and convertible securities were anti-dilutive and therefore excluded from diluted loss per share calculations.

SIGNIFICANT ACCOUNTING POLICIES (continued)

Recent Accounting Pronouncements

In May 2011, the FASB issued ASU 2011-04, Fair Value Measurement (Topic 820). The ASU provides amendments to achieve common fair value measurements and disclosure requirements in US GAAP and IFRS. The guidance clarifies and expands the disclosure pertaining to unobservable inputs used in Level 3 fair value measurements, including the disclosure of quantitative information related to (1) the valuation processes used, (2) the sensitivity of the fair value measurement to changes in unobservable inputs, and (3) use of a nonfinancial asset in a way that differs from the asset's highest and best use. The guidance also requires that public entities disclose the level within the fair value hierarchy for assets and liabilities not measured at fair value in the statement of financial position but for which the fair value is disclosed. The amendments are to be applied prospectively and are effective for annual periods beginning after December 15, 2011 for public companies. The Company does not expect the adoption to have a material impact.

3. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following:

	December 31,	
	2011	2010
Computer software and hardware	$ 138,662	$ 91,057
Research and lab equipment	585,586	260,728
Less accumulated depreciation	(203,766)	(71,604)
	$ 520,482	$280,181

4. OTHER ASSETS

Other assets consist of patent licensing fees paid to license intellectual property (see Note 17). The Company is amortizing the license fee to research and development over its 15-year term.

	December 31,	
	2011	2010
Patent licensing fee	$200,000	$ 75,000
Accumulated amortization	(33,861)	(21,361)
	$166,139	$ 53,639

Amortization expense was $12,500 and $5,000 for the years ended December 31, 2011 and 2010, respectively. Amortization expense in each of the next five years is expected to be approximately $17,000 per year.

5. ACCRUED EXPENSES

Accrued expenses consisted of the following:

	December 31, 2011	December 31, 2010
Other accrued expenses	$ 115,102	$ 45,053
Accrued payroll	358,144	179,629
Accrued vacation	145,123	22,865
	$ 618,369	$ 247,547

6. FAIR VALUES OF ASSETS AND LIABILITIES

The Company groups its assets and liabilities generally measured at fair value in three levels, based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value.

Level 1 – Valuation is based on quoted prices in active markets for identical assets or liabilities. Level 1 assets and liabilities generally include debt and equity securities that are traded in an active exchange market. Valuations are obtained from readily available pricing sources for market transactions involving identical assets or liabilities.

Level 2 – Valuation is based on observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Valuation is based on unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

The Company uses valuation methods and assumptions that consider among other factors the fair value of the underlying stock, risk-free interest rate, volatility, expected life and dividend rates in estimating fair value for the warrants considered to be derivative instruments.

Assets and liabilities measured at fair value on a recurring basis are summarized below:

	December 31, 2011			
	Level 1	**Level 2**	**Level 3**	**Fair Value**
Liabilities:				
Derivative warrant liability	$ —	$35,473,230	$ —	$35,473,230

	December 31, 2010			
	Level 1	**Level 2**	**Level 3**	**Fair Value**
Liabilities:				
Derivative warrant liability	$ —	$10,647,190	$ —	$10,647,190

7. CAPITAL LEASE PAYABLE

In February 2011, the Company entered into a capital lease agreement under which the Company leased certain laboratory equipment. Capital lease obligation consisted of the following:

	December 31, 2011
Capital lease payable	$ 68,766
Less:current portion	(30,724)
	$ 38,042

The total value of the laboratory equipment acquired under this capital lease agreement was $124,151 including a down payment of approximately $31,000. The capital lease is payable in monthly installments of $2,812 payable over thirty six months with the final payment due in January 2014. For the year ended December 31, 2011, interest expense recorded on the capital lease was $3,987. For the year ended December 31, 2011, depreciation expense on the assets under capital lease was $22,761 and the net book value at December 31, 2011 amounted to $101,390.

8. LOAN PAYABLE

In June 2011, the Company entered into a loan agreement with a bank. The loan agreement provides the Company with a $1,000,000 line of credit for the purchase of capital equipment. The line is available to the Company until December 31, 2012. The annual interest rate is the greater of 6.75% or 3.50% above the Prime Rate. Borrowings are repayable in equal monthly installments over a thirty six month period. The Company was assessed commitment fees totaling $10,000 and issued the bank a warrant for the purchase of 16,071 shares of Common Stock. The warrant has a seven year term and is exercisable at $1.40 per share. The fair value of the warrant was determined to be approximately $10,000 and was recorded as a deferred financing cost that will be amortized to interest expense over a three year period commencing from the date of the first draw from the equipment line of credit. Amortization of the deferred financing costs for the year ended December 31, 2011 was $4,146 and is included in interest expense. As of December 31, 2011, advances under the equipment line of credit totaled $151,733. The equipment line of credit is secured by substantially all the assets of the Company excluding intellectual property. In accordance with the agreement, the Company is required to maintain its primary banking and investments accounts with the commercial bank and a deposit of not less than $50,000 at the bank.

Loan payable consisted of the following:

	December 31, 2011
Equipment loan	$ 134,372
Less:current portion	(50,578)
	$ 83,794

Interest expense related to the loan payable in the year ended December 31, 2011 was $8,334. Principal payment due in the years ended December 31, 2012, 2013, and 2014 are $50,578, $50,578, and $33,216, respectively.

9. CONVERTIBLE NOTES PAYABLE

Since inception, the Company issued Convertible Notes Payable to investors totaling $4,181,000. In the year ended December 31, 2010, these notes provided cash proceeds of $200,000. The terms of the Convertible Notes Payable include interest at 8% and stipulated that the notes convert into shares of Common Stock upon the earlier of maturity of the notes or the completion of a Financing Round, a single financing or a series of related financings that raised a minimum of $4,000,000 or $5,000,000 depending on the terms of the individual notes. The notes convert at the offering price of such financing.

Certain of the notes entitled the holders to receive either a 10% or 20% discount on the conversion price if the notes were converted in connection with a Financing Round prior to the maturity date. The Company initially assessed whether a beneficial conversion feature existed on the issuance date based on the difference, if any, between the conversion price and the fair value of the Common Stock. The Company assumed the most favorable conversion price that would be in effect assuming no changes to the circumstances other than the passage of time. Based on this analysis, the Company concluded that there was no beneficial conversion feature at issuance.

However, the conversion terms are subject to change in the event of a Financing Round. Therefore, at the commitment date, the Company measured the contingent beneficial conversion feature based on the intrinsic value of the fixed percentage discount but such beneficial conversion feature was not recognized unless and until the triggering event occurs. This amount was determined by dividing the face amount of the convertible notes by the discount factor (0.90 or 0.80).

In March 2010, the Company completed a series of financings that met the definition of a Financing Round which accelerated the conversion of certain notes prior to their maturity dates triggering the discount provisions discussed above.

During the year ended December 31, 2010, the remaining outstanding Convertible Notes Payable of $3,040,000 and accrued interest payable of $288,128 converted into 3,792,417 shares of Common Stock in conjunction with the Financing Round. As of December 31, 2010, all of the Convertible Notes Payable had been converted into Common Stock.

As a result of the Financing Round in March 2010, the Company recorded the previously measured contingent beneficial conversion feature as a discount on the notes and additional paid-in capital. As the discount occurred simultaneously with the conversion of the notes, the discount was immediately charged to non-cash interest expense. Accordingly, during the year ended December 31, 2010, the Company recorded a beneficial conversion feature and related non-cash interest expense of $134,410.

Interest accrued on the outstanding balances at an annual rate of 8%. At the election of the Company, the accrued interest was to be paid in cash or in Common Stock at the time the notes were converted to Common Stock. For the year ended December 31, 2010, the Company accrued interest expense on the notes of $62,385.

10. BRIDGE NOTES PAYABLE

From July through September 2010, the Company raised $500,000 from the sale of 6% convertible promissory notes (the “Bridge Notes”). The Bridge Notes pay interest at 6% and had a stated maturity date of December 31, 2010. The Bridge Notes and all accrued interest were only convertible in the event of a Qualified Next Round Financing, as defined, at 100% of the price in that Qualified Next Round Financing. Otherwise, the Bridge Notes were to be repaid at their maturity date. In connection with the Bridge Notes,

BRIDGE NOTES PAYABLE (continued)

the Company also issued to Bridge Notes investors warrants to purchase 500,000 shares of Common Stock (the “Bridge Warrants”). The Bridge Warrants are exercisable for a period of five years with an exercise price of $1.00 per share.

In order to record the Bridge Notes and Bridge Warrants, the Company allocated the proceeds first to the fair value of the Bridge Warrants. The residual was then allocated to the Bridge Notes. As a result, the Company allocated $138,352 to the Bridge Warrants with the remainder of the proceeds allocated to the Bridge Notes. The total discount on the Bridge Notes of $138,352 was recognized as non-cash interest expense over the term of the Bridge Notes and was expensed to interest expense in 2010.

In order to determine if a beneficial conversion feature existed, the Company compared the effective conversion price of the Bridge Notes to the commitment date fair value of the Common Stock and determined a beneficial conversion feature in the amount of $138,352. However, since the Bridge Notes were only convertible in the event of a Qualified Next Round Financing, this was determined to be a contingent beneficial conversion feature not to be recognized unless and until the triggering event occurs.

In October 2010, the Company completed a private placement of Common Stock (see Note 11) which met the definition of a Qualified Next Round Financing. The Bridge Notes and accrued interest of $4,597 converted into 504,597 Units, with each unit consisting of one share of Common Stock and one warrant to purchase Common Stock at $1.40 per share. As a result of the Qualified Next Round Financing**,** the contingent beneficial conversion feature of $138,352 was recognized as a further discount on the Bridge Notes and additional paid-in capital on the date of conversion. Since the conversion took place simultaneously with the Qualified Next Round Financing, this discount of $138,352 was immediately charged to non-cash interest expense.

The Company engaged a registered broker-dealer as a placement agent (the “Placement Agent”) in conjunction with the Bridge Notes. As compensation, the Placement Agent received a warrant to purchase 100,000 shares of Common Stock at an exercise price of $1.00 per share. The fair value of the warrants issued to the Placement Agent of $40,373 was recorded as a debt issuance cost and amortized to non-cash interest expense over the term of the Bridge Notes.

For the year ended December 31, 2010, interest expense related to the Bridge Notes, including amortization of the discount and debt issuance costs, was $321,674.

The warrants issued to the Bridge Notes investors and the Placement Agent have provisions that include anti-dilution protection and under certain conditions, grant the right to the holder to request the Company to repurchase the warrant, and are therefore accounted for as derivative liabilities (see Note 13).

11. INCOME TAXES

No provision or benefit for federal or state income taxes has been recorded, as the Company has incurred a net loss for all of the periods presented, and the Company has provided a valuation allowance against its deferred tax assets.

At December 31, 2011, the Company had Federal and Massachusetts net operating loss carryforwards of approximately $14,950,000 and $14,928,000, respectively, of which federal carryforwards will expire in varying amounts beginning in 2026. Massachusetts net operating losses began to expire in 2011. Utilization of net operating losses may be subject to substantial annual limitations due to the “change in ownership” provisions of the Internal Revenue Code, and similar state provisions. The annual limitations may result in

INCOME TAXES (continued)

the expiration of net operating losses before utilization. The Company also had research and development tax credit carryforwards at December 31, 2011 of approximately $281,000 which will begin to expire in 2021 unless previously utilized.

Significant components of the Company's net deferred tax asset are as follows:

	December 31, 2011	December 31, 2010
Net operating loss carryforward	$ 5,896,441	$ 3,016,062
Research and development credit carryforward	257,110	120,316
Stock-based compensation	740,714	382,295
Deferred compensation	—	52,200
Charitable contributions	68,694	17,751
Subtotal	6,962,959	3,588,624
Valuation allowance	(6,962,959)	(3,588,624)
Net deferred taxes	$ —	$ —

The Company has maintained a full valuation allowance against its deferred tax assets in all periods presented. A valuation allowance is required to be recorded when it is more likely than not that some portion or all of the net deferred tax assets will not be realized. Since the Company cannot be assured of generating taxable income and thereby realizing the net deferred tax assets, a full valuation allowance has been provided. In the years ended December 31, 2011 and 2010, the valuation allowance increased by $3,374,000 and $1,570,000 respectively.

The Company has no uncertain tax positions at December 31, 2011 and 2010 that would affect its effective tax rate. The Company does not anticipate a significant change in the amount of uncertain tax positions over the next twelve months. Since he Company is in a loss carryforward position, the Company is generally subject to US federal and state income tax examinations by tax authorities for all years for which a loss carryforward is available.

Income tax benefits computed using the federal statutory income tax rate differs from the Company's effective tax rate primarily due to the following:

	December 31, 2011	December 31, 2010
Statutory rate	34.0%	34.0%
State taxes, net of benefit	1.4%	2.7%
Permanent differences:		
Derivative losses	-25.7%	-19.1%
Other	-0.2%	-0.2%
R&D tax credit	0.2%	0.7%
Increase in valuation reserve	-9.7%	-18.1%
	0.0%	0.0%

12. COMMON STOCK

The Company has authorized 200,000,000 shares of Common Stock, $0.00001 par value per share, of which 53,760,471 shares and 51,647,171 shares were issued and outstanding as of December 31, 2011 and 2010, respectively.

At inception in 2005, the Company issued its founders 24,787,080 shares of Common Stock with a par value of $248 for no consideration.

In 2009, the Company issued 1,472,435 shares of Common Stock to the holders of Convertible Notes Payable upon conversion of these notes. At the conversion dates, the principal balance of $1,141,000 and accrued interest payable of $203,366 were converted into Common Stock at a price of $0.91 per share.

In March 2010, the Company sold 1,095,258 shares of Common Stock to an investor at a price per share of $0.91 and the Company received cash proceeds of $1,000,000.

During the six months ended June 30, 2010, the Company issued 3,792,417 shares of Common Stock to the holders of Convertible Notes Payable upon the conversion of these notes. At the conversion date, the principal balance of $3,040,000 and accrued interest payable of $288,128 were converted into Common Stock. Certain notes provided for conversion at a discount to the $0.91 price (see Note 9).

On October 26, 2010, in conjunction with the Merger (see Note 1), the Company issued 6,999,981 shares of Common Stock to the former shareholders of ITHC.

In connection with the Merger on October 26, 2010 and in two subsequent closings in November and December 2010, the Company completed a private placement of 13,000,000 Units of its securities for total gross proceeds of $13,000,000 and net proceeds of $10,927,883 (“the Offering”). Included in these amounts are 504,597 Units and $504,597 related to the conversion of the Bridge Notes (see Note 10). Each Unit consisted of one share of Common Stock and a warrant to purchase one share of Common Stock exercisable at $1.40 per share (the “Investor Warrants”). In conjunction with the Merger and the Offering, the Company issued to an attorney 500,000 shares of its Common Stock with a fair value of $500,000. This was considered a stock issuance cost and was therefore recorded as both a debit and credit to additional paid-in capital.

In order to account for the Units, the Company allocated the proceeds between the Common Stock and warrants first to the fair value of the warrants with the residual allocated to the Common Stock. As a result, the Company allocated $4,475,791 to the warrants with the remainder of the proceeds allocated to the Common Stock. The fair value of the Placement Agent warrants, $2,040,091, was recorded as a warrant derivative liability and a stock issuance cost net against the gross proceeds received.

In October 2010, the Company issued 500,000 shares of Common Stock with a fair value of approximately $500,000 for legal services related to the Merger and related transactions. These shares were considered non-cash stock issuance costs and were recorded as a debit and credit to additional paid-in capital.

In connection with the Offering, the Company paid the Placement Agent a commission of 10% of the funds raised from such investors in the Offering. In addition, the Placement Agent received a non-accountable expense allowance equal to 3% of the proceeds raised in the Offering as well as warrants to purchase a number of shares of Common Stock equal to 20% of the number of common shares underlying Units sold to investors in the Offering. As a result of the foregoing arrangement, the Placement Agent was paid commissions and expenses of $1,690,000 and was issued warrants to purchase (i) 2,600,000 shares of Common Stock at an exercise price of $1.00 per share and (ii) 2,600,000 shares of Common Stock at an exercise price of $1.40 per share. Other cash expenses related to the private placement totaled $382,117.

COMMON STOCK (continued)

In December 2011, the Company completed a private placement with an investor that raised $2,000,000 of net proceeds. In this transaction the Company issued 980,392 shares of unregistered common stock and a warrant to purchase 343,137 shares exercisable at $3.06 per share with a five year term. The warrant was recorded as a debit and credit to additional paid-in capital.

During 2011, the Company issued 143,731 shares of Common Stock upon the exercise of stock options and received cash proceeds of approximately $10,000.

During 2011, the Company issued 215,000 unregistered shares with a fair value of approximately $198,000 to an investor relations firms in exchange for services provided.

In 2011, the Company issued 39,848 shares with a fair value of approximately $42,000 to the Company's 401(k) plan as a matching contribution.

During the fourth quarter of 2011, the Company issued 734,329 shares upon the exercise of warrants and received cash proceeds of approximately $988,000.

Common Stock Reserves

As of December 31, 2011, the Company had the following reserves established for the future issuance of Common Stock as follows:

Reserves for the exercise of warrants	18,405,975
Reserves for the exercise of stock options	7,879,005
Total Reserves	26,284,980

13. DERIVATIVE INSTRUMENTS

Certain warrants issued to the investors in the Offering, the Bridge Note investors and the Placement Agent (see notes 10 and 12) have provisions that include anti-dilution protection and, under certain conditions, grant the right to the holder to request the Company to repurchase the warrant. Accordingly, these warrants are accounted for as derivative liabilities. The Company uses the Black-Scholes option pricing model and assumptions that consider among other factors the fair value of the underlying stock, risk-free interest rate, volatility, expected life and dividend rates in estimating fair value for the warrants considered to be derivative instruments. The fair value of these derivative instruments at December 31, 2011 and 2010 was $35,473,230 and $10,647,190, respectively and are included as a derivative warrant liability, a current liability. Changes in fair value of the derivative financial instruments are recognized currently in the Statement of Operations as a derivatives gain or loss. The warrant derivative losses are non-cash expenses and for the years ended December 31, 2011 and 2010 $26,065,579 and $3,952,582, respectively were included in other income (expense) in the consolidated statement of operations.

The assumptions used principally in determining the fair value of warrants were as follows:

	As of December 31, 2011	As of December 31, 2010
Risk free interest rate	.52-.58%	2.0%
Expected dividend yield	0%	0%
Contractual term	3.7-3.9 years	4.7-4.9 years
Expected volatility	79%	50%

DERIVATIVE INSTRUMENTS (continued)

The primary underlying risk exposure pertaining to the warrants is the change in fair value of the underlying Common Stock for each reporting period.

The table below presents the changes in derivative warrant liability during the years ended December 31, 2011 and 2010:

	Years Ended December 31, 2011	Years Ended December 31, 2010
Balance at beginning of year	$ 10,647,190	$ —
Warrants intially recorded as derivative liability	—	6,694,608
Increase in the fair value of the warrants	26,065,579	3,952,582
Reduction in derivative liability due to exercise of warrants	(1,239,539)	—
Balance at end of year	$ 35,473,230	$ 10,647,190

14. STOCK OPTIONS

In 2007, the Company adopted the 2007 Employee, Director and Consultant Stock Plan (the “2007 Plan”). Pursuant to the 2007 Plan, the Company’s Board of Directors (or committees and/or executive officers delegated by the Board of Directors) may grant incentive and nonqualified stock options to the Company’s employees, officers, directors, consultants and advisors. As of December 31, 2011, there were options to purchase an aggregate of 4,379,005 shares of Common Stock outstanding under the 2007 Plan and no shares available for future grants under the 2007 Plan.

On October 26, 2010, the Company’s Board of Directors adopted the 2010 Equity Incentive Plan, (the “2010 Plan”). The Company’s shareholders approved the 2010 Plan, as amended, on August 3, 2011. The 2010 Plan provides for grants of incentive stock options to employees and nonqualified stock options and restricted Common Stock to employees, consultants and non-employee directors of the Company. As of December 31, 2011, the number of shares authorized for issuance under the 2010 Plan was 3,500,000 shares. As of December 31, 2011, there were options to purchase an aggregate of 2,003,888 shares of Common Stock outstanding under the 2010 Plan and 1,492,112 shares available for future grants under the 2010 Plan. Options issued under the 2007 Plan and the 2010 Plan (collectively the “Plans”) are exercisable for up to 10 years from the date of issuance.

Share-based compensation

For stock options issued and outstanding for the years ended December 31, 2011 and 2010, the Company recorded non-cash, stock-based compensation expense of $921,512 and $664,908, respectively, net of forfeitures.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model that uses the assumptions noted in the following table. Due to its limited operating history and limited number of sales of its Common Stock, the Company estimated its volatility in consideration of a number of factors including the volatility of comparable public companies. The Company uses historical data, as well as subsequent events occurring prior to the issuance of the financial statements, to estimate option exercises and employee terminations within the valuation model. The expected term of options granted under the Plans, all of which qualify as “plain vanilla,” is based on the average of the contractual term (generally

STOCK OPTIONS (continued)

10 years) and the vesting period (generally 48 months). For non-employee options, the expected term is the contractual term. The risk-free rate is based on the yield of a U.S. Treasury security with a term consistent with the option.

The assumptions used principally in determining the fair value of options granted were as follows:

	December 31, 2011	December 31, 2010
Risk-free interest rate	0.97%-3.05%	1.63%-3.05%
Expected dividend yield	0%	0%
Expected term (employee grants)	6.25 years	6.25 years
Expected volatility	69%	49%

A summary of option activity under the Plans and options granted to officers of the Company outside any plan as of December 31, 2011 and changes for the year then ended is presented below:

Options	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term in Years	Aggregate Intrinsic Value
Outstanding at December 31, 2010	6,195,557	$ 0.59		
Granted	1,718,888	$ 1.52		
Forfeited	(1,467,821)	$ 1.00		
Exercised	(143,731)	$ 0.07		
Outstanding at December 31, 2011	6,302,893	$ 0.76	7.69	$12,520,372
Vested at December 31, 2011	3,366,302	$ 0.37	6.50	$ 8,025,166

The weighted average grant-date fair value of options granted during years ended December 31, 2011 and 2010 was $1.14 and $0.55 per share, respectively. The total fair value of options that vested in years ended December 31, 2011 and 2010 was $1,324,325 and $962,810, respectively. As of December 31, 2011, there was approximately $2,239,247 of total unrecognized compensation expense, related to non-vested share-based option compensation arrangements. The unrecognized compensation expense is estimated to be recognized over a period of 3.25 years at December 31, 2011.

In September 2011, the Company granted 80,000 shares of Common Stock under the 2010 Plan to a consultant as a restricted stock award with 30,000 shares vesting upon FDA clearance of an Investigational Device Exemption to permit the commencement of a human clinical trial and 50,000 shares vesting upon FDA approval of the Company’s biopolymer scaffolding device to treat spinal cord injuries. The Company determined upon grant that the vesting of the 30,000 shares is probable and the fair value of these shares at $23,400 is being amortized over an eight month period from September 2011 through April 2012. The Company has determined that vesting of the 50,000 shares is not probable at this time. For the year ended December 31, 2011 the Company amortized $11,700 of stock compensation expense related to this grant.

15. WARRANTS

The following presents information about warrants to purchase Common Stock issued and outstanding at December 31, 2011:

Year Issued	Classification	Number of Warrants	Exercise Price	Date of Expiration
2010	Derivative	14,929,733	$ 1.40	10/26/2015-12/3/2015
2010	Derivative	3,117,034	$ 1.00	9/26/2015-12/3/2015
2011	Equity	16,071	$ 1.40	6/17/2018
2011	Equity	343,137	$ 3.06	12/21/2016
Total		18,405,975		
Weighted average exercise price			$ 1.39	
Weighted average life in years				3.9

16. EMPLOYEE BENEFIT PLAN

In November 2006, the Company adopted a 401(k) plan (the "Plan") covering all employees. Employees must be 21 years of age in order to participate in the Plan. Under the Plan, the Company has the option to make matching contributions. For the year ended December 31, 2011, the Company made a matching contribution in the form of the issuance of Company common stock. In the fourth quarter of 2011 the Company issued 39,848 shares of common stock and the fair value of $41,662 was recorded as expense in the Statement of Operations.

17. INTELLECTUAL PROPERTY LICENSE

The Company has obtained a world-wide exclusive license (the "CMCC License") for patents co-owned by Massachusetts Institute of Technology and Harvard's Children's Hospital initially covering the use of biopolymers to treat spinal cord injuries, and to promote the survival and proliferation of human stem cells in the spinal cord. During 2011, the Company obtained additional rights for use in the field of peripheral nerve injuries. The CMCC License has a 15-year term, or as long as the life of the last expiring patent right, whichever is longer, unless terminated earlier by the licensor. In connection with the CMCC License, the Company paid an initial $75,000 licensing fee and is required to pay certain annual maintenance fees, milestone payments and royalties. During 2011, the Company paid $75,000 to expand the license and at December 31, 2011, accrued $50,000 for a milestone payment. License fees are capitalized and all costs associated with maintenance of the CMCC License are expensed as incurred (see Note 4).

18. COMMITMENTS AND CONTINGENCIES

Operating Lease

On November 15, 2010, the Company entered into a commercial lease for 1,200 square feet of office and laboratory space in Medford, MA. The term of this lease is for two years with monthly payments of approximately $3,900. On November 29, 2011, the Company entered into a commercial lease for 20,917 square feet of office, laboratory and manufacturing space in Cambridge, MA. The term of this lease is six years and three months, with one five-year extension option. Monthly payments of $76,696 commence on July 15, 2012.

COMMITMENTS AND CONTINGENCIES (continued)

The terms of the lease required a standby letter of credit for the amount of $392,883 deposited with the commercial bank as security for the letter of credit (see Note 4).

Pursuant to the terms of the non-cancelable lease agreements in effect at December 31, 2011, future minimum rent commitments are as follows:

Year Ending December 31,	
2012	$ 311,574
2013	926,449
2014	947,366
2015	968,283
2016	989,200
2017 and thereafter	1,736,111
Total	$ 5,878,983

Total rent expense for the years ended December 31, 2011 and 2010, including month-to-month leases, was approximately $357,000 and $270,000, respectively.

19. SUBSEQUENT EVENTS

In January 2012, the Company entered into a research contract with the Geisenger Health System under which the Company is obligated to pay Geisenger $150,000 for a pre-clinical study that will evaluate the Company’s hydrogel for the treatment of peripheral nerve injuries

In February 2012, the Company completed a public offering of common stock and issued 9,523,810 shares of common stock at a purchase price of $2.10 per common share. The offering raised gross proceeds of $20.0 million and $18.1 million of net proceeds after deducting the underwriter discount and offering expenses.

On March 5, 2012, in conjunction with an amended and restated employment agreement, the Chief Executive Officer was granted an option to purchase 590,000 shares of common stock at an exercise price of $2.68 per share, the fair value on the date the employment agreement was executed. The option has a ten year life and vests monthly over a period of forty eight months. Stock compensation expense of approximately $850,000 will be amortized over the forty eight month vesting period.

PART IV

Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

Financial Statements.

The financial statements listed in the Index to Consolidated Financial Statements appearing in Item 8 are filed as part of this report.

Financial Statement Schedules.

All financial statement schedules have been omitted as they are either not required, not applicable, or the information is otherwise included.

Exhibits.

The exhibits listed in the Exhibit Index immediately preceding the exhibits are filed as part of this Amendment No. 1 on Form 10-K/A.

SIGNATURES

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

INVIVO THERAPEUTICS HOLDINGS CORP.

Date: September 12, 2013

By: *\/s\/ Michael J. Astrue*
Name: Michael J. Astrue
Title: Interim Chief Executive Officer

EXHIBIT INDEX

23.1	Consent of Wolf & Company, P.C.
31.1	Certification by the Principal Executive Officer and Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statements (Nos. 333-189002, 333-183491, 333-173208, 333-176110 and 333-176111) on Form S-8 and Registration Statement (No. 333-188573, 333-178584 and 333-171998) on Form S-3 of our report dated March 14, 2012, relating to our audits of the consolidated financial statements of InVivo Therapeutics Holdings Corp. appearing in the Amendment No. 1 to the Annual Report on Form 10-K of InVivo Therapeutics Holdings Corp. for the year ended December 31, 2011.

/s/ Wolf & Company, P.C.
Wolf & Company, P.C.
Boston, Massachusetts
September 11, 2013

Exhibit 31.1

SARBANES-OXLEY SECTION 302(a) CERTIFICATION

I, Michael J. Astrue, certify that:

1. I have reviewed this Annual Report on Form 10-K/A of InVivo Therapeutics Holdings Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

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

4. I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under my supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

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

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

5. I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of 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: September 12, 2013

/s/ Michael J. Astrue

Michael J. Astrue, Principal Executive Officer and Principal Financial Officer

Exhibit 32.1

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

In connection with the Annual Report of InVivo Therapeutics Holdings Corp. (the “Company”) on Form 10-K/A for the period ended December 31, 2011 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned officer of the Company hereby certifies, to his knowledge, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

Dated: September 12, 2013	/s/ Michael J. Astrue
	Michael J. Astrue, Interim Chief Executive Officer and Principal Financial Officer