

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
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* <u>YANAY YAKY 0001402539</u> (Last) (First) (Middle) <u>14 ARGAMAN ST.</u> (Street) <u>SHIMSHIT L3 17906</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>PLURISTEM THERAPEUTICS INC [PSTI]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer (give title below) Other (specify below) <u>CFO, Executive Vice President</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>01/08/2014</u>	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person 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	Amount	(A) or (D)	Price			
Common Stock	01/08/2014 ⁽¹⁾		S		30,000	D	\$4.25	1,139,616	D	
Common Stock	01/09/2014 ⁽¹⁾		S		150	D	\$4.25	1,139,466	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)			Title 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/ Yaky Yanay

** Signature of Reporting Person

01/09/2014

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.