

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

May 29, 2013

Via E-mail

R. Bradley Gray President and Chief Executive Officer NanoString Technologies, Inc. 530 Fairview Avenue, N., Suite 2000 Seattle, Washington 98109

Re: NanoString Technologies, Inc.

Registration Statement on Form S-1

Filed May 20, 2013 File No. 333-188704

Dear Mr. Gray:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Prospectus Summary, page 1

1. You disclose on page 13 that "the FDA communicated, among other things, that we would need to provide further support before the FDA could determine whether the pending 510(k) application, if cleared, would allow us to include risk of recurrence, or ROR, score and three distinct risk groups in patient reports for all patients tested. If Prosigna is not cleared by the FDA to indicate a specific ROR score or if Prosigna is limited to classifying patients into high/low risk of recurrence only, the prognostic information provided by Prosigna and our ability to differentiate our test from alternatives may be adversely affected within the United States." Please expand your disclosure on page 2 to include a description of the concerns communicated by the FDA and how the requirement to provide further support in order to include the ROR score may affect your projected timeline for launch of Prosigna in the United States. Further, please add to your bulleted summary risk factors to highlight this risk.

R. Bradley Gray NanoString Technologies, Inc. May 29, 2013 Page 2

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 44

Operating Expenses
Research and Development, page 47

2. You disclose that in February 2013 you secured an option from a customer to acquire an exclusive worldwide license for a gene signature and that the arrangement may include upfront, milestone, or annual cash payments and revenue-based royalties. Please disclose how you have accounted for the option to acquire the license.

March 2013 Valuation, page 65

3. You disclose on page 65 that the fair value of your stock options was \$.28 per share based on the March 2013 valuation. However, in the table on page 66 you disclose that the fair value of the 2,624,000 in stock options issued on March 1, 2013 was \$.21 per share. Please clarify why you used an estimated fair value of \$.21 per share instead of \$.28 per share for the stock options issued on March 1, 2013 or revise accordingly. Please also revise the table, if necessary, on page 66 to indicate the intrinsic value of the shares issued on March 1, 2013. In addition, you valued the options granted on May 13, 2013 at the \$0.28 March 2013 valuation price noting that particular emphasis was given to the absence of changes to your business that had not already been contemplated by the March 2013 valuation. Please revise to disclose the changes to your business from the March 2013 valuation to the May 2013 fair value that appears to have resulted in an increase in the fair value of your stock.

Business, page 71
Prosigna in the United States, page 92

4. Please expand your disclosure to describe the "further support" you may be required to provide to the FDA regarding your 510(k) application. Indicate whether such support is readily available or whether it would require further studies by the company, including an estimate of the timing to generate this information.

Expanding Clinical Utility of the Prosigna Breast Cancer Assay, page 97

5. Please disclose whether NanoString will bear any of the costs for the RxSPONDER and OPTIMA trials and, if so, how the costs of the trials will be allocated.

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 the information the Securities Act of 1933 and all applicable Securities Act rules require. 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.

R. Bradley Gray NanoString Technologies, Inc. May 29, 2013 Page 3

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Sasha Parikh, Staff Accountant, at (202) 551-3627 or Gus Rodriguez, Accounting Branch Chief, at (202) 551-3752 if you have questions regarding comments on the financial statements and related matters. Please contact Karen Ubell, Staff Attorney, at (202) 551-3873, Bryan Pitko, Staff Attorney, at (202) 551-3203 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey P. Riedler Assistant Director

cc: <u>Via E-mail</u>
Patrick J. Schultheis
Wilson Sonsini Goodrich & Rosati, P.C.