



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 6010

June 11, 2008

VIA U.S. MAIL AND FAX (858) 410-4949

Mr. Nicholas J. Venuto
Chief Financial Officer
Nanogen, Inc.
10398 Pacific Center Court
San Diego, California 92121

Re: Nanogen, Inc.
Form 10-K for the year ended December 31, 2007
Filed March 31, 2008
Form 10-Q for the quarter ended March 31, 2008
Filed May 12, 2008
File No. 000-23541

Dear Mr. Venuto:

We have reviewed your letter dated May 30, 2008 and have the following comments. Where indicated, we think you should revise your future documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

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 comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Year Ended December 31, 2007

Variable Interest Entities, page F-9

1. We note that you no longer consolidate Jurilab Ltd's financial statements after July 2007. It appears, however, you still hold an equity investment in Jurilab Ltd at the end of 2007. If that is the case, then explain to us how you considered the impact of Rule 3-09 of Regulation S-X on your reporting requirements. With your explanation, please provide us with the significance tests you performed as described in Rule 3-09(a) of Regulation S-X.

Form 10-Q for the Period Ended March 31, 2008

8. Assignment of Royalties, page 15

2. Please refer to our prior comment 2. Based on your response and the disclosure herein, we note you have two royalty assignment agreements with DRT. However, the facts and the circumstances connected to the agreements and your accounting for the assignments and modifications thereto are still not clear to us. As such, please address the following additional matters.
 - Please explain to us the major terms of your license agreement (including the duration of the agreement) with Applied Biosystems, Inc. ("ABI").
 - You responded that your assignment agreement with DRT (entered into in March 2008) is for the rights to the royalties from ABI beginning on January 1, 2011. In your disclosure on page 15, however, we note your agreement with DRT (entered into in September 2006) will be through December 31, 2011. Please confirm, if true, that beginning date of the March 2008 agreement is January 1, 2012 (as indicated in this note) and clearly explain to us the major terms, including modified terms, of each of your two royalty assignments.
 - Please explain to us how you accounted for and presented both the March 2008 assignment agreement with DRT and modifications to the September 2006 DRT assignment agreement in your financial statements, citing the applicable U.S. GAAP that supports your conclusions. Specifically address the impact of EITF 88-18 on the referenced transactions.
 - Please revise your disclosure in future filings as necessary to address our concerns.

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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Andri Boerman, Staff Accountant, at (202) 551-3645 or me at (202) 551-3603 if you have any questions regarding these comments. In this regard, do not hesitate to contact Angela Crane, Accounting Branch Chief, at (202) 551-3554.

Sincerely,

Jay Webb
Reviewing Accountant