



DIVISION OF
CORPORATION FINANCE

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

April 3, 2014

Via E-mail

Yaky Yanay
Executive Vice President, Chief
Financial Officer and Secretary
Pluristem Therapeutics, Inc.
MATAM Advanced Technology Park
Building No. 5
Haifa, Israel 31905

Re: Pluristem Therapeutics, Inc.
Form 10-K for the Fiscal year Ended June 30, 2013
Filed September 11, 2013
File No. 001-31392

Dear Mr. Yanay:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filing and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Bryan J. Pitko for

Jeffrey P. Riedler
Assistant Director