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 **September 30, 2021**

☐ 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. 5, Haifa, Israel 3508409
(Address of principal executive offices)

011-972-74-7108600
(Registrant's telephone number)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, par value $0.00001	**PSTI**	**Nasdaq Global Market**

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 every Interactive Data File required to be submitted 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 files). Yes ☒ No ☐

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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 shares as of the latest practicable date: 32,099,615 common shares issued and outstanding as of November 4, 2021.

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARIES

INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

As of September 30, 2021

(Unaudited)

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARIES
INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

As of September 30, 2021

U.S. DOLLARS IN THOUSANDS

(Unaudited)

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PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARIES

INTERIM CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)

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

	Note	September 30, 2021	June 30, 2021
ASSETS			
CURRENT ASSETS:			
Cash and cash equivalents		$ 14,611	$ 31,241
Short-term bank deposits		46,060	33,709
Restricted cash		607	597
Prepaid expenses and other current assets		1,548	1,824
Total current assets		62,826	67,371
LONG-TERM ASSETS:			
Long-term deposits		18,483	23,269
Severance pay fund		683	664
Property and equipment, net		1,176	1,499
Operating lease right-of-use asset		573	728
Other long-term assets		6	7
Total long-term assets		20,921	26,167
Total assets		$ 83,747	$ 93,538

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

INTERIM CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)

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

	Note	September 30, 2021	June 30, 2021
LIABILITIES AND SHAREHOLDERS' EQUITY			
CURRENT LIABILITIES			
Trade payables		$ 2,303	$ 2,526
Accrued expenses		5,258	5,941
Operating lease liability		401	634
Accrued vacation and recuperation		983	1,203
Other accounts payable		1,420	1,213
Total current liabilities		10,365	11,517
LONG-TERM LIABILITIES			
Accrued severance pay		937	920
Operating lease liability		94	100
Loan from the European Investment Bank (EIB)	4	23,444	23,850
Total long-term liabilities		24,475	24,870
COMMITMENTS AND CONTINGENCIES	3		
SHAREHOLDERS' EQUITY			
Share capital:	5		
Common shares $0.00001 par value per share: Authorized: 60,000,000 shares Issued and outstanding: 32,096,927 shares as of September 30, 2021, 31,957,782 shares as of June 30, 2021		*	*
Additional paid-in capital		390,360	387,172
Accumulated deficit		(341,453)	(330,021)
Total shareholders' equity		48,907	57,151
Total liabilities and shareholders' equity		$ 83,747	$ 93,538

(*) Less than $1

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

INTERIM CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

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

	Three months ended September 30,	
	2021	**2020**
Operating expenses:		
Research and development expenses	$ (6,391)	$ (6,203)
Less: participation by the Israeli Innovation Authority (IIA), Horizon 2020 and other parties	38	265
Research and development expenses, net	(6,353)	(5,938)
General and administrative expenses	(5,088)	(2,799)
Operating loss	(11,441)	(8,737)
Financial income	263	301
Financial expenses	(254)	(53)
Financial income, net	9	248
Net loss	$ (11,432)	$ (8,489)
Loss per share:		
Basic and diluted net loss per share	$ (0.36)	$ (0.33)
Weighted average number of shares used in computing basic and diluted net loss per share	32,000,789	25,535,593

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

INTERIM CONDENSED CONSOLIDATED CHANGES IN SHAREHOLDERS' EQUITY (UNAUDITED)

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

	Common Shares		Additional Paid-in Capital	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount			
Balance as of July 1, 2020	25,492,713	$ (*)	$ 336,257	$ (280,156)	$ 56,101
Share-based compensation to employees, directors and non-employee consultants	73,741	(*)	1,036	-	1,036
Exercise of warrants	42,857	(*)	300	-	300
Exercise of options by non-employee consultants	3,500	(*)	-	-	-
Net loss	-	-	-	(8,489)	(8,489)
Balance as of September 30, 2020	25,612,811	$ (*)	$ 337,593	$ (288,645)	$ 48,948

(*) Less than $1

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

INTERIM CONDENSED CONSOLIDATED CHANGES IN SHAREHOLDERS' EQUITY (UNAUDITED)

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

	Common Shares		Additional Paid-in Capital	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount			
Balance as of July 1, 2021	31,957,782	$ (*)	$ 387,172	$ (330,021)	$ 57,151
Share-based compensation to employees, directors, and non-employee consultants	139,145	(*)	3,188	-	3,188
Net loss	-	-	-	(11,432)	(11,432)
Balance as of September 30, 2021	32,096,927	$ (*)	$ 390,360	$ (341,453)	$ 48,907

(*) Less than $1

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

INTERIM CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

U.S. Dollars in thousands

	Three months ended September 30,	
	2021	**2020**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (11,432)	$ (8,489)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	337	347
Share-based compensation to employees, directors and non-employee consultants	3,188	1,036
Decrease in prepaid expenses and other current assets and other long-term assets	277	407
Decrease in trade payables	(222)	(187)
Increase (decrease) in other accounts payable, accrued expenses, accrued vacation and recuperation and other current liabilities	(696)	880
Decrease in operating lease right-of-use asset and liability, net	(84)	(80)
Increase in interest receivable on short-term deposits	(267)	(52)
Linkage differences and interest on long-term deposits, restricted bank deposits and EIB loan	(116)	(1)
Long term interest payable pursuant to EIB loan	228	-
Accrued severance pay, net	(2)	(2)
Net cash used for operating activities	$ (8,789)	$ (6,141)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of property and equipment	$ (15)	$ (77)
Proceeds from withdrawal of (investment in) short-term deposits	(12,084)	3,754
Withdrawal of long-term deposits	4,859	522
Net cash provided (used) by investing activities	$ (7,240)	$ 4,199

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

INTERIM CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

U.S. Dollars in thousands

	Three months ended September 30,	
	2021	**2020**
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds related to exercise of warrants	-	$ 300
Net cash provided by financing activities	$ -	$ 300
EFFECT OF EXCHANGE RATE ON CASH AND CASH EQUIVALENTS	(591)	-
Decrease in cash, cash equivalents and restricted cash	(16,620)	(1,642)
Cash, cash equivalents and restricted cash at the beginning of the period	31,838	9,229
Cash, cash equivalents and restricted cash at the end of the period	$ 15,218	$ 7,587

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

NOTE 1:-GENERAL

a. Pluristem Therapeutics Inc., a Nevada corporation ("Pluristem Therapeutics"), was incorporated on May 11, 2001. Pluristem Therapeutics has a wholly owned subsidiary, Pluristem Ltd. (the "Subsidiary"), which is incorporated under the laws of the State of Israel. In January 2020, the Subsidiary established a wholly owned subsidiary, Pluristem GmbH (the "German Subsidiary") which is incorporated under the laws of Germany. Pluristem Therapeutics, the Subsidiary and the German Subsidiary are referred to as the "Company" or "Pluristem." The Subsidiary and the German Subsidiary are referred to as the "Subsidiaries."

Pluristem Therapeutics' common shares are traded on the Nasdaq Global Market and on the Tel-Aviv Stock Exchange under the symbol "PSTI".

b. The Company is a bio-technology company focused in the field of regenerative medicine and operates in one business segment. The Company is developing placenta-based cell therapy product candidates for the treatment of muscle trauma, hematological disorders, radiation damage and inflammation.

The Company has incurred an accumulated deficit of approximately $341,453 and incurred recurring operating losses and negative cash flows from operating activities since inception. As of September 30, 2021, the Company's total shareholders' equity amounted to $48,907. During the three-month period ended September 30, 2021, the Company incurred losses of $11,432 and its negative cash flow from operating activities was $8,789.

As of September 30, 2021, the Company's cash position (cash and cash equivalents, short-term bank deposits and long-term bank deposits) totaled approximately $79,154. The Company plans to continue to finance its operations from its current resources, by entering into licensing or other commercial agreements, from grants to support its research and development activities, from sales of its equity securities, as well as the potential additional draw down of funds from the Finance Agreement (as defined in Note 4) executed with the European Investment Bank (the "EIB"), assuming applicable milestones will be achieved. Management believes that its current resources, together with its existing operating plan, are sufficient for the Company to meet its obligations as they come due at least for a period of twelve months from the date of the issuance of these interim condensed consolidated financial statements. There are no assurances, however, that the Company will be able to obtain an adequate level of financial resources that are required for the long-term development and commercialization of its product candidates.

NOTE 2:-SIGNIFICANT ACCOUNTING POLICIES

a. ***Unaudited Interim Financial Information***

The accompanying unaudited interim condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information and with the instructions to Form 10-Q and Article 10 of U.S. Securities and Exchange Commission Regulation S-X. Accordingly, they do not include all the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments considered necessary for a fair statement have been included (consisting only of normal recurring adjustments). For further information, reference is made to the consolidated financial statements and footnotes thereto included in the Company's Annual Report on Form 10-K for the year ended June 30, 2021. The year-end balance sheet data was derived from the audited consolidated financial statements as of June 30, 2021, but not all disclosures required by U.S. GAAP are included.

Operating results for the three-month period ended September 30, 2021 are not necessarily indicative of the results that may be expected for the year ending June 30, 2022.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

b. ***Significant Accounting Policies***

The significant accounting policies followed in the preparation of these unaudited interim condensed consolidated financial statements are identical to those applied in the preparation of the latest annual financial statements.

c. ***Use of estimates***

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates, judgments and assumptions that are reasonable based upon information available at the time they are made. These estimates, judgments and assumptions can affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

d. ***Fair value of financial instruments***

The carrying amounts of the Company's financial instruments, including cash and cash equivalents, short-term and restricted bank deposits, accounts receivable and other current assets, trade payable and other accounts payable, accrued expenses and other liabilities, approximate fair value because of their generally short-term maturities.

The Company measures its derivative instruments at fair value under Accounting Standards Codification ("ASC"), "Fair Value Measurements and Disclosures" ("ASC 820"). 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, ASC 820 establishes a three-tier value hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value:

Level 1 - Quoted prices (unadjusted) in active markets for identical assets or liabilities;
Level 2 - Inputs other than Level 1 that are observable for the asset or liability, either directly or indirectly; and
Level 3 - Unobservable inputs for the asset or liability.

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.

The Company measures its liability pursuant to the Finance Agreement with the EIB based on the aggregate outstanding amount of the combined principal and accrued interest. The Company does not reflect its liability for future royalty payments pursuant to the Finance Agreement with the EIB since the royalty payments are to be paid as a percentage of the Company's future consolidated revenues, pro-rated to the amount disbursed, beginning in the fiscal year 2024 and continuing up to and including its fiscal year 2030, which cannot be measured at this time.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (CONT.)

e. ***Recently Issued Accounting Pronouncements***

ASU No. 2016-13 - "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13"):

In June 2016, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13"). ASU 2016-13 changes the impairment model for most financial assets and certain other instruments. For trade and other receivables, held-to-maturity debt securities, loans, and other instruments, entities will be required to use a new forward-looking "expected loss" model that generally will result in the earlier recognition of allowances for losses. The guidance also requires increased disclosures. The amendments contained in ASU 2016-13 were originally effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years for the Company. In November 2019, the FASB issued ASU No. 2019-10, which delayed the effective date of ASU 2016-13 for smaller reporting companies (as defined by the U.S. Securities and Exchange Commission, "SRC") to fiscal years beginning after December 15, 2022, including interim periods. Early adoption is permitted. The Company meets the definition of a SRC and is adopting the deferral period for ASU 2016-13. The guidance requires a modified retrospective transition approach through a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption. The Company is currently evaluating the impact of the adoption of ASU 2016-13 on its consolidated financial statements but does not expect that the adoption of this standard will have a material impact on its consolidated financial statements.

NOTE 3: - COMMITMENTS AND CONTINGENCIES

a. As of September 30, 2021, an amount of $607 of cash and deposits was pledged by the Subsidiary to secure its credit line and bank guarantees.

b. Under the Law for the Encouragement of Industrial Research and Development, 1984, (the "Research Law"), research and development programs that meet specified criteria and are approved by the IIA are eligible for grants of up to 50% of the project's expenditures, as determined by the research committee, in exchange for the payment of royalties from the sale of products developed under the program. Regulations under the Research Law generally provide for the payment of royalties to the IIA of 3% on sales of products and services derived from a technology developed using these grants until 100% of the dollar-linked grant is repaid. The Company's obligation to pay these royalties is contingent on its actual sale of such products and services. In the absence of such sales, no payment is required. Outstanding balance of the grants will be subject to interest at a rate equal to the 12 month LIBOR applicable to dollar deposits that is published on the first business day of each calendar year. Following the full repayment of the grant, there is no further liability for royalties.

Through September 30, 2021, total grants from the IIA obtained aggregated to approximately $27,743 and total royalties paid and accrued amounted to $169. As of September 30, 2021, the Company's contingent liability in respect to royalties to the IIA amounted to $27,574, not including LIBOR interest as described above.

NOTE 3: - COMMITMENTS AND CONTINGENCIES (CONT.)

c. The Company has been awarded a marketing grant under the "Smart Money" program of the Israeli Ministry of Economy and Industry. The program's aim is to assist companies to extend their activities in international markets. The goal market that was chosen was Japan. The Israeli government granted the Company budget resources that are intended to be used to advance the Company's product candidate towards marketing in Japan and for regulatory activities there. As part of the program, the Company will repay royalties of 5% from the Company's income in Japan during five years, starting the year in which the Company will not be entitled to reimbursement of expenses under the program and will be spread over a period of up to 5 years or until the amount of the grant is fully paid.

   As of September 30, 2021, total grants obtained under this Smart Money program amounted to approximately $112. As of September 30, 2021, the Company's contingent liability with respect to royalties for this "Smart Money" program was $112 and no royalties were paid or accrued.

d. The Company was awarded an additional Smart Money grant of approximately $229 from Israel's Ministry of Economy and Industry to facilitate certain marketing and business development activities with respect to its advanced cell therapy products in the Chinese market, including Hong Kong. The Israeli government granted the Company budget resources that are intended to be used to advance the Company's product candidate towards marketing in the China-Hong Kong markets. The Company will also receive close support from Israel's trade representatives stationed in China, including Hong Kong, along with experts appointed by the Smart Money program. As part of the program, the Company will repay royalties of 5% from the Company's revenues in the region for a five-year period, beginning the year in which the Company will not be entitled to reimbursement of expenses under the program and will be spread over a period of up to 5 years or until the amount of the grant is fully paid.

   As of September 30, 2021, the aggregate amount of grant obtained from this Smart Money program was approximately $168. As of September 30, 2021, the Company's contingent liability with respect to royalties for this "Smart Money" program is $168 and no royalties were paid or accrued.

e. In September 2017, the Company signed an agreement with the Tel-Aviv Sourasky Medical Center (Ichilov Hospital) to conduct a Phase I/II trial of PLX-PAD cell therapy for the treatment of Steroid-Refractory Chronic Graft-Versus-Host-Disease ("cGvHD").

   As part of the agreement with the Tel-Aviv Sourasky Medical Center (Ichilov Hospital), the Company will pay royalties of 1% from its net sales of the PLX-PAD product relating to cGvHD, with a maximum aggregate royalty amount of approximately $250.

f. The Company was awarded a marketing grant of approximately $52 under the "Shalav" program of the Israeli Ministry of Economy and Industry. The grant is intended to facilitate certain marketing and business development activities with respect to the Company's advanced cell therapy products in the U.S. market. As part of the program, the Company will repay royalties of 3%, but only with respect to the Company's revenues in the U.S. market in excess of $250 of its revenues in fiscal year 2018, upon the earlier of the five year period beginning the year in which the Company will not be entitled to reimbursement of expenses under the program and/or until the amount of the grant, which is linked to the Consumer Price Index, is fully paid.

NOTE 3: - COMMITMENTS AND CONTINGENCIES (CONT.)

As of September 30, 2021, total grants obtained under the "Shalav" program amounted to approximately $52. As of September 30, 2021, the Company's contingent liability with respect to royalties for this "Shalav" program was $52 and no royalties were paid or accrued.

NOTE 4: - LOAN FROM THE EIB

On April 30, 2020, Pluristem entered into a finance agreement (the "Finance Agreement") with the EIB, pursuant to which Pluristem, through the German Subsidiary can obtain a loan in the amount of up to €50 million, subject to certain milestones being reached (the "Loan"), payable in three tranches, with the first tranche consisting of €20 million, the second of €18 million and the third of €12 million for a period of 36 months from the signing of the Finance Agreement.

The tranches will be treated independently, each with its own interest rate and maturity period. The interest rate is 4% in the aggregate (consisting of a 0% fixed interest rate and a 4% deferred interest rate payable upon maturity, respectively) per year for the first tranche, 4% in the aggregate (consisting of a 1% fixed interest rate and a 3% deferred interest rate payable upon maturity, respectively) per year for the second tranche and 3% (consisting of a 1% fixed interest rate and a 2% deferred interest rate payable upon maturity, respectively) per year for the third tranche.

In addition to any interest payable on the Loan, the EIB is entitled to receive royalties from future revenues, if any, of Pluristem for a period of seven years starting in 2024, in an amount equal to between 0.2% to 2.3% of the Company's consolidated revenues, pro-rated to the amount disbursed from the Loan to Pluristem beginning in the fiscal year 2024 and continuing up to and including its fiscal year 2030.

During June 2021, Pluristem received the first tranche in an amount of $24,449 (€20 million) of the Finance Agreement. The amount received is due on June 1, 2026 and bears annual interest of 4% to be paid with the principal of the Loan. As of September 30, 2021, the linked principal balance in the amount of $23,140 and the interest accrued in the amount of $304 are presented as part of the Loan as long term liabilities.

NOTE 5: - SHAREHOLDERS' EQUITY

a. Pursuant to a shelf registration on Form S-3 declared effective by the SEC on July 23, 2020, in July 2020 the Company entered into an Open Market Sale Agreement ("ATM Agreement") with Jefferies LLC ("Jefferies"), which provides that, upon the terms and subject to the conditions and limitations in the ATM Agreement, the Company may elect, from time to time, to offer and sell common shares having an aggregate offering price of up to $75,000 through Jefferies acting as sales agent. During the year ended June 30, 2021, the Company sold 1,045,097 common shares under the ATM Agreement at an average price of $8.50 per share for aggregate net proceeds of approximately $8,506, net of issuance expenses of $380. There were no sales under the ATM Agreement during the three months ended September 30, 2021.

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

NOTE 5: - SHAREHOLDERS' EQUITY (CONT.)

b. Options to consultants:

A summary of the options to non-employee consultants under the Company's 2005 and 2016 equity incentive plans is as follows:

	Three months ended September 30, 2021			
	Number	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms (in years)	Aggregate Intrinsic Value Price
Options outstanding at the beginning of the period	39,836	$ -	-	-
Options forfeited	(91)	$ -		
Options outstanding at the end of the period	39,745	$ -	6.75	$ 153
Options exercisable at the end of the period	36,620	$ -	6.71	$ 145
Options unvested	3,125	$ -	7.22	$ 8
Options vested and expected to vest	39,745	$ -	6.75	$ 153

Compensation expenses recorded in the in general and administration expenses related to options granted to consultants for the three months ended September 30, 2021 and 2020 were $2 and $3, respectfully.

c. **Restricted Shares units ("RSUs") to employees, directors and consultants:**

1. RSUs to employees and directors:

The following table summarizes the activity related to RSUs granted to employees and directors under the Company's 2005, 2016 and 2019 equity incentive plans for the three-month period ended September 30, 2021:

	Three months ended September 30,	
	2021	2020
	Number	
Unvested at the beginning of the period	2,404,415	415,194
Granted	40,000	2,220,000
Forfeited	(23,609)	(4,875)
Vested	(118,520)	(73,116)
Unvested at the end of the period	2,302,286	2,557,203
Expected to vest after the end of the period	2,261,117	2,539,848

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

NOTE 5: - SHAREHOLDERS' EQUITY (CONT.)

c. **RSUs to employees, directors and consultants (cont.):**

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

	Three months ended September 30,	
	2021	2020
Research and development expenses	$ 209	$ 92
General and administrative expenses	2,907	822
	$ 3,116	$ 914

Unamortized compensation expenses related to RSUs granted to employees and directors is approximately $7,055 to be recognized by the end of March 2025.

2. RSUs to consultants:

The following table summarizes the activity related to unvested RSUs granted to consultants under the Company's 2005, 2016 and 2019 equity incentive plans for the three-month period ended September 30, 2021 and 2020:

	Three months ended September 30,	
	2021	2020
	Number	
Unvested at the beginning of the period	76,249	6,250
Granted	-	85,000
Vested	(20,625)	(625)
Unvested at the end of the period	55,624	90,625

Compensation expenses related to RSUs granted to consultants were recorded as follows:

	Three months ended September 30,	
	2021	2020
Research and development expenses	$ 32	$ 103
General and administrative expenses	38	16
	$ 70	$ 119

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," "intend," "plan," "anticipate," "believe," "estimate," "predict," "potential" or "continue," the negative of such terms, or other variations thereon or comparable terminology. These statements are merely predictions and therefore inherently subject to known and unknown risks, uncertainties, assumptions and other factors that may cause actual results, performance levels of activity, or our achievements, or industry 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 may appear elsewhere in this Quarterly Report on Form 10-Q 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;
- our entering into certain contracts with third parties;
- the prospects of entering into additional license agreements, or other forms of cooperation with other companies, research organizations and medical institutions;
- our pre-clinical and clinical trials plans, including timing of initiation, expansion, enrollment and conclusion of trials;
- achieving regulatory approvals, including under accelerated paths;
- receipt of future funding from the Israel Innovation Authority, or IIA, the European Union's Horizon 2020 program, as well as grants from other independent third parties;
- the receipt of funds pursuant to our finance agreement, or the EIB Finance Agreement, with the European Investment Bank, or the EIB, and whether we will achieve the milestones necessary to receive funds thereunder;
- developing capabilities for new clinical indications of placenta expanded, or PLX, cells and new products;
- the progress of our regulated clinical multinational trial program for the potential use of PLX cells in the treatment of patients suffering from ARDS associated with COVID-19;
- our expectation to demonstrate a real-world impact and value from our pipeline, technology platform and commercial-scale manufacturing capacity;
- our expectations regarding our short- and long-term capital requirements;
- our outlook for the coming months and future periods, including but not limited to our expectations regarding future revenue and expenses;
- information with respect to any other plans and strategies for our business; and
- our expectation regarding the impact of the COVID-19 pandemic, including on our clinical trials and operations.

Our business and operations are subject to substantial risks, which increase the uncertainty inherent in the forward-looking statements contained in this report.

In addition, historic results of scientific research, clinical and preclinical trials do not guarantee that the conclusions of future research or trials would not suggest different conclusions. Also, historic results referred to in this periodic report would be interpreted differently in light of additional research, clinical and preclinical trials results. 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, 2021, or the 2021 Annual Report, as well as Item 1A of this Quarterly Report. 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 subsidiaries, Pluristem Ltd. and Pluristem GmbH, unless otherwise indicated or as otherwise required by the context.

Overview

We are a biotechnology company focused in the field of regenerative medicine, and a leading developer of placenta-based cell therapy product candidates for the treatment of multiple inflammatory, muscle injuries and hematologic conditions. Our operations are focused on the research, development, manufacturing, conducting clinical studies and business development of cell therapeutics and related technologies.

We develop, and intend to commercialize, cell therapy production technologies and products that are derived from the human placenta after a full-term delivery of a healthy baby. Our placental expanded, or PLX, cells are adherent stromal cells that are expanded using a proprietary three-dimensional, or 3D, process. This system utilizes a synthetic scaffold to create an artificial 3D environment where placental-derived stromal cells can grow. Our PLX cells can be administered to patients off-the-shelf, without blood or tissue matching or additional manipulation prior to administration. PLX cells are believed to release a range of therapeutic proteins in response to the patient's condition such as inflammation, muscle trauma, hematological disorders and radiation damage.

We are conducting several multinational clinical studies which consist of a Phase III clinical study in muscle recovery following surgery for hip fracture and two Phase II clinical studies in Acute Respiratory Distress Syndrome, or ARDS, associated with COVID-19 in the United States, Europe and Israel. In addition, we are focusing on other clinical programs in the hematological field such as a Phase I clinical study for incomplete recovery following bone marrow transplantation in the United States and Israel, an investigator-led Phase I/II Chronic Graft versus Host Disease study in Israel, and Acute Radiation Syndrome, or ARS, under the U.S. Food and Drug Administration, or FDA, animal rule. We believe that each of these indications is a severe unmet medical need.

On July 8, 2021, we announced that we are bringing our COVID-19 complicated by ARDS Phase II studies in the United States, Europe and Israel to clinical readout. The analysis will be based on 89 patients enrolled. We expect to announce the topline results of the readout during the fourth calendar quarter of 2021. Our Phase III clinical study in muscle recovery following surgery for hip fracture has enrolled more than 95 percent of its patients and is expected to complete enrollment in November 2021.

We have completed enrollment in our first in human Phase I clinical study in incomplete hematopoietic recovery following hematopoietic cell transplantation, or HCT, in the United States and Israel. The study has completed enrollment of 21 patients and is designed to assess the safety of PLX-R18. We completed one year follow up for all patients during September 2021. On April 2021, we announced positive topline results of this study as disclosed in our Current Report on Form 8-K filed with the Securities and Exchange Commission, or the SEC.

Our manufacturing facility complies with the European, Japanese, Israeli, South Korean and the FDA's current Good Manufacturing Practice, or cGMP, requirements and has been inspected and approved by the European and Israeli regulators for production of PLX cells for late stage trials. We have also been granted manufacturer/importer authorization and cGMP Certification by the Israeli Ministry of Health. If we obtain FDA and other regulatory approvals to market PLX cells, we expect to have in-house production capacity to grow PLX cells in commercial quantities.

Our goal is to make significant progress with our clinical pipeline and our clinical studies in order to ultimately bring innovative, potent therapies to patients who need new treatment options. We expect to demonstrate a real-world impact and value from our pipeline, technology platform and commercial-scale manufacturing capacity. Our business model for commercialization and revenue generation includes, but is not limited to, licensing deals, joint ventures with pharmaceutical companies, direct sale of our products, and partnerships.

RESULTS OF OPERATIONS – THREE MONTHS ENDED SEPTEMBER 30, 2021 COMPARED TO THREE MONTHS ENDED SEPTEMBER 30, 2020.

Revenues

We had no revenues during the three-month periods ended September 30, 2021 and September 30, 2020.

Research and Development Expenses, Net

Research and development expense, net (costs less participation and grants by the Horizon 2020 program, the IIA and other parties) for the three-month period ended September 30, 2021 increased by 7% from $5,938,000 for the three-month period ended September 30, 2020 to $6,353,000. The increase is mainly attributed to: (1) an increase in payroll expenses related to payroll adjustments and the strength of the New Israel Shekel, or NIS, against the U.S. dollar and (2) a decrease in participation by the EU with respect to the Horizon 2020 program, as a result of our utilizing the entirety of the grant under such program during the three month period ended September 30, 2020. The increase was partially offset by lower clinical trial subcontractor expenses associated with our CLI clinical trial that was terminated and a decrease in materials expenses.

General and Administrative Expenses

General and administrative expenses for the three-month period ended September 30, 2021 increased by 82% from $2,799,000 for the three-month period ended September 30, 2020 to $5,088,000. The increase is mainly attributed to: (1) an increase in share-based compensation expenses related to the restricted stock units, or RSUs, granted, as a result of the fair value of such grants at the time they were made and the expected vesting periods, including the RSU grants to our Chief Executive Officer and Executive Chairman, and (2) an increase in directors and officers insurance premium expenses. The increase was partially offset by a decrease in payroll expenses related to the entitlement of Mr. Aberman, our Executive Chairman, to certain adjustment fees pursuant to his amended consulting agreement recorded in the three months ended September 30, 2020.

Financial Income

Financial income decreased from a financial income of $301,000 for the three-month period ended September 30, 2020 to a financial income of $263,000 for the three-month period ended September 30, 2021. This decrease is mainly attributable to decrease in income from exchange rate differences, partially offset by an increase in interest income as a result of an increase in deposits.

Financial Expenses

Financial expenses increased from a financial expense of $53,000 for the three-month period ended September 30, 2020 to a financial expense of $254,000 for the three-month period ended September 30, 2021. This increase is mainly attributable to interest expenses related to the EIB loan provided to us pursuant to the EIB Finance Agreement.

Net Loss

Net loss for the three-month period ended September 30, 2021 was $11,432,000 as compared to net loss of $8,489,000 for the three-month period ended September 30, 2020. The increases in net loss were mainly due to increases in research and development expenses and general and administrative expenses, as described above. Net loss per share for the three-month period ended September 30, 2021 was $0.36 as compared to $0.33 for the three-month period ended September 30, 2020.

For the three-month periods ended September 30, 2021 and September 30, 2020, we had weighted average common shares outstanding of 32,000,789 and 25,535,593, respectively, which were used in the computations of net loss per share for the three-month periods.

The increase in weighted average common shares outstanding reflects the issuance of additional shares mainly related to the issuances of shares pursuant to a securities purchase agreement with certain institutional investors in February 2021, issuances of shares pursuant to our Open Market Sale Agreement™, or the ATM Agreement, that we entered into with Jefferies LLC, or Jefferies, on July 16, 2020, issuances of additional shares upon the settlement of RSUs issued to directors, employees and consultants, and shares issued as a result of exercises of outstanding warrants and options.

Liquidity and Capital Resources

As of September 30, 2021, our total current assets were $62,826,000 and total current liabilities were $10,365,000. On September 30, 2021, we had a working capital surplus of $52,461,000, shareholders' equity of $48,907,000 and an accumulated deficit of $341,453,000.

Our cash and cash equivalents as of September 30, 2021 amounted to $14,611,000, compared to $6,625,000 as of September 30, 2020, and compared to $31,241,000 as of June 30, 2021. Cash balances changed in the three months ended September 30, 2021 and 2020 for the reasons presented below.

Operating activities used cash of $8,789,000 in the three months ended September 30, 2021, compared to $6,141,000 in the three months ended September 30, 2020. Cash used in operating activities in the three months ended September 30, 2021 and 2020 consisted primarily of payments of fees to our suppliers, subcontractors, professional services providers and consultants, including the costs of our clinical studies, and payments of salaries to our employees, partially offset by grants from the IIA, the EU's Horizon 2020 program, Israel's Ministry of Economy and other research grants.

Investing activities used cash of $7,240,000 in the three months ended September 30, 2021, compared to cash provided of $4,199,000 for the three months ended September 30, 2020. The investing activities in the three-month period ended September 30, 2021 consisted primarily of the investment of $12,084,000 in short-term deposits and payments of $15,000 related to investment in property and equipment, partially offset by the withdrawal of $4,859,000 of long-term deposits. The investing activities in the three-month period ended September 30, 2020 consisted primarily of the withdrawal of $3,754,000 of short-term deposits and the withdrawal of $522,000 of long-term deposits, partially offset by payments of $77,000 related to investment in property and equipment.

Financing activities did not generate cash during the three months ended September 30, 2021, compared to $300,000 for the three months ended September 30, 2020. The cash generated in the three months ended September 30, 2020 from financing activities was related to net proceeds of $300,000 from the exercise of warrants.

On July 16, 2020, we entered into the ATM Agreement with Jefferies, pursuant to which we may issue and sell our common shares having an aggregate offering price of up to $75,000,000 from time to time through Jefferies. Upon entering into the ATM Agreement, we filed a new shelf registration statement on Form S-3, which was declared effective by the SEC on July 23, 2020. During the year ended June 30, 2021, we sold 1,045,097 of our common shares under the ATM Agreement at an average price of $8.50 per share for aggregate net proceeds of approximately $8,506,000. During the three-months ended September 30, 2021, we did not sell any of our common shares under the ATM Agreement.

In April 2020, we and our subsidiaries, Pluristem Ltd. and Pluristem GmbH, executed the EIB Finance Agreement for funding of up to €50 million in the aggregate, payable in three tranches. The proceeds from the EIB Finance Agreement are intended to support our research and development in the European Union to further advance our regenerative cell therapy platform, and to bring the products in our pipeline to market. The proceeds from the EIB Finance Agreement are expected to be deployed in three tranches, subject to the achievement of certain clinical, regulatory and scaling up milestones.

During June 2021, we received the first tranche in the amount of $24,449,000 (€20 million) pursuant to the EIB Finance Agreement. The amount received is due to be repaid on June 1, 2026 and bears annual interest of 4% to be paid together with the principal of the loan. As of September 30, 2021, the interest accrued was in the amount of $304,000 (€263,000).

According to the IIA grant terms, we are required to pay royalties at a rate of 3% on sales of products and services derived from technology developed using this and other IIA grants until 100% of the dollar-linked grants amount plus interest are repaid. In the absence of such sales, no payment is required. Through September 30, 2021, total grants obtained from the IIA aggregated to approximately $27,743,000 and total royalties paid and accrued amounted to $169,000.

In June 2020, we announced that we were selected as a member of the CRISPR-IL consortium, a group funded by the IIA. CRISPR-IL brings together the leading experts in life science and computer science from academia, medicine, and industry, to develop Artificial Intelligence, or AI, based end-to-end genome-editing solutions. These next-generation, multi-species genome editing products for human, plant, and animal DNA, have applications in the pharma, agriculture, and aquaculture industries. CRISPR-IL is funded by the IIA with a total budget of approximately $10,000,000 of which, an amount of approximately $480,000 is a direct grant allocated to us, for the initial period of 18 months.

Through September 30, 2021, we received total grants of approximately $443,000 in cash from the IIA pursuant to the CRISPR-IL consortium program, out of which an amount of $42,000 was received during the three-months ended September 30, 2021.During October 2021, we received an approval for an additional grant of approximately $583,000 from the IIA pursuant to the CRISPR-IL consortium program, for an additional period of 18 months.

The currency of our financial portfolio is mainly in U.S. dollars and we use options contracts in order to hedge our exposures to currencies other than the U.S. dollar. For more information, please see Item 7A. - “Quantitative and Qualitative Disclosures about Market Risk” in the 2021 Annual Report on form 10-K for the fiscal year ended June 30, 2021.

We have an effective Form S-3 registration statement (File No. 333-239890), filed under the Securities Act of 1933, as amended, with the SEC using a “shelf” registration process. Under this shelf registration process, we may, from time to time, sell our common shares, preferred shares and warrants to purchase common shares, and units of two or more of such securities in one or more offerings up to a total dollar amount of $250,000,000. As of November 4, 2021, other than the $75,000,000 of common shares we are eligible to sell pursuant to the ATM Agreement, and the $30,000,000 of common shares we sold in the registered direct offering in February 2021, no securities have been sold pursuant to our effective Form S-3 registration statement.

Outlook

We have accumulated a deficit of $341,453,000 since our inception in May 2001. We do not expect to generate any significant revenues from sales of products in the next twelve months. Our cash needs may increase in the foreseeable future. We expect to generate revenues, from the sale of licenses to use our technology or products, but in the short and medium terms will unlikely exceed our costs of operations.

We may be required to obtain additional liquidity resources in order to support the commercialization of our products and maintain our research and development and clinical trials activities.

We are continually looking for sources of funding, including non-diluting sources such as the EIB Finance Agreement, grants from the IIA, EU’s Horizon 2020 program, Israel’s Ministry of Economy and other research grants, collaboration with other companies and sales of our common shares.

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

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, or CEO, and our Chief Financial Officer, or 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 first quarter of fiscal year 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

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 September 30, 2021 formatted in inline XBRL (eXtensible Business Reporting Language): (i) the Interim Condensed Consolidated Balance Sheets, (ii) the Interim Condensed Consolidated Statements of Operations, (iii) the Interim Condensed Statements of Changes in Shareholders' Equity, (iv) the Interim Condensed Consolidated Statements of Cash Flows, and (vi) the Notes to Interim Condensed Consolidated Financial Statements, tagged as blocks of text and in detail.
104*	Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101).

* Filed herewith.

** Furnished herewith.

SIGNATURES

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

PLURISTEM THERAPEUTICS INC.

By: /s/ Yaky Yanay
Yaky Yanay, Chief Executive Officer and President
(Principal Executive Officer)

Date: November 8, 2021

By: /s/ Chen Franco-Yehuda
Chen Franco-Yehuda, Chief Financial Officer
(Principal Financial Officer and
Principal Accounting Officer)

Date: November 8, 2021

Exhibit 31.1

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: November 8, 2021

/s/ Yaky Yanay
Yaky Yanay
Chief Executive Officer and President
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Chen Franco-Yehuda, 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: November 8, 2021

/s/ Chen Franco-Yehuda
Chen Franco-Yehuda
Chief Financial Officer
(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 September 30, 2021, as filed with the Securities and Exchange Commission on the date hereof, I, Yaky Yanay, Chief Executive Officer and President of the Company, certify, pursuant to 18 U.S.C. 1350, 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: November 8, 2021

By: /s/ Yaky Yanay
Yaky Yanay
Chief Executive Officer and President

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 September 30, 2021, as filed with the Securities and Exchange Commission on the date hereof, I, Chen Franco-Yehuda, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. 1350, 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: November 8, 2021

By: /s/ Chen Franco-Yehuda
Chen Franco-Yehuda
Chief Financial Officer