FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL								
OMB Number:	3235-0287							
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

Name and Address of Reporting Person* BEN-YORAM ISRAEL 0001320556			2. Issuer Name and Ticker or Trading Symbol PLURISTEM THERAPEUTICS INC [PSTI]	Relationship of Reporting Person(s) to Issuer (Check all applicable)				
(Last) (First) (Middle) 24 BARKAN STREET			3. Date of Earliest Transaction (Month/Day/Year) 03/21/2013	X Director 10% Owner Officer (give title below) Other (specify below)				
(Street) RISHON LEZION	L3	75436	4. If Amendment, Date of Original Filed (Month/Day/Year)	Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Per				
(City)	(State)	(Zip)		,				

Table I – Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned											
1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3	6. Ownership Form: Direct (D) or Indirect	7. Nature of Indirect Beneficial	
			Code	V	Amount	(A) or (D)	Price	and 4)	(I) (Instr. 4)	Ownership (Instr. 4)	
Common Stock	03/21/2013		M		27,500	A	\$0.62	320,208	D		

Table II – Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)															
Derivative Conversion I		3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		Reported Transaction (s) (Instr. 4)		
Stock option (right to buy)	\$0.62	03/21/2013		М			27,500	(1)	10/30/2018	Common Stock	27,500	\$0	0	D	

Explanation of Responses:

1. The options vested as follows: 25% on 4/30/2009 and the remaining options vested monthly, in equal installments over 18 months until 10/30/2010. **Remarks:**

/s/ Israel Ben-Yoram

03/25/2013

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.