

## FORM 4

UNITED STATES SECURITIES AND EXCHANGE  
COMMISSION

Washington, D.C. 20549

## OMB APPROVAL

OMB Number: 3235-0287  
 Expires: December 31, 2014  
 Estimated average burden hours per response 0.5

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 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <b>BEN-YORAM ISRAEL 0001320556</b> <hr/> (Last) (First) (Middle) <b>24 BARKAN STREET</b> <hr/> (Street) <b>RISHON LEZION L3 75436</b> <hr/> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <b>PLURISTEM THERAPEUTICS INC [ PSTI ]</b>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) <b>01/10/2014</b>	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	

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	Amount	(A) or (D)	Price			
Common Stock	01/10/2014 <sup>(1)</sup>		S		2,080	D	\$4.25	374,804	D	
Common Stock	01/13/2014 <sup>(1)</sup>		S		24,373	D	\$4.296	350,431	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		Date Exercisable	Expiration Date					
						(A) (D)			Amount or Number of Shares				

## Explanation of Responses:

1. The sales reported on this Form 4 were affected pursuant to automatic selling under Rule 10b5-1 trading plan adopted by the reporting person.

## Remarks:

/s/ Israel Ben-Yoram

\*\* Signature of Reporting Person

01/14/2014

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.