

FORM 4

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

OMB APPROVAL

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Check this box if no longer
subject to Section 16, Form 4
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STATEMENT OF CHANGES IN BENEFICIAL
OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934
or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* BEN-YORAM ISRAEL 0001320556			2. Issuer Name and Ticker or Trading Symbol PLURISTEM THERAPEUTICS INC [PSTI]			5. Relationship of Reporting Person(s) to Issuer (Check all applicable)		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 09/12/2013			<input checked="" type="checkbox"/> Director	10% Owner	
24 BARKAN STREET						Officer (give title below)	Other (specify below)	
(Street)								
RISHON	LEZION	L3						
(City) (State) (Zip)								
4. If Amendment, Date of Original Filed (Month/Day/Year)								
6. Individual or Joint/Group Filing (Check Applicable Line)								
<input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person								

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 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V			
Common Stock	09/12/2013		S	7,173	D	\$3.23	416,508	D
Common Stock	09/12/2013		S	42,827	D	\$3.05	373,681	D
Common Stock	09/12/2013		S	1,000	D	\$3.05	372,681	D
Common Stock	09/12/2013		S	1,000	D	\$3.05	371,681	D

Table II – Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	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 Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
						Code	V					

Explanation of Responses:

Remarks:

/s/ Israel Ben-Yoram

** Signature of Reporting Person

09/16/2013

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.