

FORM 4

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

OMB APPROVAL

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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

<p>1. Name and Address of Reporting Person*</p> <p>YANAY YAKY 0001402539</p> <hr/> <p>(Last) (First) (Middle)</p> <p>14 ARGAMAN ST.</p> <hr/> <p>(Street)</p> <p>SHIMSHIT L3 17906</p> <hr/> <p>(City) (State) (Zip)</p>	<p>2. Issuer Name and Ticker or Trading Symbol</p> <p>PLURISTEM THERAPEUTICS INC [PSTI]</p> <hr/> <p>3. Date of Earliest Transaction (Month/Day/Year)</p> <p>09/22/2014</p> <hr/> <p>4. If Amendment, Date of Original Filed (Month/Day/Year)</p>	<p>5. Relationship of Reporting Person(s) to Issuer (Check all applicable)</p> <p>Director 10% Owner</p> <p><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)</p> <p>COO & President</p> <hr/> <p>6. Individual or Joint/Group Filing (Check Applicable Line)</p> <p><input checked="" type="checkbox"/> Form filed by One Reporting Person</p> <p>Form filed by More than One Reporting Person</p>
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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)
Common Stock	09/22/2014		A	11,499 A (1)	11,499	I	By Yaacov Yanay Management Ltd.
Common Stock					1,090,616	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	(A) (D)	Date Exercisable Expiration Date	Title Amount or Number of Shares				

Explanation of Responses:

1. These shares were granted in lieu of accrued vacation to Mr. Yanay, the sole owner of Yaacov Yanay Management Ltd., valued at a per share purchase price of \$ 2.94, which was the closing price of the common stock on Nasdaq on September 19, 2014.

Remarks:

/s/ Yaky Yanay

** Signature of Reporting Person

09/23/2014

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.