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

Form 10-Q

(Mark One)

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

For the quarterly period ended **March 31, 2012**

☐ TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE EXCHANGE ACT

For the transition period from _____ to _____

Commission file number **001-31392**

PLURISTEM THERAPEUTICS INC.

(Exact name of registrant as specified in its charter)

Nevada	**98-0351734**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)

MATAM Advanced Technology Park, Building No. 20, Haifa, Israel 31905

(Address of principal executive offices)

+972-74-710-7171

(Registrant's telephone number)

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 past 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 registration was required to submit and post such files).

Yes ☒ No ☐

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

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

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

Yes ☐ No ☒

State the number of shares outstanding of each of the issuer's classes of common stock as of the latest practicable date: 44,820,485 common shares issued as of April 27, 2012.

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY

CONSOLIDATED FINANCIAL STATEMENTS

As of March 31, 2012

(unaudited)

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
CONSOLIDATED FINANCIAL STATEMENTS

As of March 31, 2012

U.S. DOLLARS IN THOUSANDS

(Unaudited)

INDEX

CONSOLIDATED BALANCE SHEETS

U.S. Dollars in thousands

	Note	March 31, 2012 Unaudited	June 30, 2011 Audited
ASSETS			
CURRENT ASSETS:			
Cash and cash equivalents		$ 11,605	$ 42,829
Short term bank deposits		21,896	-
Marketable securities	3	6,042	-
Prepaid expenses		172	314
Accounts receivable from the Office of the Chief Scientist		1,529	-
Other accounts receivable		211	154
Total current assets		41,455	43,297
LONG-TERM ASSETS:			
Long-term deposits and restricted deposits		695	179
Severance pay fund		525	452
Advance payment for leasehold improvements	6c	1,155	-
Property and equipment, net		3,066	2,088
Total long-term assets		5,441	2,719
Total assets		$ 46,896	$ 46,016

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

CONSOLIDATED BALANCE SHEETS

U.S. Dollars in thousands

	Note	March 31, 2012 Unaudited	June 30, 2011 Audited
LIABILITIES AND STOCKHOLDERS' EQUITY			
CURRENT LIABILITIES			
Trade payables		$ 1,529	$ 1,177
Accrued expenses		230	208
Deferred revenues	1d, 2d	923	-
Advance payment from United Therapeutics	1d, 2d	1,509	-
Other accounts payable		663	633
Total current liabilities		4,854	2,018
LONG-TERM LIABILITIES			
Deferred revenues	1d, 2d	3,462	-
Accrued severance pay		679	576
Total long term liabilities		4,141	576
COMMITMENTS AND CONTINGENCIES	5		
STOCKHOLDERS' EQUITY			
Share capital:	6		
Common stock $0.00001 par value: Authorized: 100,000,000 shares Issued and outstanding: 44,516,175 shares as of March 31, 2012, 42,443,185 shares as of June 30, 2011		- (*)	- (*)
Additional paid-in capital		99,461	94,375
Accumulated deficit		(61,612)	(50,953)
Other comprehensive gain		52	-
		37,901	43,422
		$ 46,896	$ 46,016

(*) Less than $1.

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

CONSOLIDATED STATEMENTS OF OPERATIONS

U.S. Dollars in thousands (except share and per share data)

	Nine months ended March 31,		Three months ended March 31,		Year ended June 30,
	2012	2011	2012	2011	2011
	Unaudited	Unaudited	Unaudited	Unaudited	Audited
Revenues	$ 615	$ -	$ 230	$ -	$ -
Research and development expenses	(9,271)	(5,832)	(3,427)	(2,145)	(8,311)
Less participation by the Office of the Chief Scientist and other parties	2,432	1,709	511	598	1,682
Research and development expenses, net	(6,839)	(4,123)	(2,916)	(1,547)	(6,629)
General and administrative expenses	(4,836)	(3,154)	(1,924)	(1,152)	(4,485)
Operating loss	(11,060)	(7,277)	(4,610)	(2,699)	(11,114)
Financial income, net	401	154	436	86	266
Net loss for the period	$ (10,659)	$ (7,123)	$ (4,174)	$ (2,613)	$ (10,848)
Loss per share:					
Basic and diluted net loss per share	$ (0.24)	$ (0.26)	$ (0.09)	$ (0.07)	$ (0.35)
Weighted average number of shares used in computing basic and diluted net loss per share	43,585,104	27,894,392	44,328,201	36,676,721	31,198,825

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

STATEMENTS OF CHANGES IN EQUITY (AUDITED)

U.S. Dollars in thousands (except share and per share data)

	Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance as of July 1, 2010	20,888,781	$ (*)	$ 44,086	$ (40,105)	$ 3,981
Issuance of common stock and warrants related to October 2010 agreements, net of issuance costs of $244	4,375,000	(*)	5,006	-	5,006
Issuance of common stock and warrants related to February 2011 secondary offering, net of issuance costs of $2,970	12,650,000	(*)	38,142	-	38,142
Exercise of warrants by investors and finders	2,442,714	(*)	3,593	-	3,593
Exercise of options by employees and consultants	103,943	(*)	68	-	68
Issuance of common stock related to investor relations agreements	90,000	(*)	155	-	155
Stock based compensation to employees, directors and non-employees consultants	1,892,747	(*)	3,325	-	3,325
Net loss for the period	-	-	-	(10,848)	(10,848)
Balance as of June 30, 2011	42,443,185	$ (*)	$ 94,375	$ (50,953)	$ 43,422

(*) Less than $1.

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

STATEMENTS OF CHANGES IN EQUITY (UNAUDITED)

U.S. Dollars in thousands (except share and per share data)

	Common Stock		Additional Paid-in	Deficit	Total Stockholders'
	Shares	Amount	Capital	Accumulated	Equity
Balance as of July 1, 2010	20,888,781	$ (*)	$ 44,086	$ (40,105)	$ 3,981
Issuance of common stock and warrants related to February 2011 agreement, net of issuance costs of $2,970	12,650,000	(*)	38,142	-	38,142
Issuance of common stock and warrants related to October 2010 agreements, net of issuance costs of $244	4,375,000	(*)	5,006	-	5,006
Exercise of options by employees and consultants	76,160	(*)	46	-	46
Exercise of warrants by investors and finders	2,174,083	(*)	3,202	-	3,202
Stock based compensation to employees, directors and non-employees consultants	1,353,493	(*)	2,336	-	2,336
Issuance of common stock related to investor relations agreements	90,000	(*)	155	-	155
Net loss for the period	-	-	-	(7,123)	(7,123)
Balance as of March 31, 2011	41,607,517	$ (*)	$ 92,973	$ (47,228)	$ 45,745

(*) Less than $1.

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

STATEMENTS OF CHANGES IN EQUITY (UNAUDITED)

U.S. Dollars in thousands (except share and per share data)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Gain	Deficit Accumulated	Total Stockholders' Equity
	Shares	Amount				
Balance as of July 1, 2011	42,443,185	$ (*)	$ 94,375	$ -	$ (50,953)	$ 43,422
Exercise of options by employees and consultants	23,000	(*)	14	-	-	14
Exercise of warrants by investors and finders	335,286	(*)	383	-	-	383
Stock based compensation to employees, directors and non-employees consultants	1,714,704	(*)	4,689	-	-	4,689
Unrealized gain on available for sale marketable securities	-	-	-	52	-	52
Net loss for the period	-	-	-	-	(10,659)	(10,659)
Balance as of March 31, 2012	44,516,175	$ (*)	$ 99,461	$ 52	$ (61,612)	$ 37,901

(*) Less than $1.

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. Dollars in thousands

	Nine months ended March 31,		Year ended June 30,
	2012	2011	2011
	Unaudited	Unaudited	Audited
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$ (10,659)	$ (7,123)	$ (10,848)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	312	224	312
Capital loss	-	8	8
Impairment of property and equipment	-	-	11
Stock-based compensation to employees, directors and non-employees consultants	3,533	2,336	3,325
Stock compensation to investor relations consultants	1	155	155
Decrease (increase) in other accounts receivable	(1,586)	265	656
Decrease (increase) in prepaid expenses	142	(172)	(273)
Increase in trade payables	375	516	455
Increase in other accounts payable and accrued expenses	52	156	375
Increase in deferred revenues	4,385	-	-
Increase in advance payment from United Therapeutics	1,509	-	-
Increase (decrease) in interest receivable on short-term deposit	(284)	15	15
Linkage differences and interest on short-term restricted lease deposit	15	-	-
Linkage differences and interest on long-term restricted lease deposit	4	(3)	(4)
Amortization of discount, premium and changes in accrued interest from marketable securities	(174)	-	-
Accrued severance pay, net	30	27	58
Net cash used in operating activities	$ (2,345)	$ (3,596)	$ (5,755)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchase of property and equipment	$ (1,313)	$ (672)	$ (962)
Investment in short-term deposits	(21,627)	-	-
Proceeds from short-term deposits	-	898	898
Proceeds from sale of property and equipment	-	28	29
Investment in long-term deposits	(526)	(12)	(14)
Repayment of long-term restricted deposit	6	13	13
Proceeds from sale and redemption of available for sale marketable securities	750	-	-
Purchase of available for sale marketable securities	(6,566)	-	-
Net cash provided by (used in) investing activities	$ (29,276)	$ 255	$ (36)

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. Dollars in thousands

	Nine months ended March 31,		Year ended June 30,
	2012	2011	2011
	Unaudited	Unaudited	Audited
CASH FLOWS FROM FINANCING ACTIVITIES:			
Issuance of common stock and warrants, net of issuance costs	$ -	$ 43,400	$ 43,400
Exercise of warrants and options	397	3,248	3,661
Repayment of long-term loan	-	(24)	(24)
Net cash provided by financing activities	$ 397	$ 46,624	$ 47,037
Increase (decrease) in cash and cash equivalents	(31,224)	43,283	41,246
Cash and cash equivalents at the beginning of the period	42,829	1,583	1,583
Cash and cash equivalents at the end of the period	$ 11,605	$ 44,866	$ 42,829
(a) Supplemental disclosure of cash flow activities:			
Cash paid during the period for:			
Taxes paid due to non-deductible expenses	$ 12	$ 9	$ 11
(b) Supplemental disclosure of non-cash activities:			
Increase in fair value of marketable securities	$ 52	$ -	$ -
Purchase of property and equipment in credit	$ 100	$ 168	$ 123
Issuance of shares in consideration of leasehold improvements	$ 1,155	$ -	$ -

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. Dollars in thousands (except per share amounts)

NOTE 1:- GENERAL

a. Pluristem Therapeutics Inc., a Nevada corporation, was incorporated on May 11, 2001. Pluristem Therapeutics Inc. has a wholly owned subsidiary, Pluristem Ltd. (the "Subsidiary"), which is incorporated under the laws of the State of Israel. Pluristem Therapeutics Inc. and the Subsidiary are referred to as the "Company".

b. The Company is a bio-therapeutic company developing standardized cell therapy products from human placenta for the treatment of multiple disorders. The Company has sustained operating losses and expects such losses to continue in the foreseeable future. The Company's accumulated losses aggregated to $61,612 through March 31, 2012 and the Company incurred a net loss of $10,659 for the nine months ended March 31, 2012. There is no assurance that profitable operations, if ever achieved, could be sustained on a continuing basis.

The Company plans to continue to finance its operations with sales of equity securities, entering into licensing technology agreements such as the United Therapeutics Corporation ("United Therapeutics") agreement, and from grants to support its R&D activity. In the longer term, the Company plans to finance its operations from revenues from sales of products.

The Company was in the development stage from its inception until July 2011 (see 2a below).

c. Since December 10, 2007, the Company's shares of common stock have been traded on the NASDAQ Capital Market under the symbol PSTI. On May 7, 2007, the Company's shares also began trading on Europe's Frankfurt Stock Exchange under the symbol PJTA.

On December 19, 2010, the Company's shares began trading on the Tel-Aviv Stock Exchange under the symbol "PLTR".

d. License Agreement:

On June 19, 2011, the Company entered into an exclusive license agreement, or the License Agreement, with United Therapeutics, for the use of its PLX cells to develop and commercialize a cell-based product for the treatment of Pulmonary Hypertension ("PAH"). The License Agreement provides that United Therapeutics will receive exclusive worldwide license rights for the development and commercialization of the Company's PLX cell-based product to treat PAH. The License Agreement provides for the following consideration payable to the Company: (i) an upfront payment of $7,000 paid in August 2011, which includes a $5,000 non-refundable upfront payment and $2,000 refundable advance payment on the development ; (ii) up to $37,500 upon reaching certain regulatory milestones with respect to the development of a product to treat PAH; (iii) reimbursement of up to $10,000 of certain of the Company expenses if the Company establishes a manufacturing facility in North America upon meeting certain milestones; (iv) reimbursement of certain costs in connection with the development of the product; and (v) following commercialization of the product, royalties and the purchase of commercial supplies of the developed product from the Company at a specified margin over the Company's cost.

On August 2, 2011, the License Agreement became effective following the consent of the Office of the Chief Scientist of Israel ("OCS") within the Israeli Ministry of Industry, Trade and Labor.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES

a. The accompanying unaudited interim financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America and the rules of the Securities and Exchange Commission and should be read in conjunction with the audited financial statements and notes thereto contained in the Company's latest Annual Report on Form 10-K filed with the SEC. In the opinion of management, all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of financial position and the results of operations for the interim periods presented have been reflected herein. The results of operations for interim periods are not necessarily indicative of the results to be expected for the full year. Notes to the financial statements that would substantially duplicate the disclosure contained in the audited financial statements for the most recent fiscal year as reported in the Form 10-K have been omitted. Commencing July 2011, the Company ceased to consider itself a development stage company.

b. ***Short-term deposits***

The Company considers all highly liquid investments that are convertible to cash with original maturities of more than three months and less than one year as short-term deposits.

c. ***Marketable Securities***

The Company accounts for its investments in marketable securities in accordance with ASC 320, "Investments - Debt and Equity Securities". The Company determines the classification of marketable securities at the time of purchase and reevaluates such designations as of each balance sheet date. The Company classifies all of its marketable securities as available-for-sale. Available-for-sale marketable securities are carried at fair value, with the unrealized gain and loss reported as a separate component of shareholders' equity, accumulated other comprehensive income (loss).

Realized gain and loss on sales of marketable securities are included in the Company's statements of operations and are derived using the specific identification basis for determining the cost of marketable securities. The amortized cost of available for sale marketable securities is adjusted for amortization of premiums and accretion of discount to maturity. Such amortization, together with interest on available for sale marketable securities, is included in the financial income (expenses), net.

The Company recognizes an impairment charge when a decline in the fair value of its available-for-sale marketable securities below the cost basis is judged to be other-than-temporary. The Company considers various factors in determining whether to recognize an impairment charge, including the length of time the investment has been in a loss position, the extent to which the fair value has been less than the Company's cost basis, the investment's financial condition and the near-term prospects of the issuer. The Company adopted FASB ASC 320-10-65, which requires an other-than-temporary impairment for debt securities to be separated into (a) the amount representing the credit loss and (b) the amount related to all other factors (provided that the Company does not intend to sell the security and it is not more likely than not that it will be required to sell it before recovery). The Company classifies its marketable securities as available-for-sale and marks them to market with changes to other comprehensive income until realization or occurrence of other than temporary impairment loss.

d. ***Revenue Recognition from the license Agreement with United Therapeutics***

The Company recognizes revenue pursuant to the License Agreement with United Therapeutics in accordance with ASC 605-25, "Revenue Recognition, Multiple-Element Arrangements". Pursuant to this guidance, the Company determined that its arrangement with United Therapeutics involves multiple revenue-generating deliverables that should be accounted for as a separate units of accounting for revenue recognition purposes.

The Company received an up-front, non-refundable license payment of $5,000. Additional payments totaling $37,500 are subject to the Company's meeting certain milestones.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

d. ***Revenue Recognition from the license Agreement with United Therapeutics (cont.)***

The non-refundable upfront license fee of $5,000 is deferred and recognized over the related performance period in accordance with SAB 104, "Revenue Recognition". The Company estimated the performance period of the development of approximately 5.5 years. The license fee will be recognized on a straight line basis as revenue over the estimated development period, resulting in revenue of $615 for the nine months ended March 31, 2012.

The additional milestones payments will be recognized upon the achievement of the specific milestone, in accordance with ASC 605-28, “Milestone Method of Revenue Recognition".

The Company also received a refundable, advance payment on the development, of $2,000 that will be deductible against development expenses as it accrued. The upfront payment received and not recognized as revenues is included in the balance sheet as advanced payment. All expenses related to the development, on cost basis, shall be repaid to the Company by United Therapeutics. The Company is deducting the payments from the R&D expenses in accordance with ASC 730 "Research and Development".

During the nine month period ended March 31, 2012, the Company deducted an amount of approximately $491.

e. ***Fair value of financial instruments:***

The carrying amounts of the Company's financial instruments, including cash and cash equivalents, available-for-sale marketable securities, short-term deposits, trade payable and other accounts payable and accrued liabilities, approximate fair value because of their generally short term maturities.

The Company accounts for certain assets and liabilities at fair value under FASB ASC 820, “Fair Value Measurements and Disclosures.” Fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. As a basis for considering such assumptions, FASB ASC 820 establishes a three-tier value hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value:

Level 1 - Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets;

Level 2 - Includes other inputs that are directly or indirectly observable in the marketplace, other than quoted prices included in Level 1, such as quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets with insufficient volume or infrequent transactions, or other inputs that are observable (model-derived valuations in which significant inputs are observable), or can be derived principally from or corroborated by observable market data; and

Level 3 - Unobservable inputs which are supported by little or no market activity.

The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The Company categorized each of its fair value measurements in one of these three levels of hierarchy.

f. ***Impact of recently issued accounting standards:***

In May 2011, the FASB issued ASU 2011-04, "Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs." The new guidance does not extend the use of fair value accounting, but provides guidance on how it should be applied where its use is already required or permitted by other standards within GAAP or International Financial Reporting Standards ("IFRS"). The new guidance also changes the wording used to describe many requirements in GAAP for measuring fair value and for disclosing information about fair value measurements and it clarifies the FASB's intent about the application of existing fair value measurements. The Company adopted the provisions of this new guidance on January 1, 2012. The Company does not expect the adoption of the new provisions to have a material impact on its consolidated financial position, results of operations or cash flows.

U.S. Dollars in thousands (except per share amounts)

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

f. ***Impact of recently issued accounting standards: (cont.)***

On June 16, 2011, the Financial Accounting Standards Board issued ASU No. 2011-05, "Presentation of Comprehensive Income" . This standard eliminates the current option to report other comprehensive income and its components in the statement of changes in shareholders' equity and provides for either a single continuous statement or two separate statements. Both options require companies to present the components of net income and total net income, the components of other comprehensive income along with a total for other comprehensive income. Companies are also required to present reclassification adjustments for items that are reclassified from other comprehensive income to net income within these statements. This standard will be applied retrospectively for fiscal years beginning after December 15, 2011 with early adoption permitted. The disclosure requirements of this standard will not have a material effect on the Company's results of operations or financial position as the amendment impacts presentation only.

NOTE 3:- MARKETABLE SECURITIES

As of March 31, 2012, all of the Company's marketable securities were classified as available-for-sale.

	March 31, 2012				June 30,2011			
	Amortized cost	Gross unrealized gain	Gross unrealized loss	Fair value	Amortized cost	Gross unrealized gain	Gross unrealized loss	Fair value
Available-for-sale - matures within one year:								
Trust Funds	$ 1,164	$ 44	$ (15)	$ 1,193	$ -	$ -	$ -	$ -
Corporate debentures – fixed interest rate	162	1	-	163	-	-	-	-
	$ 1,326	$ 45	$ (15)	$ 1,356	$ -	$ -	$ -	$ -
Available-for-sale - matures after one year through five years:								
Government debentures – fixed interest rate	2,311	25	(13)	2,323	-	-	-	-
Corporate debentures – fixed interest rate	954	22	(5)	971	-	-	-	-
	$ 3,265	$ 47	$ (18)	$ 3,294	$ -	$ -	$ -	$ -
Available-for-sale - matures after five year through ten years:								
Government debentures – fixed interest rate	803	122	(128)	797	-	-	-	-
Corporate debentures – fixed interest rate	596	6	(7)	595	-	-	-	-
	$ 1,399	$ 128	$ (135)	$ 1,392	$ -	$ -	$ -	$ -
	$ 5,990	$ 220	$ (168)	$ 6,042	$ -	$ -	$ -	$ -

U.S. Dollars in thousands (except per share amounts)

NOTE 4:- FAIR VALUE OF FINANCIAL INSTRUMENTS

In accordance with FASB ASC 820, "Fair Value Measurements and Disclosures," the Company measures its available-for-sale marketable securities contracts at fair value.

	March 31, 2012			June 30, 2011		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Short term deposits	$ 21,896	$ -	$ -	$ -	$ -	$ -
Marketable securities	6,042	-	-	-	-	-
Foreign currency cash flow hedges	-	68	-	-	7	-
Total	$ 27,938	$ 68	$ -	$ -	$ 7	$ -

NOTE 5: - COMMITMENTS AND CONTINGENCIES

Commitments and contingencies that occurred during the nine months ended March 31, 2012 include the following:

a. An amount of $511 was pledged by the Company to secure its hedging transactions, credit line and bank guarantees.

b. In July 2011, the Company entered into an agreement with MTM – Scientific Industries Center Haifa Ltd., for the leasing and construction of a new Good Manufacturing Practice ("GMP") manufacturing facility. The new facility will be located near the Company's headquarters and existing facilities in MATAM Park, Haifa, Israel. According to the agreement, the lease of the new facility is commenced in January 2012 for a period of approximately 5 years with an option to extend the lease for an additional 5 year period. The Company issued an additional bank guarantee in favor of MTM in the amount of approximately $263.

c. In December 9 2011, the Company has entered into an agreement with Aseptic Technologies for the rental of a machine. The Company has issued an additional bank guarantee in favor Aseptic Technologies in amount of approximately $83.

NOTE 6: - SHARE CAPITAL AND STOCK OPTIONS

a. The Company's authorized common stock consists of 100,000,000 shares with a par value of $0.00001 per share. All shares have equal voting rights and are entitled to one vote per share in all matters to be voted upon by stockholders. The shares have no pre-emptive, subscription, conversion or redemption rights and may be issued only as fully paid and non-assessable shares. Holders of the common stock are entitled to equal ratable rights to dividends and distributions with respect to the common stock, as may be declared by the Board of Directors out of funds legally available.

The Company's authorized preferred stock consists of 10,000,000 shares of preferred stock, par value $0.00001 per share, with series, rights, preferences, privileges and restrictions as may be designated from time to time by the Company's Board of Directors. No shares of preferred stock have been issued.

b. From July through March 2012, a total of 231,692 warrants were exercised via a "cashless" exercise, resulting in the issuance of 116,913 shares of common stock to investors of the Company. In addition 218,373 warrants were exercised and resulted in the issuance of 218,373 shares of common stock by investors of the Company. The aggregate cash consideration received was $383.

c. On October 26, 2011, the Company issued 500,000 shares as an advance payment to Biopharmax as part of the agreement for building the new Company facility.

U.S. Dollars in thousands (except per share amounts)

NOTE 6: - SHARE CAPITAL AND STOCK OPTIONS (CONT.)

d. **Options, warrants, restricted stock and restricted stock units to employees, directors and consultants:**

The Company has approved two incentive option plans from 2003 and from 2005 (the "2003 Plan" and the "2005 Plan", and collectively, the "Plans"). Under these Plans, options, restricted stock and restricted stock units (the "Awards") may be granted to the Company's officers, directors, employees and consultants. Any Awards that are cancelled or forfeited before expiration become available for future grants.

As of March 31, 2012, the number of shares of common stock authorized for issuance under the 2005 Plan amounted to 10,487,338. 1,193,410 shares are still available for future grant under the 2005 Plan as of March 31, 2012. Under the 2003 Plan, 20,500 options are authorized for issuance, and 15,296 options are still available for future grant as of March 31, 2012.

a. Options to employees and directors:

The Company accounted for its options to employees and directors under the fair value method in accordance with ASC 718, "Compensation — Stock Compensation". A summary of the Company's share option activity for options granted to employees and directors under the Plans is as follows:

	Nine months ended March 31, 2012			
	Number	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms (in years)	Aggregate Intrinsic Value Price
Options outstanding at beginning of period	2,200,616	$ 3.84		
Options exercised	(18,000)	0.62		
Options forfeited	(98,644)	3.95		
Options outstanding at end of the period	2,083,972	$ 3.87	5.14	$ 882
Options exercisable at the end of the period	2,083,972	$ 3.87	5.14	$ 882
Options vested and expected to vest	2,083,972	$ 3.87	5.14	$ 882

Intrinsic value of exercisable options (the difference between the Company's closing stock price on the last trading day in the period and the exercise price, multiplied by the number of in-the-money options) represents the amount that would have been received by the employees and directors option holders had all option holders exercised their options on March 31, 2012. This amount changes based on the fair market value of the Company's common stock.

Compensation expenses related to options granted to employees and directors were recorded as follows:

	Nine months ended March 31,		Three months ended March 31,	
	2012	2011	2012	2011
Research and development expenses	$ -	$ 3	$ -	$ -
General and administrative expenses	-	4	-	-
	$ -	$ 7	$ -	$ -

U.S. Dollars in thousands (except per share amounts)

NOTE 6: - SHARE CAPITAL AND STOCK OPTIONS (CONT.)

e. **Options, warrants, restricted stock and restricted stock units to employees, directors and consultants (cont.):**

b. Options and warrants to non-employees:

On December 21, 2011, the Company's Compensation Committee approved a grant of a total of 12,000 options to the Company's consultants.

A summary of the Company's activity related to options and warrants to consultants is as follows:

	Nine months ended March 31, 2012			
	Number	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms (in years)	Aggregate Intrinsic Value Price
Options and warrants outstanding at beginning of period	425,000	$ 3.65		
Options and warrants granted	12,000	-		
Options and warrants exercised	(5,000)	0.62		
Options and warrants outstanding at end of the period	432,000	$ 3.58	4.37	$ 417
Options and warrants exercisable at the end of the period	412,500	$ 3.75	4.12	$ 372
Options and warrants vested and expected to vest	432,000	$ 3.58	4.37	$ 417

Compensation expenses related to options and warrants granted to consultants were recorded as follows:

	Nine months ended March 31,		Three months ended March 31,	
	2012	2011	2012	2011
Research and development expenses	$ 19	$ 24	$ -	$ 7
General and administrative expenses	27	28	12	27
	$ 46	$ 52	$ 12	$ 34

Future expenses related to options and warrants granted to consultants for an average time of almost two years is $28.

U.S. Dollars in thousands (except per share amounts)

NOTE 6: - SHARE CAPITAL AND STOCK OPTIONS (CONT.)

e. **Options, warrants, restricted stock and restricted stock units to employees, directors and consultants (cont.):**

c. Restricted stock and restricted stock units to employees and directors:

On December 21, 2011, the Company's Compensation Committee approved a grant of a total of 1,547,250 restricted stock units to the Company's employees and directors.

On February 9, 2012, the Company's Board of Directors approved a grant of a total of 6,000 restricted stock units to the Company's employees.

The following table summarizes the activities for unvested restricted stock units and restricted stock granted to employees and directors for the nine months ended March 31, 2012:

	Number
Unvested at the beginning of period	2,138,955
Granted	1,579,638
Forfeited	(77,811)
Vested	(1,101,770)
Unvested at the end of the period	2,539,012
Expected to vest after March 31, 2012	2,499,563

Compensation expenses related to restricted stock and restricted stock units granted to employees and directors were recorded as follows:

	Nine months ended March 31,		Three months ended March 31,	
	2012	2011	2012	2011
Research and development expenses	$ 845	$ 736	$ 362	$ 320
General and administrative expenses	2,462	1,212	1,172	391
	$ 3,307	$ 1,948	$ 1,534	$ 711

Future expenses related to restricted stock and restricted stock units granted to employees and directors for an average time of almost two years is $3,414.

U.S. Dollars in thousands (except per share amounts)

NOTE 6: - SHARE CAPITAL AND STOCK OPTIONS (CONT.)

e. **Options, warrants, restricted stock and restricted stock units to employees, directors and consultants (cont.):**

d. Restricted stock and restricted stock units to consultants:

During the nine months ended March 31, 2012, the Company granted restricted stock to several consultants and service providers.

The following table summarizes the activities for unvested restricted stock units and restricted stock granted to consultants for the nine months ended March 31, 2012:

	Number
Unvested at the beginning of period	149,998
Granted	15,433
Vested	(112,931)
Unvested at the end of the period	52,500
Expected to vest after March 31, 2012	52,500

Compensation expenses related to restricted stock and restricted stock units granted to consultants were recorded as follows:

	Nine months ended March 31,		Three months ended March 31,	
	2012	2011	2012	2011
Research and development expenses	$ 181	$ 183	$ 68	$ 109
General and administrative expenses	1	146	-	19
	$ 182	$ 329	$ 68	$ 128

Future expenses related to restricted stock and restricted stock units granted to consultants for an average time of almost two years is $25.

U.S. Dollars in thousands (except per share amounts)

NOTE 6: - SHARE CAPITAL AND STOCK OPTIONS (CONT.)

f. **Summary of warrants and options:**

A summary of all the warrants and options outstanding as of March 31, 2012 is presented in this table:

Warrants / Options	Exercise Price per Share	Options and Warrants for Common Stock	Options and Warrants Exercisable	Weighted Average Remaining Contractual Terms(in years)
Warrants:	$ 1.00	2,002,245	2,002,245	1.66
	$ 1.12	114,794	114,794	0.07
	$ 1.20	12,500	12,500	0.55
	$ 1.25 – 1.28	687,072	687,072	0.76
	$ 1.40 - $ 1.50	1,768,040	1,768,040	2.58
	$ 1.60	181,221	181,221	3.03
	$ 1.80 - $ 1.96	3,721,445	3,721,445	2.21
	$ 2.50	81,298	81,298	0.21
	$ 4.20	5,060,000	5,060,000	4.34
	$ 5.00	2,394,585	2,394,585	0.24
Total warrants		**16,023,200**	**16,023,200**	
Options:	$ 0.00	110,000	90,500	7.76
	$ 0.62	471,612	471,612	6.32
	$ 1.04-$ 1.45	143,756	143,756	2.68
	$ 2.97	20,000	20,000	6.11
	$ 3.50	920,000	920,000	4.74
	$ 3.72 - $ 3.80	31,550	31,550	4.69
	$ 4.00	42,500	42,500	4.55
	$ 4.38 - $ 4.40	456,804	456,804	5.18
	$ 6.80	36,250	36,250	5.62
	$ 8.20	40,000	40,000	4.45
	$ 20.00	142,500	142,500	4.23
Total options		**2,414,972**	**2,395,472**	
Total warrants and options		**18,438,172**	**18,418,672**	

This summary does not include 2,591,512 restricted stock units that are not vested as of March 31, 2012.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. Dollars in thousands (except per share amounts)

NOTE 7: - SUBSEQUENT EVENTS

In April 2012, our wholly owned subsidiary, Pluristem Ltd., received approval for a NIS 11,800 (approximately $3,100) grant from the OCS. Once received, the grant will be used to cover R&D expenses for the period March 1, 2012 to December 31, 2012. This is the seventh grant received by the Company from the OCS and this grant is subject to the same repayment restrictions of royalties as the prior grants.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Forward - Looking Statements

This quarterly report on Form 10-Q contains certain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and other Federal securities laws, and is subject to the safe-harbor created by such Act and laws. Forward-looking statements may include statements regarding our goals, beliefs, strategies, objectives, plans, including product and technology developments, future financial conditions, results or projections or current expectations. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "potential" or "continue," the negative of such terms, or other comparable terminology. These statements are subject to known and unknown risks, uncertainties, assumptions and other factors that may cause actual results to be materially different from those contemplated by the forward-looking statements. Such forward-looking statements appear in this Item 2 – "Management's Discussion and Analysis of Financial Condition and Results of Operations," and include, but are not limited to, statements regarding the following: the expected development and potential benefits from our products in treating various medical conditions, the safety and efficacy of our PLX-PAD product as well as the extent to which it is tolerated, our plans, intentions or expectations regarding clinical studies and publication of results of such studies, our expectations regarding our short and long-term capital requirements and sufficiency of our capital resources, our plans to raise additional funding, including non-dilutive funding and governmental grants, the success of our plans to develop in house manufacturing capacity of clinical grade PLX cells in commercial quantities, the expansion of our relationships with research and clinical institutions as well as collaboration and entering into out-licensing agreements with other companies and information with respect to any other plans and strategies for our business. Our business and operations are subject to substantial risks, which increase the uncertainty inherent in the forward-looking statements contained in this report. Except as required by law, we undertake no obligation to release publicly the result of any revision to these forward-looking statements that may be made to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Further information on potential factors that could affect our business is described under the heading "Risk Factors" in Part I, Item 1A of our Annual Report on Form 10-K for the fiscal year ended June 30, 2011. Readers are also urged to carefully review and consider the various disclosures we have made in that report.

As used in this quarterly report, the terms "we", "us", "our", the "company" and "Pluristem" mean Pluristem Therapeutics Inc. and our wholly owned subsidiary, Pluristem Ltd., unless otherwise indicated or as otherwise required by the context.

Overview

We are a leading bio-therapeutic company developing standardized cell therapy products for the treatment of life threatening diseases and other medical conditions. We are developing a pipeline of products, stored ready-to-use, derived from human placenta, a non-controversial, non-embryonic, adult cell source. Placental-derived adherent stromal cells are grown in the Company's proprietary PluriX™ three-dimensional process that allows cells to grow in a more natural environment and enable us to produce large quantities of clinical grade cells. We refer to the cells that are grown in the PluriX™ as our PLacental eXpanded cells, or PLX cells. We are expanding our in-house manufacturing capacity so that we will be able to grow large scale quantities of our cells efficiently and without reliance on outside vendors.

Our strategy is to develop and manufacture cell therapy products for the treatment of multiple disorders via several routes of administration. We plan to execute this strategy both independently, using our own personnel and via relationships with research and clinical institutions, or in collaboration with other companies, such as United Therapeutics Corporation, or United. We plan to have in-house manufacturing capacity of clinical grade PLX cells in commercial quantities and to control all of our proprietary manufacturing processes in order to assist in executing this strategy.

We believe that intramuscular administration, which means that the cells are administrated locally to the muscle and not systemically, may be suitable for a number of different clinical indications. Such indications include peripheral artery disease, or PAD, critical limb ischemia, or CLI (the end stage of PAD), intermittent claudication, or IC (a subset of PAD), muscle injuries, thromboangiitis obliterans, or Buerger's disease, neuropathic pain, wound healing, orthopedic injuries and acute myocardial infarction. In addition, we have reported pre-clinical studies utilizing successfully our proprietary PLX cells when administered systemically via the intravenous route in treating multiple sclerosis, ischemic stroke, inflammatory bowel disease and radiation exposure. Under our exclusive license agreement, or the United Agreement, with United, we plan to participate in the development and commercialization of a PLX cell-based product for the treatment of pulmonary arterial hypertension, or PAH.

Our first product in development, called PLX-PAD, is intended to improve the quality of life of millions of people suffering from PAD. In November 2011, following completion of twelve month clinical follow-ups using our PLX cells in CLI, the end-stage of PAD, we announced that the data collected from our two open-label, dose-escalation, Phase I clinical trials conducted in the United States and Germany demonstrated a safe immunologic profile at all dosage levels and found PLX-PAD to be potentially effective in treating patients suffering from CLI. During the Phase I clinical trials we collected information regarding the Amputation Free Survival, or AFS, rate and since our Phase I clinical trials did not include control groups, we compared the data with another published CLI trial's control data, or Historical Data. The data showed that from a total of twenty-seven patients, four treatment failures, or Events, occurred during the observation period of twelve months, which resulted in an AFS rate of 85.2%, as opposed to Historical Data of 66.8% for the same time period. This corresponded to an Event rate of 14.8%, as opposed to Historical Data showing a 33.2% Event rate.

In April 2012, we received clearance from the United States Food and Drug Administration (FDA) to start a Phase II clinical trial using our PLX-PAD product for the treatment of IC.

Critical accounting policies

Our financial statements and accompanying notes are prepared in accordance with U.S. GAAP. Preparing financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses. These estimates and assumptions are affected by management's application of accounting policies. We believe that understanding the basis and nature of the estimates and assumptions involved with the following aspects of our consolidated financial statements is critical to an understanding of our financial statements.

Revenue Recognition

We recognize revenue pursuant to the United Agreement in accordance with Accounting Standards Codification, or ASC, 625-25 "Revenue Recognition, Multiple-Element Arrangements". Pursuant to this guidance, we determined that our arrangement with United involves multiple revenue-generating deliverables that should be accounted for as separate units of accounting for revenue recognition purposes.

We received an up-front, non-refundable license payment of $5,000,000. Additional payments totaling $37.5 million are subject to our Company's meeting certain milestones. The non-refundable upfront license fee of $5,000,000 is deferred and recognized over the related performance period in accordance with SAB 104 "Revenue Recognition". We estimated the performance period of the development of approximately 5.5 years. Future changes in estimates of the performance period may materially impact the timing and amounts of future revenue recognized. The license fee will be recognized on a straight line basis as revenue over the estimated development period, resulting in revenue of $615,000 for the nine months ended March 31, 2012.

The additional milestones payments will be recognized upon the achievement of the specific milestone, in accordance with EITF Issue No. 08-9, “Milestone Method of Revenue Recognition"

We also received a refundable, advance payment on the research and development, or R&D, expenses, of $2,000,000 that is deductible against development expenses as accrued. The upfront payment received and not recognized as deduction from the R&D expenses is included in the balance sheet as advanced payment. All expenses related to the development, on a cost basis, shall be repaid to us by United. We are deducting the payments from the R&D expenses in accordance with ASC 730 "Research and Development".

RESULTS OF OPERATIONS – NINE AND THREE MONTHS ENDED MARCH 31, 2012 COMPARED TO NINE AND THREE MONTHS ENDED MARCH 31, 2011.

Revenues

Revenues for the nine months ended March 31, 2012 in the amount of $615,000 are from the United Agreement. We did not generate other revenues during the nine months ended March 31, 2011.

Revenues for the three months ended March 31, 2012 in the amount of $230,000 are from the United Agreement. We did not generate other revenues during the three months ended March 31, 2011.

Research and Development

Research and development expenses, net of participation of the Office of Chief Scientist within the Israeli Ministry of Industry, Trade and Labor, or the OCS, and other grants, for the nine months ended March 31, 2012 increased by 66% from $4,123,000 for the nine months ended March 31, 2011 to $6,839,000. This increase is attributed to the following reasons: The material increase in our in-house research and development activity, the increase in expenses related to the clinical and preclinical trials we are involved with and timing of approval of the OCS program. The material increase in our in-house research and development activity resulted in an increase in our salaries and lab materials expenses due to, among other things, hiring 46 new employees since March 2011. In addition, the research and development expenses for the nine months ended March 31, 2012 are net of participation of the OCS in the amount of $2,414,000 compared to participation of the OCS for the nine months ended March 31, 2011 which was $1,465,000. This is due to the late approval of the OCS participation for the period March 1, 2011 through February 29, 2012, which resulted in recognizing OCS participation for the four months starting on March 1, 2011 in the nine month period ended March 31, 2012, instead of during the previous fiscal year ended on June 30, 2011.

Research and development expenses, net of participation of the OCS and other grants, for the three months ended March 31, 2012 increased by 88% from $1,547,000 for the three months ended March 31, 2011 to $2,916,000. This increase is attributed to the increase in our in-house research and development activity and the increase in expenses related to the clinical and preclinical trials we are involved with. The increase in our in-house research and development activity resulted in an increase in our salaries due to, among other things, hiring 46 new employees since March 2011, and increases in laboratory materials expenses.

General and Administrative

General and administrative expenses for the nine months ended March 31, 2012 increased by 53% from $3,154,000 for the nine months ended March 31, 2011 to $4,836,000 mainly due to stock-based compensation expenses related to our employees and consultants which increased by approximately $1,361,000 and due to general and administrative costs related to the United Agreement such as bonuses that our officers and directors were entitled to as part of our bonus plan and legal fees involved.

General and administrative expenses for the three months ended March 31, 2012 increased by 67% from $1,152,000 for the three months ended March 31, 2011 to $1,924,000 mainly due to stock-based compensation expenses related to our employees and consultants which increased by approximately $766,000.

Financial Income, net

Financial income increased from $154,000 for the nine months ended March 31, 2011 to $401,000 for the nine months ended March 31, 2012 due to interest income on bank deposits on larger cash balances.

Financial income increased from $86,000 for the three months ended March 31, 2011 to $436,000 for the three months ended March 31, 2012 due to exchange rate adjustments and hedging transactions, as described below, as well interest income on bank deposits on larger cash balances.

Net Loss

Net loss for the nine and three months ended March 31, 2012 was $10,659,000 and $4,174,000, respectively, as compared to net loss of $7,123,000 and $2,613,000 for the nine and three months ended March 31, 2011, respectively. Net loss per share for the nine and three months ended March 31, 2012 was $0.24 and $0.09, respectively, as compared to $0.26 and $0.07 for the nine and three months ended March 31, 2011.

For the periods ended March 31, 2012 and March 31, 2011, we had weighted average shares of common stock outstanding of 43,585,104 and 27,894,392, respectively, that were used in the computations of net loss per share for the nine months. The increase in weighted average common shares outstanding reflects mainly shares issued in an underwriten public offering in February 2011, as well as shares issued as a result of exercise of warrants and options and shares issued restricted stock units to employees and consultants.

Liquidity and Capital Resources

As of March 31, 2012, total current assets were $41,455,000 and total current liabilities were $4,854,000. On March 31, 2012, we had a working capital surplus of $36,601,000, stockholders' equity of $37,901,000 and an accumulated deficit of $61,612,000. We finance our operations and plan to continue doing so from our existing cash, licensing agreements, funds from grants from the OCS and issuances of our securities.

Cash and cash equivalents as of March 31, 2012 amounted to $11,605,000. This is a decrease of $31,224,000 from the $42,829,000 reported as of June 30, 2011, which is mainly due to our investing in short-term and long-term bank deposits and in marketable securities, as further detailed below. Cash balances decreased in the nine months ended March 31, 2012 for the reasons presented below.

Operating activities used cash of $2,345,000 in the nine months ended March 31, 2012. Cash used in operating activities in the nine months ended March 31, 2012 primarily consisted of payments of salaries to our employees, and payments of fees to our consultants, subcontractors and professional services providers including costs of clinical studies offset by the upfront payment related to the United Agreement in the amount of $7,000,000 and by an OCS grant.

Investing activities used cash of $29,276,000 in the nine months ended March 31, 2012. The investing activities consisted primarily of investing in short-term and long-term bank deposits and in marketable securities. The investments were made in accordance with the policy set by our investment committee which aims to preserve our financial assets, maintain adequate liquidity and maximize return. Such policy further provides that we should hold the vast majority of our current assets in bank deposits and the remainder of our current assets is to be invested in government bonds and a combination of corporate bonds and relatively low risk stocks. As of today, the currency of our financial portfolio is mainly in U.S. dollars and we use forward and options contracts in order to hedge our exposures to the New Israeli Shekel, or NIS.

Financing activities generated cash of $397,000 during the nine months ended March 31, 2012 from exercises of warrants by shareholders and exercises of options by employees and consultants.

During the past nine months, 218,373 warrants were exercised in consideration for $383,253, and 231,692 warrants were exercised on a cashless basis resulting in the net issuance of 116,913 shares of stock.

During the nine months ended March 31, 2012, we received approximately $904,000 from the OCS towards our research and development expenses. The OCS has supported our activity in the past six years. In April 2012, we received the OCS's approval of the seventh year grant in the amount of NIS 11.8 million (approximately $3.1 million) for participation in R&D expenses occurred during the period from March 1, 2012 through December 31, 2012. According to the OCS grant terms, we are required to pay royalties at a rate of 3% - 5% on sales of products and services derived from technology developed using this and other OCS grants until 100% of the dollar-linked grants amount plus interest are repaid. In the absence of such sales, no payment is required.

We have accumulated a deficit of $61,612,000 since our inception in May 2001. We do not expect to generate any revenues from sales of products in the next twelve months. Our products will likely not be ready for sale for at least three years, if at all. We expect to generate revenues, which in the short and medium terms will unlikely exceed our costs of operations, from the sale of licenses to use our technology or products, as we have in the United Agreement. Our management believes that we may need to raise additional funds before we have cash flow from operations that can materially decrease our dependence on our existing cash and other liquidity resources. We are continually looking for sources of funding, including non-diluting sources such as the OCS grants. We have an effective shelf registration statement, which we may use in the future to raise additional funds.

We believe that we have sufficient cash to fund our operations for at least the next 12 months.

Off Balance Sheet Arrangements

We have no off balance sheet arrangements.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures - We maintain a system of disclosure controls and procedures that are designed for the purposes of ensuring that information required to be disclosed in our SEC reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer (CEO) and our Chief Financial Officer (CFO), as appropriate to allow timely decisions regarding required disclosures.

As of the end of the period covered by this report, we carried out an evaluation, under the supervision and with the participation of our CEO and our CFO, of the effectiveness of our disclosure controls and procedures as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934, as amended. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures are effective.

Changes in Internal Control Over Financial Reporting - There has been no change in our internal control over financial reporting during the third quarter of fiscal 2012 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

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

In February 2012, we issued 15,000 restricted stock units to a consultant as partial consideration for services the consultant provides to the Company.

The above issuance and sale was exempt under Section 4(2) of the Securities Act of 1933, as amended.

Item 6. Exhibits.

31.1*	Rule 13a-14(a) Certification of Chief Executive Officer.
31.2*	Rule 13a-14(a) Certification of Chief Financial Officer.
32.1**	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350.
32.2**	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350.
101 **	The following materials from our Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 formatted in XBRL (eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) Statements of changes in Equity, (iv) the Consolidated Statements of Cash Flows, and (v) related notes to these financial statements, tagged as blocks of text.

*Filed herewith.

**Furnished herewith.

SIGNATURES

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

PLURISTEM THERAPEUTICS INC.

By: /s/ Zami Aberman
Zami Aberman, Chief Executive Officer
(Principal Executive Officer)
Date: May 8, 2012

By: /s/ Yaky Yanay
Yaky Yanay, Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)
Date: May 8, 2012

Exhibit 31.1

CERTIFICATION

I, Zami Aberman, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Pluristem Therapeutics Inc.;

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

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

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15d-15(f)) of the registrant and have:

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

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

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

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

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: May 8, 2012

/s/ Zami Aberman

Zami Aberman
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Yaky Yanay, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Pluristem Therapeutics Inc.;

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

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

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15d-15(f)) of the registrant and have:

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

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

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

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

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: May 8, 2012

/s/ Yaky Yanay

Yaky Yanay
Chief Financial Officer and Secretary
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350

In connection with the Quarterly Report (the "Report") of Pluristem Therapeutics Inc. (the "Company") on Form 10-Q for the period ended March 31, 2012, as filed with the Securities and Exchange Commission on the date hereof, I, Zami Aberman, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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.

Date: May 8, 2012

By: /s/ Zami Aberman

Zami Aberman
Chief Executive Officer

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350

In connection with the Quarterly Report (the "Report") of Pluristem Therapeutics Inc. (the "Company") on Form 10-Q for the period ended March 31, 2012, as filed with the Securities and Exchange Commission on the date hereof, I, Yaky Yanay, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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.

Date: May 8, 2012

By: /s/ Yaky Yanay

Yaky Yanay
Chief Financial Officer