UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

	FORM	10-Q	
\boxtimes	QUARTERLY REPORT PURSUANT TO SECTION 13 C 1934	OR 15(d) OF THE SECURITIES EXCHANGE ACT OF	
	For the quarterly period	ended June 30, 2012.	
	or		
	TRANSITION REPORT PURSUANT TO SECTION 13 C	OR 15(d) OF THE SECURITIES EXCHANGE ACT OF	
	For the transition period	from to .	
	Commission File Nu	mber: 000-52089	
	InVivo Therapeuti (Exact name of registrant a	<u> </u>	
	Nevada (State or other jurisdiction of	36-4528166 (I.R.S. Employer	
	incorporation or organization)	(i.R.S. Employer Identification Number)	
	One Kendall Square		
	Suite B14402 Cambridge, MA	02139	
	(Address of principal executive offices)	(Zip code)	
	(617) 863 (Registrant's telephone num		
	One Broadwa Cambridge, (Former Name, former address and former	MA 02142	
	Indicate by check mark whether the registrant (1) has filed all reports requiring the preceding 12 months (or for such shorter period that the registrant was rirements for the past 90 days. Yes \boxtimes No \square		
	Indicate by check mark whether the registrant has submitted electronically a submitted and posted pursuant to Rule 405 of Regulation S-T ($\S 232.405$ of the strant was required to submit and post such files). Yes \boxtimes No \square	nd posted on its corporate Web site, if any, every Interactive Data File require its chapter) during the preceding 12 months (or for such shorter period that the	
the o	Indicate by check mark whether the registrant is a large accelerated filer, an lefinitions of "large accelerated filer," "accelerated filer," and "smaller reporting the state of the control of the cont	accelerated filer, a non-accelerated filer, or a smaller reporting company. See ag company" in Rule 12b-2 of the Exchange Act.	
Larg	e accelerated filer \square	Accelerated filer	
Non	-accelerated filer \Box (Do not check if a smaller reporting company)	Smaller reporting company	X
	Indicate by check mark whether the registrant is a shell company (as defined	in Rule 12b-2 of the Exchange Act). Yes \square No \boxtimes	
	As of August 10, 2012, 64,807,847 shares of the registrant's Common Stock	¢0,00001	

Item

INVIVO THERAPEUTICS HOLDINGS CORP. Quarterly Report on Form 10-Q for the period ended June 30, 2012

TABLE OF CONTENTS

PART I

FINANCIAL INFORMATION

<u>Item</u>	Page
1. Financial Statements	
Consolidated Balance Sheets as of June 30, 2012 and December 31, 2011	3
Consolidated Statements of Operations for the three and six months ended June 30, 2012 and 2011	4
Consolidated Statements of Cash Flows for the three and six months ended June 30, 2012 and 2011	5
Notes to Financial Statements (Unaudited)	7
2. Management's Discussion and Analysis of Financial Condition and Results of Operations	14
3. Quantitative and Qualitative Disclosures about Market Risk	16
4. Controls and Procedures	16
PART II	
OTHER INFORMATION	
1. Legal Proceedings	17
1A. Risk Factors	17
2. Unregistered Sales of Equity Securities and Use of Proceeds	17
3. Defaults Upon Senior Securities	17
4. Mine Safety Disclosures	17
5. Other Information	17
6. Exhibits	17

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements.

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

	June 30, 2012	December 31, 2011
ASSETS:	Unaudited	
Current assets:		
Cash and cash equivalents	\$ 18,036,626	\$ 4,363,712
Restricted cash	659,719	547,883
Prepaid expenses	462,828	104,022
Total current assets	19,159,173	5,015,617
Property and equipment, net	684,715	520,482
Other assets	157,389	166,139
Total assets	\$ 20,001,277	\$ 5,702,238
LIABILITIES AND STOCKHOLDERS' DEFICIT:		
Current liabilities:		
Accounts payable	\$ 576,963	\$ 567,195
Loan payable-current portion	106,911	50,578
Capital lease payable-current portion	34,292	30,724
Derivative warrant liability	23,527,882	35,473,230
Accrued expenses	289,862	618,369
Total current liabilities	24,535,910	36,740,096
Loan payable-less current portion	171,172	83,794
Capital lease payable-less current portion	19,326	38,042
Total liabilities	24,726,408	36,861,932
Commitments and contingencies		
Stockholders' deficit:		
Common stock, \$0.00001 par value, authorized 200,000,000 shares at June 30, 2012 and December 31, 2011; issued		
and outstanding 64,693,936 and 53,760,471 shares at June 30, 2012 and December 31, 2011, respectively.	647	538
Additional paid-in capital	37,740,580	16,656,830
Deficit accumulated during the development stage	(42,466,358)	(47,817,062)
Total stockholders' deficit	(4,725,131)	(31,159,694)
Total liabilities and stockholders' deficit	\$ 20,001,277	\$ 5,702,238

InVivo Therapeutics Holdings Corp. (A Developmental Stage Company)

Consolidated Statements of Operations (Unaudited)

		nths Ended e 30,		th Ended e 30,	Period from November 28, 2005 (inception) to June 30,
	2012	2011	2012	2011	2012
Operating expenses:					
Research and development	\$ 1,307,395	\$ 1,392,238	\$ 2,247,948	\$ 2,028,561	\$ 11,131,782
General and administrative	1,447,668	1,135,103	2,967,880	1,899,422	11,219,417
Total operating expenses	2,755,063	2,527,341	5,215,828	3,927,983	22,351,199
Operating loss	(2,755,063)	(2,527,341)	(5,215,828)	(3,927,983)	(22,351,199)
Other income (expense):					
Other income	_	_	_	_	383,000
Interest income	12,344	2,988	14,781	5,806	34,830
Interest expense	(10,687)	(8,682)	(15,693)	(10,195)	(1,082,024)
Derivatives gain (loss)	4,954,238	1,162,897	10,567,444	1,284,244	(19,450,717)
Other income (expense), net	4,955,895	1,157,203	10,566,532	1,279,855	(20,114,911)
Net income (loss)	\$ 2,200,832	\$ (1,370,138)	\$ 5,350,704	\$ (2,648,128)	\$(42,466,110)
Net income (loss) per share, basic	\$ 0.03	\$ (0.03)	\$ 0.09	\$ (0.05)	\$ (1.28)
Net income (loss) per share, diluted	\$ 0.03	\$ (0.03)	\$ 0.07	\$ (0.05)	\$ (1.28)
Weighted average number of common shares outstanding, basic	64,105,886	51,676,855	61,055,069	51,668,942	33,052,153
Weighted average number of common shares outstanding, diluted	74,279,084	51,676,855	71,621,568	51,668,942	33,052,153

InVivo Therapeutics Holdings Corp. (A Developmental Stage Company)

Consolidated Statements of Cash Flows (Unaudited)

			Period from November 28, 2005
		Six Months Ended June 30,	
	2012	2011	June 30, 2012
Cash flows from operating activities:			
Net gain (loss)	\$ 5,350,704	\$(2,648,128)	\$(42,466,110)
Adjustments to reconcile net income (loss) to net cash used in operating activities:			
Depreciation and amortization expense	96,808	62,618	334,435
Non-cash derivatives (gain) loss	(10,567,444)	(1,284,244)	19,450,717
Non-cash interest expense	_	_	962,834
Common stock issued to 401(k) plan	42,204	_	83,866
Common stock issued for services	24,750	55,250	234,201
Share-based compensation expense	767,955	510,342	2,568,307
Changes in operating assets and liabilities:			
Restricted cash	(111,836)	(105,000)	(659,719)
Prepaid expenses	(358,806)	(160,030)	(452,777)
Other assets	_	(75,000)	(200,000)
Accounts payable	9,768	(113,049)	576,963
Accrued interest payable	_	_	(15,256)
Accrued expenses	(328,507)	(21,041)	289,862
Net cash used in operating activities	(5,074,404)	(3,778,282)	(19,292,677)
Cash flows from investing activities:			
Purchases of property and equipment	(252,290)	(211,503)	(882,998)
Net cash used in investing activities	(252,290)	(211,503)	(882,998)
Cash flows from financing activities:			
Proceeds from issuance of convertible notes payable	<u>_</u>	<u> </u>	4,181,000
Proceeds from convertible bridge notes	_	_	500,000
Principal payments on capital lease obligation	(15,148)	(12,461)	(39,922)
Proceeds from loans payable, net	143,711	(12,101)	278,083
Proceeds from issuance of common stock and warrants	18,871,045	1,999	33,293,140
Net cash provided (used in) by financing activities	18,999,608	(10,462)	38,212,301
Increase (decrease) in cash and cash equivalents	13,672,914	(4,000,247)	18,036,626
Cash and cash equivalents at beginning of period	4,363,712	8,964,194	
Cash and cash equivalents at end of period	\$ 18,036,626	\$ 4,963,947	\$ 18,036,626

(continued)

InVivo Therapeutics Holdings Corp. (A Developmental Stage Company)

Consolidated Statements of Cash Flows (Concluded) (Unaudited)

	Six Months June 3 2012		Period from November 28, 2005 (inception) to June 30, 2012
Supplemental disclosure of cash flow information and non-cash transactions:			
Cash paid for interest	\$ 7,746	\$10,195	\$ 113,793
Conversion of convertible notes payable and accrued interest into common stock	\$ —	\$ —	\$4,672,484
Conversion of convertible bridge note payable and accrued interest into common stock	\$	\$ —	\$ 504,597
Asset acquired through capital lease obligation	\$ —	\$93,540	\$ 93,540
Beneficial conversion feature on convertible and bridge notes payable	<u> </u>	\$ —	\$ 134,410
Fair value of warrants issued with bridge notes payable	\$ —	\$ —	\$ 178,727
Fair value of warrants issued in connection with loan agreement	\$	\$10,051	\$ 10,051
Issuance of founders shares	\$	<u>\$</u>	\$ 248
Reclassification of derivative warrant liability to additional paid-in capital	\$1,377,904	\$ —	\$2,617,443

InVivo Therapeutics Holdings Corp. (A Development Stage Company) Notes to Consolidated Financial Statements Period Ended June 30, 2012 (Unaudited)

1. NATURE OF OPERATIONS AND BASIS OF PRESENTATION

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 and peripheral nerve injuries. In 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 Corporation (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, 2011 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 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 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.

Basis of Presentation

The accompanying unaudited consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States ("GAAP") consistent with those applied in, and should be read in conjunction with, the Company's audited financial statements and related footnotes for the year ended December 31, 2011 included in the Company's Annual Report on Form 10-K as filed with the United States Securities and Exchange Commission ("SEC") on March 15, 2012. The unaudited consolidated financial statements reflect all adjustments, consisting only of normal recurring adjustments, which are, in the opinion of management, necessary for a fair presentation of the Company's financial position as of June 30, 2012 and its results of operations and cash flows for the interim periods presented and are not necessarily indicative of results for subsequent interim periods or for the full year. The interim financial statements do not include all of the information and footnotes required by GAAP for complete financial statements as allowed by the relevant SEC rules and regulations; however, the Company believes that its disclosures are adequate to ensure that the information presented is not misleading.

2. CASH AND CASH EQUIVALENTS

As of June 30, 2012, the Company held \$18,037, 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 June 30, 2012 due to a temporary federal program 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. Cash and cash equivalents consist of the following:

	June 30, 2012	December 31, 2011
Cash on hand	\$ 162,798	\$ 133,035
Money market fund	7,873,828	4,230,677
	8,036,626	4,363,712
Certificates of deposit		
Maturing in September 2012	5,000,000	_
Maturing in November 2012	5,000,000	_
	10,000,000	
Total cash and cash equivalents	\$18,036,626	\$4,363,712

3. RESTRICTED CASH

Restricted cash of \$660,000 represents \$315,000 of security deposits related to the Company's credit card accounts, a \$50,000 minimum balance in a checking account that is required as part of a loan agreement, and a \$295,000 cash account securing a standby letter of credit in favor of a landlord (see Note 5). This letter of credit expires December 22, 2012 and may be extended through July 31, 2023.

4. FAIR VALUE 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:

		June 30, 2012		
	Level 1	Level 2	Level 3	Fair Value
Liabilities:				
Derivative warrant liability	\$ —	\$23,527,882	\$ —	\$23,527,882
				
		Decembe	r 31, 2011	
	Level 1	Decembe Level 2	r 31, 2011 Level 3	Fair Value
Liabilities:	Level 1			Fair Value
Liabilities: Derivative warrant liability	<u>Level 1</u> \$ —			Fair Value \$35,473,230

5. COMMITMENTS

Operating Lease Commitment

The Company leases approximately 1,597 square feet of laboratory and office space in Medford, Massachusetts at a monthly cost of \$5,476 under a lease expiring on November 15, 2012.

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.

The terms of this lease require a standby letter of credit in the amount of \$295,000 secured by a deposit with a commercial bank (see Note 3). Pursuant to the terms of the non-cancelable lease agreements in effect at June 30, 2012, future minimum rent commitments are as follows:

Year Ended December 31,	
2012	\$ 421,826
2013	929,935
2014	950,852
2015	971,737
2016	992,648
2017 and thereafter	1,825,008
Total	\$6,092,006
2015 2016 2017 and thereafter	971,7 992,6 1,825,0

Total rent expense for the six months ended June 30, 2012 and 2011, including month-to-month leases, was \$215,000 and \$207,000 respectively. Total rent expense for the three months ended June 30, 2012 and 2011, including month-to-month leases, was \$114,000 and \$84,000 respectively.

Other Commitments

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. During the first quarter of 2012, the Company made an up-front payment of \$60,000 for this study and this cost was expensed to Research and Development. During the second quarter of 2012, the Company did not make any payments under this contract.

6. CAPITAL LEASE PAYABLE

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

	June 30, 2012	December 31, 2011
Capital lease payable	\$ 53,618	\$ 68,766
Less:current portion	(34,292)	(30,724)
	\$ 19,326	\$ 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 three and six months ended June 30, 2012, interest expense recorded on the capital lease was \$1,353 and \$2,545, respectively. For the three and six months ended June 30, 2011, interest expense recorded on the capital lease was \$1,181 and \$2,024 respectively. For the three and six months ended June 30, 2012 depreciation expense was \$6,208 and \$12,416, respectively. For the three and six months ended June 30, 2011, depreciation expense was \$6,208 and \$10,436, respectively.

7. 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 six months ended June 30, 2012 was \$7,947 and is included in interest expense. As of June 30, 2012, advances under the equipment line of credit totaled \$320,733. 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:

	June 30, 2012	December 31, 2011
Equipment loan	\$ 278,083	\$ 134,372
Less:current portion	(106,911)	(50,578)
	\$ 171,172	\$ 83,794

Interest expense related to the loan payable for the three and six months ended June 30, 2012 was \$2,931 and \$5,201, respectively.

8. COMMON STOCK

The Company has authorized 200,000,000 shares of Common Stock, \$0.00001 par value per share, of which 64,693,936 shares were issued and outstanding as of June 30, 2012 and 53,760,471 shares were issued and outstanding as of December 31, 2011.

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 approximately \$20 million and the Company received net proceeds of approximately \$18,207,000 after deducting underwriter discounts and offering expenses.

During the first quarter of 2012, the Company issued 281,691 shares of Common Stock upon the exercise of stock options and received cash proceeds of approximately \$20,500.

During the first quarter of 2012, the Company issued 362,400 shares of common stock upon the exercise of warrants, including warrants to purchase 266,123 shares of Common Stock exercised through cashless exercise provisions and warrants to purchase 220,000 shares of Common Stock exercised for cash, providing cash proceeds of approximately \$292,000.

During the second quarter of 2012, the Company issued 405,737 shares of Common Stock upon the exercise of stock options and received cash proceeds of approximately \$29,500.

During the second quarter of 2012, the Company issued 326,451 shares of common stock upon the exercise of warrants, including warrants to purchase 92,975 shares of Common Stock exercised through cashless exercise provisions and warrants to purchase 277,946 shares of Common Stock exercised for cash, providing cash proceeds of approximately \$374,000.

During the second quarter of 2012, the Company issued 18,376 shares of common stock with a fair value of approximately \$42,000 to the Company's 401(k) plan as a matching contribution.

9. DERIVATIVE INSTRUMENTS

Certain warrants issued to the investors in the fourth quarter of 2010 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 a derivative liability on the consolidated balance sheet and measured at fair value. 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 June 30, 2012 and December 31, 2011 was \$23,527,882 and \$35,472,230, 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 gains or losses are non-cash item and are included in other income in the consolidated statement of operations. The warrant derivative gain for the three and six months ended June 30, 2012 was \$4,954,238 and \$10,567,444, respectively. The warrant derivative gain for the three and six months ended June 30, 2011 was \$1,162,897 and \$1,284,244, respectively.

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

	June 30, 2012
Risk-free interest rate	0.44%-0.48%
Expected dividend yield	0%
Expected term	3.17-3.43 years
Expected volatility	64.8%

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 for the six months ended June 30, 2012 and 2011:

	Six Months End	Six Months Ended June 30,	
	2012	2011	
Balance at December 31,	\$ 35,473,230	\$10,647,190	
Decrease in the fair value of the warrants	(10,567,444)	(1,282,244)	
Reduction in derivative liability due to exercise of warrants	(1,377,904)		
Balance at June 30,	\$ 23,527,882	\$ 9,364,946	

10. 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 June 30, 2012, there were options to purchase an aggregate of 3,691,577 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 and on May 30, 2012 approved an amendment to the 2010 Plan to increase the number of shares available for issuance under the 2010 Plan. 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 June 30, 2012, the number of shares authorized for issuance under the 2010 Plan, as amended, was 6,500,000 shares. As of June 30, 2012, there were options to purchase an aggregate of 3,874,890 shares of Common Stock outstanding under the 2010 Plan and 2,625,110 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 three and six months ended June 30, 2012, the Company recorded non-cash, stock-based compensation expense of \$530,413 and \$767,955, 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 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 to employees were as follows:

	2012
Risk-free interest rate	1.07%-2.41%
Expected dividend yield	0%
Expected term (employee grants)	6.08 years
Expected volatility	68%

A summary of option activity under the Plans and options granted to officers of the Company outside any plan as of June 30, 2012 and changes during the three months 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, 2011	6,302,893	\$ 0.76		
Granted	1,961,001	\$ 2.54		
Forfeited	(10,000)	\$ 0.85		
Exercised	(687,428)	\$ 0.07		
Outstanding at June 30, 2012	7,566,466	\$ 1.29	7.96	\$8,108,171
Vested at June 30, 2012	3,273,837	\$ 0.60	6.51	\$5,564,395

The weighted average grant-date fair value of options granted during the six months ended June 30, 2012 was \$2.54 per share. The total fair value of options that vested in the three months ended June 30, 2012 was \$511,220. As of June 30, 2012, there was approximately \$4,005,000 of total unrecognized compensation expense, related to non-vested share-based compensation arrangements. The unrecognized compensation expense is estimated to be recognized over a period of 3.1 years at June 30, 2012.

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 had previously determined that the vesting of the 30,000 shares was probable and the fair value of these shares at \$23,400 was being amortized over an eight month period from September 2011 through April 2012. In March of 2012, the contract with the consultant was terminated and the consultant had no vested right to the restricted stock, so accordingly, the \$11,700 of expense previously recorded in 2011 was reversed in 2012.

11. WARRANTS

The following presents information about warrants to purchase Common Stock issued and outstanding at June 30, 2012:

		Number of	Exercise	
Year Issued	Classification	Warrants	Price	Date of Expiration
2010	Derivative	14,397,219	\$ 1.40	10/26/2015-12/3/2015
2010	Derivative	2,792,504	\$ 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		17,548,931		
Weighted average exercise price			\$ 1.40	
NAT-1				2.42
Weighted average life in years				3.42

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

The following management's discussion and analysis should be read in conjunction with the unaudited consolidated financial statements included in this report and with the Company's historical consolidated financial statements and the related notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2011 (the "2011 Annual Report"). The management's discussion and analysis contains forward-looking statements of our plans, objectives, expectations and intentions that involve risks and uncertainties, including those we detailed under "Risk Factors" in Item 1A of our 2011 Annual Report. Any statements that are not statements of historical fact are forward-looking statements. When used, the words "believe," "plan," "intend," "anticipate," "target," "estimate," "expect" and the like, and/or future tense or conditional constructions ("will," "may," "could," "should," etc.), or similar expressions, identify certain of these forward-looking statements. These forward-looking statements are subject to risks and uncertainties that could cause actual results or events to differ materially from those expressed or implied by the forward-looking statements in this quarterly report. The Company's actual results and the timing of events could differ materially from those anticipated in these forward-looking statements as a result of several factors. The Company does not undertake any obligation to update forward-looking statements to reflect events or circumstances occurring after the date of this quarterly report.

The discussion and analysis of the Company's financial condition and results of operations are based on the Company's financial statements, which the Company has prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires the Company to make 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, as well as the reported revenues and expenses during the reporting periods. On an ongoing basis, the Company evaluates such estimates and judgments, including those described in greater detail below. The Company bases its estimates on historical experience and on various other factors that the Company believes are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Overview

The Company is developing and commercializing biopolymer scaffolding devices for the treatment of spinal cord injuries and peripheral nerve injuries. For 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, the Company 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, the Company is considered to be in the development stage.

Critical Accounting Policies and Estimates

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make 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 amounts of revenues and expenses during the reporting period.

On an ongoing basis, we evaluate our estimates and judgments for all assets and liabilities, including those related to stock-based compensation expense and the fair value determined for stock purchase warrants classified as derivative liabilities. We base our estimates and judgments on historical experience, current economic and industry conditions and on various other factors that are believed to be reasonable under the circumstances. This forms the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. There have been no changes in our critical accounting policies and estimates from our 2011 Annual Report.

We believe that full consideration has been given to all relevant circumstances that we may be subject to, and the consolidated financial statements accurately reflect our best estimate of the results of operations, financial position and cash flows for the periods presented.

Results of Operations

Comparison of the three months ended June 30, 2012 and 2011

Research and Development Expenses

Research and development expenses consist primarily of payments to contract research and development companies and payroll. Research and development expenses decreased by \$85,000 to \$1,307,000 for the three months ended June 30, 2012 from \$1,392,000 for the three months ended June 30, 2011. The decrease in expenses is primarily attributable to a decrease in costs for preclinical studies of \$457,000 offset by the increase in compensation costs of \$226,000 due to the hiring of additional personnel.

General and Administrative Expenses

General and administrative expenses consist primarily of payroll, rent and professional services. General and administrative expenses increased by \$313,000 to \$1,448,000 for the three months ended June 30, 2012 from \$1,135,000 for the three months ended June 30, 2011. The increase in expenses is primarily attributable to increases in compensation costs of \$148,000 due to additional staffing and raises, and an increase in stock compensation costs of \$127,000.

Interest Income and Interest Expense

Interest income increased by \$9,000 to \$12,000 for the three months ended June 30, 2012 from \$3,000 for the three months ended June 30, 2011. The increase in interest income is due to higher amounts of cash deposited in interest-bearing accounts.

Interest expense increased by \$2,000 to \$11,000 for the three months ended June 30, 2012 from \$9,000 for the three months ended June 30, 2011. The increase in interest expense is due to increased borrowings under the loan payable.

Derivatives Gain (Loss)

Derivatives gain increased by \$3,791,000 to \$4,954,000 for the three months ended June 30, 2012 from \$1,163,000 for the three months ended June 30, 2011. The increase in this non-cash gain for the three months ended June 30, 2012 reflects the decrease in the fair value of derivative warrant liability from \$29,001,000 at March 31, 2012 to \$23,528,000 at June 30, 2012 due primarily to the decrease in the fair value of the underlying Common Stock.

Comparison of the six months ended June 30, 2012 and 2011

Research and Development Expenses

Research and development expenses increased by \$219,000 to \$2,248,000 for the six months ended June 30, 2012 from \$2,029,000 for the six months ended June 30, 2011. The increase in expenses is primarily attributable to increased compensation costs of \$429,000 due to the hiring of additional personnel, an increase of \$137,000 in costs due to scaling up manufacturing and an increase in consulting costs of \$51,000, offset by a decrease in costs for preclinical studies of \$531,000.

General and Administrative Expenses

General and administrative expenses increased by \$1,069,000 to \$2,968,000 for the six months ended June 30, 2012 from \$1,899,000 for the six months ended June 30, 2011. The increase in expenses is primarily attributable to increases in compensation costs of \$223,000 due to additional staffing and raises, an increase of \$114,000 in legal costs, an increase of \$146,000 in investor relations costs, an increase of \$180,000 in travel and conference meeting costs and an increase in stock compensation costs of \$258,000.

Interest Income and Interest Expense

Interest income increased by \$9,000 to \$15,000 for the six months ended June 30, 2012 from \$6,000 for the six months ended June 30, 2011. The increase in interest income is due to higher amounts of cash deposited in interest-bearing accounts.

Interest expense increased by \$6,000 to \$16,000 for the six months ended June 30, 2012 from \$10,000 for the six months ended June 30, 2011. The increase in interest expense is due to increased borrowings under the loan payable.

Derivatives Gain (Loss)

Derivatives gain increased by \$9,283,000 to \$10,567,000 for the six months ended June 30, 2012 from \$1,284,000 for the six months ended June 30, 2011. The increase in this non-cash gain for the six months ended June 30, 2012 reflects the decrease in the fair value of derivative warrant liability from \$35,473,000 at December 31, 2011 to \$23,528,000 at June 30, 2012 due primarily to the decrease in the fair value of the underlying Common Stock.

Liquidity and Capital Resources

Since its inception, the Company 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, the Company is considered to be in the development stage.

Since inception, the Company has experienced negative cash flows from operations. The Company has financed its operations primarily through the sale of equity-related securities. At June 30, 2012, the accumulated deficit was \$42,466,000.

At June 30, 2012, we had total current assets of \$19,159,000 and current liabilities of \$24,536,000 resulting in a working capital deficit of \$5,377,000. At June 30, 2012, the Company had total assets of \$20,001,000 and total liabilities of \$24,726,000, resulting in a stockholders' deficit of \$4,725,000.

Net cash used by operating activities for the six months ended June 30, 2012 was \$5,074,000. The operating loss used \$5,216,000, an increase in restricted cash used \$112,000, an increase in prepaid expenses used \$359,000 and a decrease in accrued expensed used \$329,000. Significant commitments that will require the use of cash in operating activities in future periods include obligations under operating leases and the loan payable. Gross committed lease obligations were \$6,092,000, and capital leases and the loan payable was \$332,000 at June 30, 2012. Total commitments due for the remainder of fiscal 2012 are \$563,000.

Net cash provided by financing activities was approximately \$19,000,000 in the six months ended June 30, 2012, due mainly to approximately \$18,155,000 in net proceeds from a public offering. In addition, the Company received approximately \$716,000 from the exercise of stock options and warrants and approximately \$144,000 from loans, net of repayments

At June 30, 2012, the Company had cash on hand of \$18,037,000, which the Company expects to be sufficient to meet its operating and capital requirements into the first quarter of 2014. However, the Company will need to raise substantial additional capital in the future to complete clinical trials, obtain marketing approvals and commercialize its products, potentially through debt or equity financings. The sale of debt or equity securities may cause dilution to existing stockholders. Furthermore, there can be no assurance that we will be able to raise such funds if and when they are required. Failure to obtain future funding when needed or on acceptable terms would materially adversely affect our results of operations.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements, including unrecorded derivative instruments that have or are reasonably likely to have a current or future material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources. We have certain warrants and options outstanding but we do not expect to receive sufficient proceeds from the exercise of these instruments unless and until the trading price of our Common Stock is significantly greater than the applicable exercise prices of the options and warrants and mainly following any necessary registering of underlying securities.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

This information has been omitted as the Company qualifies as a smaller reporting company.

Item 4. Controls and Procedures.

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) as of the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this report were effective in ensuring that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported

within the time periods specified in the SEC's rules and forms and that the information required to be disclosed by us in such reports is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) that occurred during the period to which this report relates that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

From time to time, we could be subject to claims arising in the ordinary course of business or be a defendant in lawsuits. While the outcome of such claims or other proceedings cannot be predicted with certainty, our management expects that any such liabilities, to the extent not provided for by insurance or otherwise, will not have a material adverse effect on our financial condition, results of operations or cash flows.

Item 1A. Risk Factors.

There have been no material changes from the risk factors previously disclosed in Part I, Item 1A. "Risk Factors," of our Annual Report on Form 10-K for the fiscal year ending December 31, 2011.

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

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

The Exhibits listed in the Exhibit Index immediately preceding such Exhibits are filed with or incorporated by reference in this report.

SIGNATURES

Pursuant to the requirements 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: August 13, 2012

By: /s/ Frank M. Reynolds

Name: Frank M. Reynolds

Title: Chief Executive Officer and Chief Financial Officer (Principal

Executive, Financial and Accounting Officer)

Exhibit

EXHIBIT INDEX

Number	<u>Description</u>
3.1	Amended and Restated Bylaws of InVivo Therapeutics Holdings Corp, incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, as filed with the SEC on April 24, 2012.
10.1	InVivo Therapeutics Holdings Corp. 2010 Equity Incentive Plan, as amended, incorporated by reference to Appendix A to the Registrant's Schedule 14A Proxy Statement, as filed with the SEC on April 19, 2012.
31.1/31.2	Certification by the Principal Executive Officer and Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1/32.2	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Label Linkbase Document
101.PRE*	XBRL Taxonomy Presentation Linkbase Document

^{*} Pursuant to Rule 406T of Regulation S-T, the interactive files on Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

SARBANES-OXLEY SECTION 302(a) CERTIFICATION

- I, Frank M. Reynolds, certify that:
- 1. I have reviewed this Quarterly Report on Form 10-Q 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: August 13, 2012 /s/ Frank M. Reynolds

Frank M. Reynolds, Principal Executive Officer and Principal Financial Officer

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

In connection with the Quarterly Report of InVivo Therapeutics Holdings Corp. (the "Company") on Form 10-Q for the quarter ended June 30, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Frank M. Reynolds, Chief Executive Officer and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (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: August 13, 2012

/s/ Frank M. Reynolds

Frank M. Reynolds, Chief Executive Officer and Chief Financial Officer