

Via Facsimile and U.S. Mail
Mail Stop 6010

June 29, 2007

Ms. Ronit Lerner
Chief Financial Officer
Compugen Ltd.
72 Pinchas Rosen Street
Tel Aviv, 69512 Israel

**Re: Compugen Ltd.
Form 20-F for the Fiscal Year Ended December 31, 2006
Filed April 18, 2007
File No. 000-30902**

Dear Ms. Lerner:

We have reviewed your filing and have the following comment. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In our comment, we ask you to provide us with information so we may better understand your disclosure.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comment or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Item 5. Operating Results and Financial Review and Prospects, page 30

1. Please refer to the Division of Corporation Finance "Current Issues and Rulemaking Projects Quarterly Update" under section VIII – Industry Specific Issues – Accounting and Disclosure by Companies Engaged in Research and Development Activities. You can find it at the following website address:
<http://www.sec.gov/divisions/corpfin/cfcrq032001.htm#secviii>.

Please provide in disclosure-type format the following information for each of your major research and development projects:

- a. The current status of the project;
- b. The costs incurred during each period presented and to date on the project;
- c. The nature, timing and estimated costs of the efforts necessary to complete the project;
- d. The anticipated completion dates;
- e. The risks and uncertainties associated with completing development on schedule, and the consequences to operations, financial position and liquidity if the project is not completed timely; and finally
- f. The period in which material net cash inflows from significant projects are expected to commence.

Regarding b., if you do not maintain any research and development costs by project, disclose that fact and explain why management does not maintain and evaluate research and development costs by project. Provide other quantitative or qualitative disclosure that indicates the amount of the company's resources being used on the project.

Regarding c. and d., disclose the amount or range of estimated costs and timing to complete the phase in process and each future phase. To the extent that information is not estimable, disclose those facts and circumstances indicating the uncertainties that preclude you from making a reasonable estimate.

* * * *

Please provide us the information requested within 10 business days of the date of this letter or tell us when you will provide a response prior to the expiration of the 10-day period. Please furnish a letter with your responses that keys your responses to our comment. Detailed letters greatly facilitate our review. You should furnish the letter on EDGAR under the form type label CORRESP. Please understand that we may have additional comments after reviewing your responses to our comment.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comment, please provide, in your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;

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- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comment as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Tabatha Akins, Staff Accountant, at (202) 551-3658, or Mary Mast, Senior Accountant, at (202) 551-3613, if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant