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

DIVISION OF
CORPORATION FINANCE

December 3, 2012

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.
Confidential Draft Registration Statement on Form S-1
Submitted November 5, 2012
CIK No. 0001401708

Dear Mr. Gray:

We have reviewed your confidential draft 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 providing the requested information and either submitting an amended confidential draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended confidential draft registration statement or filed registration statement, we may have additional comments.

General

1. Please submit all exhibits as soon as practicable. We may have further comments upon examination of these exhibits.

2. Please provide us proofs of all graphic, visual or photographic information you will provide in the printed prospectus prior to its use, for example in a preliminary prospectus. Please note that we may have comments regarding this material.

3. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or

distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering

4. We will deliver comments to your confidential treatment request under separate cover.

Summary, page 1
The Offering, page 6

5. We note your disclosure that you intend to effect a reverse stock split prior to the effectiveness of the offering but that the prospectus does not reflect the effects of such a reverse stock split. Please provide additional information as to the expected ratio of the reverse stock split and update your prospectus to reflect the reverse stock split. To the extent that the ratio and the effects of the reverse stock split are not yet known, you may include placeholders.

Risk Factors, page 9

6. Please delete the statement "Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business." It is not appropriate to warn investors about unknown risks.

"Our dependence on distributors for sales of our life sciences systems outside of the United States…," page 11

7. We note the disclosure regarding your dependence on distributors for sales of life sciences systems outside of the United States and your reference to having established exclusive distribution agreements for your nCounter Analysis System in the life sciences research market within parts of Europe and Asia. Please revise your disclosure in the Business Section to describe these exclusive distribution agreements, including the parties to the agreements and their material terms. Please also file any distribution agreement upon which you are substantially dependent as an exhibit pursuant to Item 601(b)(10)(ii)(B) of Regulation S-K.

"If Prosigna fails to achieve and sustain sufficient market acceptance…," page 12

8. Please identify the countries that accept the CE mark, aside from those in the European Union.

"If we are unable to recruit, train and retain key personnel…," page 18

9. Please identify the individuals considered key personnel, aside from senior management, upon which you are dependent.

"We are an 'emerging growth company'…," page 28

10. Please revise your risk factor disclosure to state that you have elected to use the extended transition period for complying with new or revised accounting standards under Section 102(b)(1) of the JOBS Act.

Use of Proceeds, page 34

11. Please expand your disclosure to provide an estimate of the amount of proceeds you intend to use for each bulleted item.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 42

12. Please define and provide context for "ISO 13485:2003 classification" for your manufacturing facility.

Factors Affecting Our Performance, page 45

13. Please disclose the average price of one nCounter Digital Analyzer and one nCounter Prep Station.

Research and Development, page 49

14. You indicate that you have committed a substantial portion of your resources to developing new products and solutions and are currently focused on several products and enhancements in both your future diagnostic products and current life sciences research offerings. You have invested $7.5 million and $9.0 million in 2010 and 2011, respectively, and $8.3 million at September 30, 2012 in research and development and have disclosed that you intend to continue to make significant investments in research and development. Please provide the following disclosures for each of your material projects:
    - The nature, objective, and current status of the project;
    - The costs incurred during each period presented and to-date;
    - The nature of efforts and steps necessary to complete the project;
    - The risks and uncertainties associated with completing development;
    - The extent and nature of additional resources that need to be obtained if current liquidity is not expected to be sufficient to complete the project; and
    - Where a future milestone such as completion of a development phase, date of filing an NDA with a regulatory agency, or approval from a regulatory agency can be reliably determined, disclosure should be made.

Where the sum of the costs incurred by project is materially different than the total R&D expense shown in the financial statements, disclose the nature and amount of the items that comprise this difference.

Critical Accounting Policies and Significant Estimates
Stock-based Compensation, page 56

15. You state that you estimate your enterprise value using the guideline public company approach which is a market approach. To gain a better understanding of your determination of the fair market value of your common stock at each valuation date, please provide us the following information in revised disclosure, as applicable:

    - If your valuations were contemporaneous or retrospective; if retrospective, why contemporaneous valuations were not obtained from an unrelated valuation specialist;
    - Identify the guideline public companies that you selected and what similarities existed between you and the guideline public companies selected such as number of products, types of products, size, working capital, liquidity, etc. Specify any adjustments that were made to reflect differences between you and the public companies selected;
    - What revenue ratios of public companies similar to you were used and how your revenue projections were estimated;
    - Regarding the 30% discount applied in your December 2011 valuation to reflect the lack of marketability, clarify why the put option analyses of the publicly-traded companies deemed similar to you was used and if this was the only factor considered in determining the discount;
    - Why you used the third quartile of volatilities of common stock of the publicly-traded companies deemed similar to you in your December 2011 valuation but the mean of the volatilities of common stock of the publicly-traded companies deemed similar to you in the September 2012 valuation;
    - Why the assumed volatilities of publicly-traded companies similar to you decreased from 92.4% in 2010 to 61.0% at September 30, 2012;
    - What factors changed from your December 2011 valuation to your September 2012 valuation that caused the guideline public company approach to increase from $59.4 million to $105.5 million; and
    - How you allocated the enterprise value between the preferred and common stock at each valuation date.

    You disclose that you assessed your estimate of fair value of your common stock for financial reporting purposes and adjusted the fair value per common share as of each grant date. Please provide disclosure that indicates the progress of your business at each relevant grant date that supports the increase in the fair value from the prior grant date. Clarify to us how the change in the fair value affected your stock compensation.

Business, page 62
Overview, page 62

16. We note your discussion on page 19 in your risk factor disclosure subtitled "Approval and/or clearance by the FDA and foreign regulatory authorities for our diagnostic tests will take significant time…" in which you discuss the different procedures that will be required for FDA clearance pursuant to 510(k) or pre-market approval. It appears that the different procedures and review levels will dictate the scope of your diagnostic tests to be marketed, specifically, whether Prosigna will be available to report intrinsic subtype classifications or only used to assess a patient's risk of recurrence for breast cancer. In this regard, we specifically note your disclosure on page 78, which states that "[the] report output of the U.S. version of Prosigna will not include the patient's intrinsic subtype." Please revise your disclosure throughout your prospectus to highlight that the U.S. version of Prosigna for which you intend to seek FDA approval will not report intrinsic subtype. Please also discuss how this may impact the marketability and demand for Prosigna as compared to competing products currently available.

Development and Clinical Validation of the Prosigna Breast Cancer Assay, page 76

17. Please expand your discussion of the TransATAC study and the ABCSG8 study to describe in further detail how you obtain access to the data and samples from the prior studies, engage investigators to conduct the studies and any related agreements or arrangements related to the administration and consummation of these or other studies including planned or future studies.

18. Please provide footnote or narrative disclosure to give further context to the tabular and graphical disclosures included on pages 77 and 78. For example, you have not explained "Number of Events" or provided explanations for the comparison points depicted in the charts included on page 77.

Prosigna in the United States, page 78

19. Please expand your disclosure to describe how you intend to use Agendia's MammaPrint as a predicate for obtaining 510(k) clearance for Prosigna from the FDA.

Intellectual Property, page 79

20. Please revise your disclosure to identify your material patents or patent applications, whether each is owned or licensed and the expiration of such patents. In addition, please categorize your material patents or patent applications within the subsections of the three main areas to which your patent applications relate on page 79 and identify the type of patent protection associated with each patent or patent application.

21. We note your discussion on page 23 regarding recent judicial decisions impacting the scope of patentability of certain inventions or discoveries relating to genomic diagnostics. Please specifically discuss whether any of your owned or licensed intellectual property may be affected by these decisions.

Collaborations; License Agreements, page 79
Institute for Systems Biology, page 79

22. Please disclose the annual minimum royalty payment you are obligated to make in your contractual obligations table.

Bioclassifier, LLC, page 80

23. Please disclose the minimum royalty payment you are obligated to make in your contractual obligations table. Please disclose the development and commercialization milestones you are required to meet and quantify, if applicable, any payments required for each milestone. Please also quantify the fees payable if you do not meet certain milestones within predetermined time periods.

Manufacturing; Suppliers, page 83

24. We note your disclosure on page 54 regarding certain purchase obligations. Please expand your disclosure to include a discussion of these purchase obligations and commitments.

Employees, page 89

25. Please reconcile your disclosure on page 89 that you have 32 employees engaged in research and development with your disclosure on page 80 that you have 30 employees so engaged.

Description of Capital Stock, page 122

26. Please expand your disclosure to indicate the voting threshold for matters besides election of directors that may be voted on by stockholders.

Shares Eligible for Future Sale, page 128

27. Once available, please file copies of each of the lock-up agreements.

Notes to Consolidated Financial Statements, page F-7

28. Please provide disclosures for income taxes, related party transactions and property and equipment in your financial statement notes for the quarter ending September 30, 2012 in a manner similar to that for your other financial statement notes.

2. Significant Accounting Policies
Unaudited Pro Forma Information, page F-8

29. Please provide us an analysis that supports your reclassification of the warrant liability to additional paid-in-capital upon the completion of the IPO.

Revenue Recognition, page F-11

30. Please revise your policy related to arrangements with multiple deliverables entered into subsequent to 2010, as applicable, as follows:

    - Specify each deliverable (i.e. installation, calibration, one- year warranty, extended warranty, training, etc.);
    - Indicate if the deliverable is considered a separate unit of account or combined with another deliverable(s); and
    - Why the deliverable is considered a separate unit of account or combined with another deliverable.

31. You disclose that you recognize revenue for a deliverable based on the contractual price when the contractual price of each deliverable in a multiple deliverable arrangement falls within the range established for estimated selling prices. In other cases, you allocate revenue to each deliverable based on its estimated selling price. Please tell us why you recognize revenue for deliverables based on contractual prices in some cases when contractually stated prices are not presumed to be representative of vendor-specific objective evidence, third-party evidence or the best estimate of selling price according to ASC 605-25-30. Please also tell us how you establish the range of estimated selling prices and how you determine that a deliverable falls within the range established for estimated selling prices.

Guarantees and Indemnifications, page F-13

32. Please summarize each of the material provisions in your guarantee and indemnification agreements or specifically state that the provisions are not material to your financial condition, operating results and cash flows.

Note 9 – Stock Option Plan, page F-20

33. Please disclose the total compensation expense related to non-vested stock options and the weighted average period over which it is expected to be recognized at September 30, 2012. Please refer to ASC 718-10-50.

General

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm.

Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

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/ Bryan J. Pitko for

Jeffrey P. Riedler
Assistant Director

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