

NanoString Technologies Inc
Form S-1/A
June 13, 2013
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As filed with the Securities and Exchange Commission on June 13, 2013

Registration No. 333-188704

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

AMENDMENT NO. 1

TO

FORM S-1

REGISTRATION STATEMENT Under The Securities Act of 1933

NANOSTRING TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware
*(State or other jurisdiction of
incorporation or organization)*

3826
*(Primary Standard Industrial
Classification Code Number)*
530 Fairview Avenue, N., Suite 2000

20-0094687
*(I.R.S. Employer
Identification Number)*

Seattle, Washington 98109

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(206) 378-6266

(Address, including ZIP code, and telephone number, including area code, of registrant's principal executive offices)

R. Bradley Gray

President and Chief Executive Officer

530 Fairview Avenue, N., Suite 2000

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(206) 378-6266

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, as amended, check the following box. "

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

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Large accelerated filer

Accelerated filer

Non-accelerated filer
(Do not check if a smaller reporting company)

Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Proposed maximum aggregate offering price(1)	Amount of registration fee(2)
Common Stock, par value \$0.0001 per share	\$ 93,150,000	\$ 12,705.66

(1) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended. Includes shares that the underwriters have the option to purchase to cover overallocments, if any.

(2) The registrant previously paid a registration fee of \$11,764.50 with the initial filing of this registration statement.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to such Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PROSPECTUS (Subject to Completion)

Issued June 13, 2013

5,400,000 Shares

COMMON STOCK

This is the initial public offering of shares of common stock of NanoString Technologies, Inc. NanoString Technologies is selling 5,400,000 shares of common stock. Prior to this offering, there has been no public market for our common stock. The initial public offering price is expected to be between \$13.00 and \$15.00 per share.

Our common stock has been approved for listing on The NASDAQ Global Market under the symbol NSTG.

NanoString Technologies is an emerging growth company as defined under the federal securities laws and, as such, may elect to comply with certain reduced public company reporting requirements for this and future filings.

	Per Share	Total
Initial public offering price	\$	\$
Underwriting discounts and commissions	\$	\$
Proceeds to NanoString Technologies, Inc. before expenses	\$	\$

We have granted the underwriters an option to purchase up to 810,000 additional shares of common stock to cover overallocments.

Investment entities affiliated with certain of our principal stockholders and certain of our other existing stockholders, including one of our directors, have expressed interest in acquiring shares of our common stock in this offering. We have requested the representatives of the underwriters allocate shares in this offering to these investors. It is not currently anticipated that the aggregate purchase price of the shares to be purchased by these investors in this offering will exceed \$10.0 million.

Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page 10.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares to purchasers on or about _____, 2013.

J.P. Morgan

Leerink Swann

Morgan Stanley

Baird

, 2013

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We and the underwriters have not authorized anyone to provide any information other than that contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

Until _____, 2013, all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

For investors outside of the United States: We and the underwriters have not done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

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PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus and is qualified in its entirety by the more detailed information and financial statements included elsewhere in this prospectus. It does not contain all of the information that may be important to you and your investment decision. You should carefully read this entire prospectus, including the matters set forth under Risk Factors, Management's Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and related notes.

NanoString Technologies, Inc.

Overview

We develop, manufacture and sell robust, intuitive products that unlock scientifically valuable and clinically actionable genomic information from minute amounts of tissue. Our nCounter Analysis System directly profiles hundreds of molecules simultaneously using a novel barcoding technology that is powerful enough for use in research, yet simple enough for use in clinical laboratories worldwide. We market systems and related consumables to researchers in academic, government, and biopharmaceutical laboratories for use in understanding fundamental biology and the molecular basis of disease. We have an installed base of more than 140 systems, which our customers have used to publish more than 220 peer-reviewed papers. As researchers discover how genomic information can be used to improve clinical decision-making, we seek to selectively translate their discoveries into molecular diagnostic products. In September 2012, we received European Union regulatory clearance for our first molecular diagnostic product, the Prosigna Breast Cancer Assay, or Prosigna, an assay providing an assessment of a patient's risk of recurrence for breast cancer and the intrinsic subtype of the patient's tumor. In February 2013, we commercially launched Prosigna in Europe and Israel. In December 2012, we submitted an application, known as a 510(k), to the U.S. Food and Drug Administration, or FDA, seeking clearance in the United States for a version of Prosigna providing an assessment of a patient's risk of recurrence for breast cancer.

The role of genomic information in research and medical practice is evolving rapidly. The advent of new technologies that sequence and digitally count discrete nucleic acids, commonly referred to as next generation sequencing, or NGS, is accelerating the discovery of the relationships between the genome and human disease. Researchers are applying this wealth of new information to identify biological pathways, which are networks of tens or hundreds of genes that act in concert to produce biological functions. Researchers then seek to translate this understanding of the genomic basis of disease into the development of diagnostic tools that can be used to profile an individual patient's biological pathways as well as develop targeted drug therapies. Precise, simple and robust profiling of biological pathways presents both an analytical challenge for researchers and an opportunity to improve patient outcomes in the future.

Our nCounter Analysis System enables research on a scale appropriate for pathway-based biology by digitally quantifying the activity of up to 800 genes simultaneously in a single experiment. The sensitivity and precision of our novel barcoding chemistry allows researchers to measure subtle changes in genomic activity efficiently, which is essential because tissue samples are often available only in very small quantities. This problem is especially acute in cancer research, which is typically conducted using biopsies that are often stored in a format known as formalin-fixed paraffin embedded, or FFPE, which complicates subsequent analysis of genetic material. The nCounter Analysis System is an easy-to-use and flexible solution that allows researchers to efficiently test hypotheses across thousands of different samples. As a result, the nCounter Analysis System is particularly useful for discovering and validating networks of genes that characterize and help predict disease states, enabling the development of diagnostics and medicines designed specifically for treating patients with certain genomic profiles. When researchers succeed in these endeavors, our strategy is to selectively partner with them to translate their discoveries into clinically valuable molecular diagnostic applications.

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Prosigna, our first molecular diagnostic test, is based on a collection of 50 genes known as the PAM50 gene signature, which was discovered by several of our life sciences customers. We secured an exclusive worldwide license to the PAM50 gene signature in 2010. Prosigna can provide a breast cancer patient and her physician with a subtype classification based on the fundamental biology of the patient's tumor, as well as a prognostic score that predicts the probability of cancer recurrence over 10 years. Our goal is for physicians to use Prosigna to guide therapeutic decisions so that patients receive only therapeutic interventions from which they are likely to benefit. In 2011, we conducted a clinical study, which we refer to as our TransATAC study, based on material extracted from tumor samples of more than 1,000 evaluable patients from the Arimidex, Tamoxifen, Alone or in Combination, or ATAC, study. In our study, investigators performed Prosigna on these samples that had been previously analyzed using Genomic Health's *Oncotype DX*, the historical market leader in breast cancer recurrence testing. The results of our TransATAC study demonstrated the ability of Prosigna to indicate risk of recurrence in postmenopausal women with hormone receptor-positive early stage breast cancer treated with endocrine therapy alone. In comparing the risk estimate provided by Prosigna to the risk estimate previously generated using *Oncotype DX*, investigators concluded that Prosigna is capable of providing more prognostic information than *Oncotype DX*. Based on the results of this study and multi-site analytical validation studies, we received European Union, or EU, regulatory clearance for Prosigna, known as a CE mark. As part of our preparation for regulatory submission in the United States, we conducted a second clinical study, which we refer to as our ABCSG8 study, based on tumor samples of more than 1,400 evaluable patients from the Austrian Breast & Colorectal Cancer Study Group 8. Our ABCSG8 study confirmed the conclusion that Prosigna can indicate risk of recurrence as previously demonstrated in our TransATAC study. In December 2012, we submitted an application, known as a 510(k), to the FDA seeking clearance in the United States for a version of Prosigna providing an assessment of a patient's risk of recurrence for breast cancer. In March 2013, we received a written response from the FDA requesting additional information for its review of our 510(k) submission. A request for additional information is common following an initial 510(k) submission. In May 2013, we submitted an initial response to the FDA's request for additional information and met with the FDA to discuss our response. If the FDA clears Prosigna, we intend to launch Prosigna in the United States promptly following receipt of such clearance. We are currently planning for this commercial launch in the first quarter of 2014. We plan to conduct future clinical studies to evaluate Prosigna's ability to guide physicians and patients in making additional treatment decisions, including the selection of the appropriate chemotherapy regimen, the duration of adjuvant endocrine therapy, and whether to use adjuvant radiation therapy, and, if such studies are successfully completed, to seek 510(k) clearance or PMA approval in the U.S. for such indications in the future.

Prosigna will be regulated as an *in vitro* diagnostic test and we intend to distribute it as a kit for use on our nCounter Analysis System in clinical laboratories after regulatory authorizations are obtained. We expect that our future diagnostic products will be regulated and distributed in a similar manner. This is in contrast to most complex genomic tests, which are currently regulated as services and are usually offered only by a limited number of specialized laboratories. The current centralized laboratory model for complex genomic testing can result in complicated logistics for the treating physician, including slower test result turnaround times and limited international access to tests as compared to local testing. In addition, most clinical laboratories cannot currently share in the revenue associated with offering patients complex genomic tests. We believe that our decentralized model will transform the current paradigm of complex genomic testing by allowing physicians worldwide to provide more comprehensive personalized diagnoses, broadening patient access, and increasing the degree to which clinical laboratories can profit by providing molecular diagnostic testing services.

We generated revenue of \$11.7 million, \$17.8 million and \$23.0 million in 2010, 2011 and 2012, respectively, and \$5.7 million in the three months ended March 31, 2013, while incurring net losses of \$12.8 million, \$10.9 million and \$17.7 million in 2010, 2011 and 2012, respectively, and \$7.3 million in the three months ended March 31, 2013.

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Investment Highlights

Highly synergistic life sciences tools and molecular diagnostics business model. Our nCounter Analysis System's key attributes appeal specifically to life sciences researchers focused on pathway-based biology. When these researchers identify clinically valuable genomic targets, we believe that we are well positioned to selectively in-license their discoveries and translate them into molecular diagnostic products. To date, we have secured access to Prosigna as well as one other gene signature with the potential to become a molecular diagnostic product, both of which were invented by our research customers.

Platform optimized for pathway-based biology. Our system's ability to precisely measure subtle changes in the activity of hundreds of genes simultaneously within precious tissue samples is a significant advantage over traditional tools. While powerful enough for advanced research applications, our system's reliability and simplified workflow enables use in clinical laboratories worldwide. Innovations to improve the cost, performance, and footprint of our system will expand the range of customers that can benefit from using our platform in research and diagnostic applications.

Recurring sales of proprietary consumables create a predictable revenue stream. Because we are the exclusive provider of proprietary reagents for the nCounter Analysis System, the growth of our installed instrument base should drive an increasingly predictable stream of recurring consumable revenue. In 2010, 2011 and 2012, our average consumable revenue per installed instrument exceeded \$100,000 per year.

Decentralized approach to complex genomic testing. We believe that offering molecular diagnostics as *in vitro* diagnostic kits for use in local clinical laboratories will improve patient care by reducing turnaround times and allowing physicians worldwide, many of whom do not currently have access to these tests, to provide more comprehensive personalized diagnoses. In addition to broadening patient access, our decentralized business model will allow hospitals and pathology laboratories to profit by in-sourcing their molecular diagnostic testing services.

Clinically validated assay targeting the significant and growing breast cancer diagnostics market. We recently received an EU regulatory clearance for Prosigna, an assay providing an assessment of a patient's risk of recurrence for breast cancer and the intrinsic subtype of the patient's tumor, and in February 2013 we commercially launched Prosigna in Europe and Israel. In December 2012, we submitted an application, known as a 510(k), to the FDA seeking clearance in the United States for a version of Prosigna providing an assessment of a patient's risk of recurrence for breast cancer. Our TransATAC clinical study of material extracted from tumor samples from more than 1,000 evaluable patients that had been previously analyzed using Genomic Health's *Oncotype DX*, the historical market leader, provided evidence of clinical validity of Prosigna in predicting the risk of distant recurrence of breast cancer, and the investigators concluded that Prosigna is capable of providing more prognostic information than *Oncotype DX*. Our recently completed ABCSG8 clinical study based on tumor samples of more than 1,400 evaluable patients confirmed the conclusion that Prosigna can indicate risk of recurrence as previously demonstrated in our TransATAC study. We intend to pursue further clinical studies evaluating our test's ability to inform treatment decisions for which no genomic diagnostic tests are currently available.

Capital efficient in vitro diagnostics business model. We believe that our *in vitro* diagnostics business model is more capital efficient than the clinical laboratory services model and has the potential to become profitable on a small revenue base. Our diagnostics business leverages many of the capabilities of our life sciences business, including our technology platform and product development, manufacturing, and administrative functions. Because we provide *in vitro* diagnostics kits rather than clinical laboratory services, we do not incur the costs of clinical laboratory infrastructure, sample logistics, or contracting with and billing managed care organizations. We believe that our customers

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will be motivated by the potential to improve patient care, broaden patient access and profit from testing services based on Prosigna and other potential nCounter-based diagnostics, which will encourage market adoption and potentially reduce sales and marketing expenditures relative to a centralized laboratory model.

Our Target Markets

Over the last decade, methods of measuring genomic information have advanced substantially. However pathway-based research and the development of diagnostic tests require analysis of multiple genes and sensitivity to small changes in expression, which can be challenging for traditional genomic tools. In general, DNA microarrays and tube-based PCR methods require complex, time-consuming workflows and relatively large amounts of sample tissue to accurately characterize biological pathway activation. In both life sciences research and clinical medicine, there is a growing need for improved technologies that can precisely and rapidly measure the activation state of hundreds of genes simultaneously across a large number of precious samples, thereby providing a simple and reliable means to characterize biological pathways within minute tissue specimens.

Life Sciences Research

According to Strategic Directions International, Inc., life sciences researchers spent approximately \$28 billion on tools and related consumables in 2011. In the decade since the completion of the Human Genome Project, improvements in NGS technology have greatly reduced the cost of sequencing a human genome and increased throughput and precision, which has led to an abundance of new biological information. In order to gather insights from this information, researchers must first distill and then efficiently analyze large pools of data. Gene expression analysis has emerged as a primary tool that researchers use to extract meaningful insights from networks of genes, which enables them to validate and then translate their findings into the development of diagnostics and medicines. According to Percepta Associates, a provider of consulting services to bioscience companies, the 2012 global market for gene expression profiling products is estimated to be \$1.2 billion.

Molecular Diagnostics

According to Frost and Sullivan, the molecular diagnostics market totaled approximately \$4.1 billion in 2010 and is expected to reach \$6.2 billion by 2014. Growth in the molecular diagnostics market has been driven by technological innovations that have increased sensitivity, decreased turnaround times, simplified workflow, and lowered costs when compared to other techniques. In addition, the medical community has seen a trend in favor of decentralized diagnostic testing as a result of the convenience of local testing, hospitals and medical centers increasingly viewing their laboratories as profit centers and a need to increase access to tests for patients outside of the United States. We believe that there is an opportunity to improve the quality of diagnosis and treatment of diseases by developing and commercializing comprehensive, simple and widely available diagnostic products based on gene expression analysis. Molecular diagnostics have had a significant impact on the treatment of breast cancer, which had a worldwide incidence of 1.4 million per year in 2008 according to the World Health Organization. Over the last decade, genomic tests for breast cancer have improved the accuracy of prognosis and efficacy of treatment by assessing the risk of cancer recurrence for individual patients.

Our Solution

Our nCounter Analysis System is an automated, multi-application, digital detection and counting system which directly profiles hundreds of molecules simultaneously using a novel barcoding technology that is powerful enough for use in research, yet simple enough for use in clinical laboratories worldwide. Our nCounter Analysis System consists of two automated instruments that prepare and analyze tissue samples using proprietary reagents that we call CodeSets, which can only be obtained from us. Our life sciences research customers

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purchase instruments from us and then purchase our panels or custom CodeSets and related consumables for the specific experiment they wish to conduct. Beginning with Prosigna, our future diagnostics customers will either purchase or lease instruments from us and also purchase one of our diagnostic kits for each test that they intend to run. Our nCounter Analysis System offers a number of compelling advantages, including:

Optimized for Pathway-Based Biology. The nCounter Analysis System can profile up to 800 molecules in a single test tube, which allows researchers to analyze interactions among hundreds of genes that mediate biological pathways. In addition, our nCounter Analysis System offers customers the freedom to order panels or custom CodeSets specific to their experiment.

Digital Precision. Our molecular barcodes hybridize directly to the target molecules in a sample allowing them to be counted. This generates digital data (1 molecule = 1 count) of excellent quality over a wide dynamic range of measurements. Our nCounter Analysis System provides excellent reproducibility and avoids the potential bias that may be introduced by the sample division and extended amplification that are generally required for qPCR-based techniques.

Simple Workflow. The nCounter Analysis System's minimal sample preparation and automated workflow enable the performance of gene expression analysis across hundreds of genes simultaneously in approximately 24 hours with only approximately 15 minutes of hands-on preparation time. Our nCounter Analysis System generates data that customers can evaluate without the use of complex bioinformatics.

Flexible Sample Requirements. The nCounter Analysis System is able to unlock genomic information from minute amounts of a variety of challenging tissue samples, including FFPE samples, cell lysates, and single cells.

Our Strategy

Our goal is to provide products that empower scientists to understand the molecular basis of disease and empower physicians to put genomic medicine into practice. To accomplish this goal, we intend to continue providing technologies that are powerful enough for research, yet simple and robust enough for use in clinical laboratories worldwide.

Our strategy includes the following key elements:

Establish the nCounter Analysis System as the global standard for gene expression analysis.

Expand the installed base of the nCounter Analysis System in biopharmaceutical and academic research.

Broaden the addressable market of the nCounter Analysis System through continued innovation.

Build a menu of proprietary diagnostic products in collaboration with researchers.

Execute high quality clinical studies to support regulatory authorizations, market adoption and reimbursement of diagnostic products.

Enable clinical laboratories worldwide to provide complex genomic testing using our *in vitro* diagnostic products.

Drive physician demand for nCounter Analysis System-based diagnostic products.

Capture capital efficiencies stemming from our diagnostics business model.

Risks Associated With Our Business

Our business is subject to numerous risks, including:

We have incurred losses since we were formed and expect to incur losses in the future. We cannot be certain that we will achieve or sustain profitability.

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Our financial results may vary significantly from quarter to quarter which may adversely affect our stock price.

If we do not obtain regulatory clearance or approval to market our products for diagnostic purposes, we will be limited to marketing our products for research use only. In addition, if regulatory limitations are placed on our diagnostic products our business and growth will be harmed.

Approval and/or clearance by the FDA and foreign regulatory authorities for our diagnostic tests will take significant time and require significant research, development and clinical study expenditures, may result in a clearance that does not allow us to differentiate our diagnostic tests, including Prosigna, from alternatives and ultimately may not succeed.

The life sciences research and diagnostics markets are highly competitive. If we fail to compete effectively, our business and operating results will suffer.

If Medicare and other third-party payors in the United States and foreign countries do not approve reimbursement for diagnostic tests enabled by our technology, the commercial success of our diagnostic products would be compromised.

If we are unable to protect our intellectual property effectively, our business would be harmed.

For additional information about the risks we face, please see the section of this prospectus captioned Risk Factors.

Corporate History and Information

We were incorporated in Delaware in June 2003. Our principal executive offices are located at 530 Fairview Avenue, N., Suite 2000, Seattle, Washington 98109. Our telephone number is (206) 378-6266. Our website address is www.nanostring.com. Information contained on the website is not incorporated by reference into this prospectus, and should not be considered to be part of this prospectus.

Unless the context indicates otherwise, as used in this prospectus, the terms NanoString, we, us and our refer to NanoString Technologies, Inc. and its subsidiaries, NanoString Technologies Europe Limited, NanoString Technologies SAS, NanoString Technologies Asia Pacific Limited and NanoString Technologies International, Inc. We use NanoString®, NanoString Technologies nCounter Molecules that Count Prosigna and other marks as trademarks in the United States and other countries. This prospectus contains references to our trademarks and service marks and to those belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other entities' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

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The Offering

Common stock offered by us	5,400,000 shares
Common stock to be outstanding after this offering	14,594,745 shares (or 15,404,745 if the underwriters exercise their overallotment option in full)
Overallotment option	810,000 shares

Use of proceeds

We intend to use the net proceeds from this offering to: (1) commercialize Prosigna after obtaining regulatory authorization, including establishing a dedicated oncology sales force; (2) expand the clinical utility of Prosigna and to develop other potential diagnostic product opportunities; (3) expand life sciences commercial operations to grow and support the installed base of our nCounter Analysis Systems among life sciences research customers in the United States and internationally; (4) develop new life sciences applications, chemistry and instrumentation for our nCounter technology platform; and (5) for working capital and other general corporate purposes. We may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. See Use of Proceeds.

Proposed NASDAQ trading symbol NSTG

The number of shares of common stock to be outstanding following this offering is based on 9,194,745 shares of common stock outstanding as of March 31, 2013, and excludes:

1,806,273 shares of common stock issuable upon exercise of options outstanding as of March 31, 2013, at a weighted-average exercise price of \$3.02 per share;

1,984,972 shares of common stock reserved for future issuance under stock-based compensation plans, including 1,562,500 shares of common stock reserved for issuance under the 2013 Equity Incentive Plan, which will become effective on the date of this prospectus, and any future automatic increase in shares reserved for issuance under such plan, 281,250 shares of common stock reserved for issuance under the 2013 Employee Stock Purchase Plan, and any future automatic increase in shares reserved for issuance under such plan, and 141,222 shares of common stock reserved for issuance under the 2004 Stock Option Plan as of March 31, 2013, which shares will be added to the 2013 Equity Incentive Plan upon effectiveness of such plan;

607,187 shares of common stock issuable upon the exercise of warrants outstanding as of March 31, 2013, at a weighted-average exercise price of \$8.69 per share, after conversion of the convertible preferred stock; and

10,418 shares of common stock issuable upon the exercise of warrants at an exercise price of \$14.40 per share, after conversion of the convertible preferred stock, issued in connection with the April 2013 term loan borrowing under our credit facility.

Unless otherwise indicated, this prospectus reflects and assumes the following:

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a 1-for-32 reverse stock split of our common stock and preferred stock effected on June 12, 2013;

the conversion of all outstanding shares of convertible preferred stock into an aggregate of 8,631,427 shares of common stock upon the closing of this offering;

the filing of the certificate of incorporation immediately prior to the closing of this offering; and

no exercise by the underwriters of their overallotment option.

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We have derived the following summary of statements of operations data for the years ended December 31, 2010, 2011 and 2012 from audited financial statements appearing elsewhere in this prospectus. We derived the following statements of comprehensive income for the three months ended March 31, 2012 and 2013 and the balance sheet data as of March 31, 2013 from unaudited interim financial statements included elsewhere in this prospectus. In the opinion of management, the unaudited interim financial statements reflect all adjustments, which include normal recurring adjustments, necessary for a fair presentation of the financial statements. Historical results are not necessarily indicative of the results that may be expected in the future and the results for the three months ended March 31, 2013 are not necessarily indicative of the results that may be expected for the full year or any other period. The summary financial data set forth below should be read together with the financial statements and the related notes to those statements, as well as the sections of this prospectus captioned "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Year Ended December 31,			Three Months Ended	
	2010	2011	2012	2012	March 31, 2013
(In thousands, except per share data)					
Consolidated Statements of Comprehensive Income:					
Revenue	\$ 11,730	\$ 17,800	\$ 22,973	\$ 4,502	\$ 5,676
Costs and expenses:					
Cost of revenue	9,128	9,777	12,361	2,656	2,882
Research and development	7,547	8,990	11,635	2,197	3,059
Selling, general and administrative	8,027	9,529	15,486	3,167	6,126
Total costs and expenses	24,702	28,296	39,482	8,020	12,067
Loss from operations	(12,972)	(10,496)	(16,509)	(3,518)	(6,391)
Other income (expense):					
Interest income	29	10	21	7	3
Interest expense	(94)	(599)	(804)	(112)	(385)
Other income (expense)	254	80	(29)	(13)	(4)
Revaluation of preferred stock warrant liability	15	73	(387)	26	(482)
Total other income (expense)	204	(436)	(1,199)	(92)	(868)
Net loss	\$ (12,768)	\$ (10,932)	\$ (17,708)	(3,610)	(7,259)
Accretion of mandatorily redeemable convertible preferred stock	(4,351)	(5,251)	(7,533)	(1,793)	(2,342)
Net loss attributable to common stockholders	\$ (17,119)	\$ (16,183)	\$ (25,241)	\$ (5,403)	\$ (9,601)
Net loss per share - basic and diluted	\$ (54.17)	\$ (50.10)	\$ (71.10)	\$ (16.52)	\$ (17.88)
Shares used in computing basic and diluted net loss per share	316	323	355	327	537
Pro forma net loss per share basic and diluted (unaudited) ⁽¹⁾			\$ (2.16)		\$ (0.74)
Shares used in computing pro forma net loss per share, basic and diluted (unaudited) ⁽¹⁾			8,018		9,168

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	As of March 31, 2013	
	Actual	Pro Forma As Adjusted ⁽²⁾
	(In thousands)	
Consolidated Balance Sheet Data:		
Cash and cash equivalents	\$ 11,794	\$ 81,138
Working capital	12,250	81,594
Total assets	29,575	96,583
Total long-term debt	12,835	12,835
Mandatorily redeemable convertible preferred stock	105,964	
Total stockholders' equity (deficit)	(102,808)	74,178

- (1) Pro forma net loss per share represents net loss divided by the pro forma weighted-average shares outstanding, as though the 1-for-32 reverse stock split of our common stock and preferred stock and the conversion of the preferred stock into common stock occurred on the first day of the relevant period. Pro forma weighted-average shares outstanding reflects the 1-for-32 reverse stock split of our common stock and preferred stock and the conversion of the preferred stock (using the if-converted method) into common stock as though the conversion had occurred on the first day of the relevant period.
- (2) Reflects, on a pro forma as adjusted basis, (a) a 1-for-32 reverse stock split of our common stock and preferred stock effected on June 12, 2013, (b) the conversion of all outstanding shares of convertible preferred stock into 8,631,427 shares of common stock upon the closing of this offering, (c) the conversion of warrants to purchase 604,563 shares of preferred stock into warrants to purchase 607,187 shares of common stock and (d) the sale and issuance by us of 5,400,000 shares of common stock in this offering at an assumed initial price to public of \$14.00 per share, the mid-point of the range reflected on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses. Each \$1.00 increase (decrease) in the assumed initial price to public of \$14.00 per share, would increase (decrease) each of cash and cash equivalents, working capital, total assets and total stockholders' deficit by approximately \$5.0 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the underwriting discounts and commissions and estimated offering expenses. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 in the number of shares offered by us would increase (decrease) each of cash and cash equivalents, working capital, total assets and total stockholders' deficit by approximately \$13.0 million, assuming that the assumed initial price to public remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses. The pro forma as adjusted information discussed above is illustrative only and will adjust based on the actual initial price to public and other terms of this offering determined at pricing.

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RISK FACTORS

Investing in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider the risks and uncertainties described below, which we believe are the material risks associated with our business and this offering. Our business, financial condition, operating results or growth prospects could be harmed by any of these risks. In that event, the trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. In assessing these risks, you should also refer to all of the other information contained in this prospectus, including our financial statements and related notes.

Risks Related to our Business and Strategy

We have incurred losses since we were formed and expect to incur losses in the future. We cannot be certain that we will achieve or sustain profitability.

We have incurred losses since we were formed and expect to incur losses in the future. We incurred net losses of \$12.8 million, \$10.9 million, \$17.7 million, \$3.6 million and \$7.3 million in 2010, 2011 and 2012 and the three months ended March 31, 2012 and 2013, respectively. As of March 31, 2013, we had an accumulated deficit of \$102.8 million. We expect that our losses will continue for at least the next several years as we will be required to invest significant additional funds toward development and commercialization of our technology. We also expect that our selling, general and administrative expenses will continue to increase due to the additional costs associated with establishing a dedicated oncology diagnostics sales force and the increased administrative costs associated with being a public company. Our ability to achieve or sustain profitability is based on numerous factors, many of which are beyond our control, including the market acceptance of our products, future product development and our market penetration and margins. We may never be able to generate sufficient revenue to achieve or sustain profitability.

Our financial results may vary significantly from quarter to quarter which may adversely affect our stock price.

Investors should consider our business and prospects in light of the risks and difficulties we expect to encounter in the new, uncertain and rapidly evolving markets in which we compete. Because these markets are new and evolving, predicting their future growth and size is difficult. We expect that our visibility into future sales of our products, including volumes, prices and product mix between instruments and consumables, will continue to be limited and could result in unexpected fluctuations in our quarterly and annual operating results.

Numerous other factors, many of which are outside our control, may cause or contribute to significant fluctuations in our quarterly and annual operating results. These fluctuations may make financial planning and forecasting difficult. In addition, these fluctuations may result in unanticipated decreases in our available cash, which could negatively affect our business and prospects. Factors that may contribute to fluctuations in our operating results include many of the risks described in this section. In addition, one or more of such factors may cause our revenue or operating expenses in one period to be disproportionately higher or lower relative to the others. Our products involve a significant capital commitment by our customers and accordingly involve a lengthy sales cycle. We may expend significant effort in attempting to make a particular sale, which may be deferred by the customer or never occur. Accordingly, comparing our operating results on a period-to-period basis may not be meaningful, and investors should not rely on our past results as an indication of our future performance. If such fluctuations occur or if our operating results deviate from our expectations or the expectations of securities analysts, our stock price may be adversely affected.

If we do not achieve, sustain or successfully manage our anticipated growth, our business and growth prospects will be harmed.

We have experienced significant revenue growth in a short period of time. We may not achieve similar growth rates in future periods. Investors should not rely on our operating results for any prior periods as an indication of our future operating performance. If we are unable to maintain adequate revenue growth, our

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financial results could suffer and our stock price could decline. Furthermore, growth will place significant strains on our management and our operational and financial systems and processes. For example, commercialization of the Prosigna Breast Cancer Assay, or Prosigna, in Europe and development and commercialization of this test and other diagnostic products worldwide are key elements of our growth strategy and will require us to hire and retain additional sales and marketing, regulatory, manufacturing and quality assurance personnel. If we do not successfully forecast the timing of regulatory clearance or approval for product marketing and subsequent demand for our diagnostic products or manage our anticipated expenses accordingly, our operating results will be harmed.

Our future success is dependent upon our ability to expand our customer base and introduce new applications.

Our current customer base is primarily composed of academic institutions, government laboratories and biopharmaceutical companies that perform analyses using our nCounter Analysis System for research use only. Our success will depend, in part, upon our ability to increase our market penetration among these customers and to expand our market by developing and marketing new life sciences applications, developing a lower cost instrument that would be attractive to more researchers, and introducing diagnostic products into clinical laboratories after obtaining regulatory authorization. For example, we must convince physicians and third-party payors that our diagnostic products, such as Prosigna, are cost effective in obtaining prognostic information that can inform treatment decisions and that our nCounter Analysis System could enable an equivalent or superior approach that lessens reliance on centralized laboratories. Furthermore, we expect that increasing the installed base of our nCounter Analysis Systems will drive demand for our relatively high margin consumable products. If we are not able to successfully increase our installed base of nCounter Analysis Systems, sales of our consumable products and our margins may not meet expectations. Attracting new customers and introducing new applications requires substantial time and expense. Any failure to expand our existing customer base, or launch new applications, would adversely affect our ability to improve our operating results.

Our life sciences research business depends on levels of research and development spending by academic and governmental research institutions and biopharmaceutical companies, a reduction in which could limit demand for our products and adversely affect our business and operating results.

In the near term, we expect that our revenue will be derived primarily from sales of our nCounter Analysis Systems to academic institutions, governmental laboratories and biopharmaceutical companies worldwide for research applications. The demand for our products will depend in part upon the research and development budgets of these customers, which are impacted by factors beyond our control, such as:

changes in government programs that provide funding to research institutions and companies;

macroeconomic conditions and the political climate;

changes in the regulatory environment;

differences in budgetary cycles;

market-driven pressures to consolidate operations and reduce costs; and

market acceptance of relatively new technologies, such as ours.

For example, in the United States, automatic across-the-board cuts in government spending, or sequestration, took effect on March 1, 2013. These cuts will impact the budgets of government agencies, such as the National Institutes of Health, which provide significant funding for cancer research and other diseases, however, as of the date of this prospectus the full impact of the cuts is unknown. We believe that the uncertainty regarding the availability of research funding, including the potential impact of sequestration, has adversely affected our historical operating results and any continuing uncertainty may adversely affect sales to customers or potential customers that rely on government funding. In addition, academic, governmental and other research institutions that fund research and development activities may be subject to stringent budgetary constraints that could result in spending reductions, reduced allocations or budget cutbacks, which could jeopardize the ability of these customers to purchase our products.

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Our operating results may fluctuate substantially due to reductions and delays in research and development expenditures by these customers. Any decrease in our customers' budgets or expenditures, or in the size, scope or frequency of capital or operating expenditures, could materially and adversely affect our business, operating results and financial condition.

Our sales cycle is lengthy and variable, which makes it difficult for us to forecast revenue and other operating results.

Our sales process involves numerous interactions with multiple individuals within an organization, and often includes in-depth analysis by potential customers of our products, performance of proof-of-principle studies, preparation of extensive documentation and a lengthy review process. As a result of these factors, the large capital investment required in purchasing our instruments and the budget cycles of our customers, the time from initial contact with a customer to our receipt of a purchase order can vary significantly and be up to 12 months or longer. Given the length and uncertainty of our sales cycle, we have in the past experienced, and likely will in the future experience, fluctuations in our instrument sales on a period-to-period basis. In addition, any failure to meet customer expectations could result in customers choosing to retain their existing systems or to purchase systems other than ours.

Our reliance on distributors for sales of our life sciences systems outside of the United States could limit or prevent us from selling our diagnostic tests in foreign markets and impact our revenue.

As of March 31, 2013, we have established exclusive distribution agreements for our nCounter Analysis System in the life sciences research market within parts of Europe, the Middle East, Asia Pacific and South America. We intend to continue to grow our business internationally, and to do so we must attract additional distributors to maximize the commercial opportunity for our products. There is no guarantee, if we do seek to enter into such arrangements, that we will be successful in attracting desirable sales and distribution partners or that we will be able to enter into such arrangements on favorable terms. Distributors may not commit the necessary resources to market and sell our products to the level of our expectations or may choose to favor marketing the products of our competitors. If current or future distributors do not perform adequately, or we are unable to enter into effective arrangements with distributors in particular geographic areas, we may not realize long-term international revenue growth.

If we do not obtain regulatory clearance or approval to market our products for diagnostic purposes, we will be limited to marketing our products for research use only. In addition, if regulatory limitations are placed on our diagnostic products our business and growth will be harmed.

We recently obtained a CE mark for our first diagnostic product, Prosigna, which permits us to market that assay for diagnostic purposes in Europe, and we intend to seek regulatory authorization in other countries outside of the United States. In Europe, Prosigna can be used to provide a subtype classification based on the fundamental biology of an individual's breast tumor, as well as a prognostic score that indicates the probability of cancer recurrence over 10 years. In February 2013, we commercially launched Prosigna in Europe and Israel, but we do not have regulatory clearance or approval to market any other product for diagnostic purposes or to market Prosigna for diagnostic purposes in any other market. Other than with respect to Prosigna in such jurisdictions, we are limited to marketing our products for research use only, which means that we cannot make any diagnostic or clinical claims. We intend to seek regulatory authorizations in other jurisdictions to market Prosigna for diagnostic purposes; however, we cannot assure investors that we will be successful in doing so. In December 2012, we submitted an application, known as a 510(k), to the FDA seeking clearance in the United States for a version of Prosigna providing an assessment of a patient's risk of recurrence for breast cancer. In March 2013, we received a written response from the FDA requesting additional information for its review of our 510(k) submission. In the FDA's March 2013 written response to our 510(k) submission, 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 a risk score and three distinct risk groups in patient reports for all patients tested. In May 2013, we submitted an initial response to the

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FDA's request for additional information and met with the FDA to discuss our response. In this meeting, we discussed, among other issues raised by the FDA, the specific elements and format of a potential report generated by Prosigna, including the appropriate name for the risk score, the appropriate graphic presentation of the risk score, and, specifically for the potential report for node-positive patients, the numerical range of the risk score and the appropriate number of risk groups. We cannot guarantee that we will obtain clearance. For example, even though the results of our clinical studies that used samples from the ATAC study and the ABCSG8 study of postmenopausal women with hormone receptor-positive, or HR+, early stage breast cancer were favorable, there is no guarantee that any future studies will be successful or that the FDA will provide clearance of Prosigna based on the studies we have completed. If the FDA requires additional studies, we may be required to expend considerable resources to conduct them, which would greatly increase our costs, divert resources away from other programs and halt or delay the path to commercialization. If we do not obtain such clearance, we will be limited to marketing our products for research use only within the United States. In addition, even if we obtain clearance for Prosigna, the prognostic information ultimately reported could be limited. For example, if we do obtain clearance from the FDA to market Prosigna in the United States, the test may be limited to classifying patients into categories according to the risk of recurrence of breast cancer, such as high/intermediate/low risk or high/low risk. If Prosigna is not cleared by the FDA to indicate a specific risk score or if Prosigna is limited to classifying node-negative patients into high or low risk groups only, the prognostic information provided by Prosigna and our ability to differentiate our test from alternatives may be adversely affected in the United States. Similarly, if we do not obtain regulatory clearance or approval of future products or future indications for diagnostic purposes, for instance approval to allow for reporting of the subtype classification based on the fundamental biology of an individual's breast cancer, if unexpected regulatory limitations are placed on our products or if we fail to successfully commercialize such products, the market potential for our diagnostic products would be constrained, and our business and growth prospects would be adversely affected.

If Prosigna fails to achieve and sustain sufficient market acceptance, we will not generate expected revenue, and our prospects may be harmed.

Currently, most oncologists seeking sophisticated gene expression analysis for diagnosing and profiling breast cancer in their patients ship tissue samples to a limited number of centralized laboratories typically located in the United States. We may experience reluctance, or refusal, on the part of physicians to order, and third-party payors to pay for, Prosigna if the results of our research and clinical studies, and our sales and marketing activities relating to communication of these results, do not convey to physicians, third-party payors and patients that Prosigna provides equivalent or better prognostic information.

In Europe, Prosigna may be used for intrinsic subtyping of breast cancer and in the future we intend to seek approval from the FDA for such use. Intrinsic subtyping will be a new methodology in categorizing breast cancer patients, and we may have to overcome resistance among physicians to adopting it for the marketing of our products to be successful. Even if we are able to obtain regulatory approval from the FDA, the use of intrinsic subtyping and thus Prosigna may not be included in breast cancer treatment guidelines. In addition, breast cancer treatment guidelines recommend that chemotherapy be considered in many cases, in combination with other patient factors. Accordingly, physicians may be reluctant to order a test, such as Prosigna, that may suggest recommending against chemotherapy. Furthermore, our diagnostic tests would be performed by pathologists in local laboratories, rather than by a vendor in a remote centralized laboratory, which will require us to educate pathologists regarding the benefits of this business model.

These hurdles may make it difficult to convince health care providers that tests using our technologies are appropriate options for cancer diagnostics, may be equivalent or superior to available tests, and may be at least as cost effective as alternative technologies, and thus we may encounter significant difficulty in broadening market acceptance of Prosigna.

As part of our current business model, we will seek to enter into strategic collaborations and licensing arrangements with third parties to develop diagnostic tests.

We have relied, and expect to continue to rely, on strategic collaborations and licensing agreements with third parties for discoveries based on which we develop diagnostic tests. For example, we licensed the rights to

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intellectual property that forms the basis of Prosigna from Bioclassifier, LLC, which was founded by several of our life sciences research customers engaged in translational research. In addition, in February 2013, we secured an option from The Broad Institute, a leading non-profit molecular medicine institute in Cambridge, Massachusetts, to acquire an exclusive worldwide license for a gene signature that could be used, after appropriate regulatory authorization, for a second molecular diagnostic product focused on hepatocellular carcinoma, or HCC. We intend to enter into more such arrangements with our life sciences customers and other researchers for future diagnostic products. However, there is no assurance that we will be successful in doing so. In particular, our life sciences research customers are not obligated to collaborate with us or license technology to us, and they may choose to develop diagnostic products themselves or collaborate with our competitors. Establishing collaborations and licensing arrangements is difficult and time-consuming. Discussions may not lead to collaborations or licenses on favorable terms, if at all. To the extent we agree to work exclusively with a party in a given area, our opportunities to collaborate with others could be limited. Potential collaborators or licensors may elect not to work with us based upon their assessment of our financial, regulatory or intellectual property position. Even if we establish new relationships, they may never result in the successful development or commercialization of future tests.

New diagnostic product development involves a lengthy and complex process, and we may be unable to commercialize on a timely basis, or at all, any of the tests we develop.

Few research and development projects result in successful commercial products, and success in early clinical studies often is not replicated in later studies. For example, even though the results of our clinical studies that used samples from the ATAC study and ABCSG8 study of postmenopausal women with HR+ early stage breast cancer were favorable, there is no guarantee that any future studies will be successful, that the FDA will provide clearance of Prosigna based on the studies we have completed or if FDA provides clearance, that the prognostic information that may be reported will differentiate our test from alternatives in the United States. At any point, we may abandon development of a product candidate or we may be required to expend considerable resources repeating clinical studies, which would adversely impact potential revenue and our expenses. In addition, any delay in product development would provide others with additional time to commercialize competing products before we do, which in turn may adversely affect our growth prospects and operating results.

Our research and development efforts will be hindered if we are not able to contract with third parties for access to archival tissue samples.

Under standard clinical practice, tumor biopsies removed from patients are preserved and stored in formalin-fixed paraffin embedded, or FFPE, format. We rely on our ability to secure access to these archived FFPE tumor biopsy samples, as well as information pertaining to the clinical outcomes of the patients from which they were derived for our clinical development activities. Others compete with us for access to these samples. Additionally, the process of negotiating access to archived samples is lengthy because it typically involves numerous parties and approval levels to resolve complex issues such as usage rights, institutional review board approval, privacy rights, publication rights, intellectual property ownership and research parameters. If we are not able to negotiate access to archived tumor tissue samples with hospitals, clinical partners, pharmaceutical companies, or companies developing therapeutics on a timely basis, or at all, or if other laboratories or our competitors secure access to these samples before us, our ability to research, develop and commercialize future products will be limited or delayed.

The life sciences research and diagnostic markets are highly competitive. If we fail to compete effectively, our business and operating results will suffer.

We face significant competition in the life sciences research and diagnostics markets. We currently compete with both established and early stage life sciences research companies that design, manufacture and market instruments and consumables for gene expression analysis, single-cell analysis, polymerase chain reaction, or PCR, digital PCR, other nucleic acid detection and additional applications. These companies use well established laboratory techniques such as microarrays or quantitative PCR, or qPCR, as well as newer technologies such as next generation sequencing. We believe our principal competitors in the life sciences research market are

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Affymetrix, Agilent Technologies, Bio-Rad, Exiqon, Fluidigm, High Throughput Genomics, Illumina, Life Technologies, Luminex, Perkin Elmer, Qiagen and Roche Applied Science. In addition, there are a number of new market entrants in the process of developing novel technologies for the life sciences market, including companies such as RainDance Technologies and Wafergen Bio-Systems.

We will also compete with commercial diagnostics companies. We believe our principal competitor in the breast cancer diagnostics market will be Genomic Health, which provides gene expression analysis at its central laboratory in Redwood City, California and currently commands a substantial majority of the market. We also expect to face competition from companies such as Agendia, Clariant (a GE Healthcare company), Genoptix (a division of Novartis) and bioMeri  ux, which also offer services by means of centralized laboratories that profile gene or protein expression in breast cancer. In Europe, we will also face regional competition from smaller companies such as Sividon Diagnostics, maker of EndoPredict, a distributed test for breast cancer recurrence, and other independent laboratories.

Most of our current competitors are either publicly traded, or are divisions of publicly-traded companies, and enjoy a number of competitive advantages over us, including:

greater name and brand recognition, financial and human resources;

broader product lines;

larger sales forces and more established distributor networks;

substantial intellectual property portfolios;

larger and more established customer bases and relationships; and

better established, larger scale, and lower cost manufacturing capabilities.

We believe that the principal competitive factors in all of our target markets include:

cost of capital equipment;

cost of consumables and supplies;

reputation among customers;

innovation in product offerings;

flexibility and ease-of-use;

accuracy and reproducibility of results; and

compatibility with existing laboratory processes, tools and methods.

We believe that additional competitive factors specific to the diagnostics market include:

breadth of clinical decisions that can be influenced by information generated by tests;

volume, quality, and strength of clinical and analytical validation data;

availability of reimbursement for testing services; and

economic benefit accrued to customers based on testing services enabled by products.

We cannot assure investors that our products will compete favorably or that we will be successful in the face of increasing competition from new products and technologies introduced by our existing competitors or new companies entering our markets. In addition, we cannot assure investors that our competitors do not have or will not develop products or technologies that currently or in the future will enable them to produce competitive products with greater capabilities or at lower costs than ours. Any failure to compete effectively could materially and adversely affect our business, financial condition and operating results.

We have limited experience in marketing and selling our products, and if we are unable to successfully commercialize our products, our business may be adversely affected.

We have limited experience marketing and selling our products. Our nCounter Analysis System was introduced for sale in the life sciences research market in 2008, and was introduced for sale in the diagnostics

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market in Europe and Israel in connection with the February 2013 commercial launch of Prosigna in those markets. We sell our products through our own sales force in North America and through a combination of our own sales force and distributors in Europe, Asia Pacific and South America. In the future, we intend to establish distributor relationships in other parts of the world; however, we may not be able to market and sell our products effectively.

Our future sales of diagnostic products will depend in large part on our ability to successfully establish an oncology diagnostics sales force and to increase the scope of our marketing efforts. Because we have no experience in marketing and selling our products in the diagnostics market, our ability to forecast demand, the infrastructure required to support such demand and the sales cycle to diagnostics customers is unproven. If we do not build an efficient and effective sales force targeting this market, our business and operating results will be adversely affected.

We may not be able to develop new products or enhance the capabilities of our systems to keep pace with rapidly changing technology and customer requirements, which could have a material adverse effect on our business and operating results.

Our success depends on our ability to develop new products and applications for our technology in existing and new markets, while improving the performance and cost-effectiveness of our systems. New technologies, techniques or products could emerge that might offer better combinations of price and performance than our current or future products and systems. Existing markets for our products, including gene expression analysis, single-cell analysis and copy number variation, as well as potential markets for our diagnostic product candidates, are characterized by rapid technological change and innovation. It is critical to our success that we anticipate changes in technology and customer requirements and to successfully introduce new, enhanced and competitive technologies to meet our customers' and prospective customers' needs on a timely and cost-effective basis. At the same time, however, we must carefully manage the introduction by us of new products. If customers believe that such products will offer enhanced features or be sold for a more attractive price, they may delay purchases until such products are available. We may also have excess or obsolete inventory of older products as we transition to new products and our experience in managing product transitions is very limited. If we do not successfully innovate and introduce new technology into our product lines or manage the transitions to new product offerings, our revenues, results of operations and business will be adversely impacted.

Competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. We anticipate that we will face increased competition in the future as existing companies and competitors develop new or improved products and as new companies enter the market with new technologies.

New market opportunities may not develop as quickly as we expect, limiting our ability to successfully market and sell our products.

The market for our products is new and evolving. Accordingly, we expect the application of our technologies to emerging opportunities will take several years to develop and mature and we cannot be certain that these market opportunities will develop as we expect. For example, in September 2012, we launched a single cell gene expression application for our nCounter Analysis System, which applies our technology to, amongst other things, improve single cell analytic workflow for gene expression analysis. The future growth of the single cell analysis market depends on many factors beyond our control, including recognition and acceptance of our applications by the scientific community and the growth, prevalence and costs of competing methods of genomic analysis. If the markets for single cell analysis or others do not develop as we expect, our business may be adversely affected. In addition, we commercially launched Prosigna in Europe and Israel in February 2013 and we intend to offer Prosigna in other countries outside of the United States. Genomic testing for breast cancer is not widely available outside of the United States and the market for such tests is new. The future growth of the market for genomic breast cancer testing will depend on physicians acceptance of such testing and the availability of reimbursement for such tests. Our success in these new markets will depend to a large extent on our ability to successfully market, sell and establish reimbursement for products using our technologies. If we are

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not able to successfully market and sell our products or to achieve the revenue or margins we expect, our operating results may be harmed and we may not recover our product development and marketing expenditures.

We are dependent on single source suppliers for some of the components and materials used in our products, and the loss of any of these suppliers could harm our business.

We rely on Precision System Science, Co., Ltd of Chiba, Japan, to build our nCounter Prep Station and Korvis LLC of Corvallis, Oregon, to build our nCounter Digital Analyzer. Each of these contract manufacturers are sole suppliers. Since our contracts with these instrument suppliers do not commit them to carry inventory or make available any particular quantities, they may give other customers' needs higher priority than ours, and we may not be able to obtain adequate supplies in a timely manner or on commercially reasonable terms. We also rely on sole suppliers for various components we use to manufacture our consumable products. We periodically forecast our needs for such components and enter into standard purchase orders with them. If we were to lose such suppliers, there can be no assurance that we will be able to identify or enter into agreements with alternative suppliers on a timely basis on acceptable terms, if at all. If we should encounter delays or difficulties in securing the quality and quantity of materials we require for our products our supply chain would be interrupted which would adversely affect sales. If any of these events occur, our business and operating results could be harmed.

If our Seattle facility becomes unavailable or inoperable, we will be unable to continue manufacturing our consumables or process sales orders, and our business will be harmed.

We manufacture our consumable products in our facility in Seattle, Washington. In addition, our Seattle facility is the center for order processing, receipt of our prep station and digital analyzer manufactured by third-party contract manufacturers and shipping products to customers. Our facility and the equipment we use to manufacture our consumable products would be costly, and would require substantial lead time, to repair or replace. Seattle is situated near active earthquake fault lines. The facility may be harmed or rendered inoperable by natural or man-made disasters, including earthquakes and power outages, which may render it difficult or impossible for us to produce our tests for some period of time. The inability to manufacture consumables or to ship products to customers for even a short period of time may result in the loss of customers or harm our reputation, and we may be unable to regain those customers in the future. Although we possess insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, if at all.

We expect to generate a substantial portion of our revenue internationally and are subject to various risks relating to our international activities which could adversely affect our operating results.

During 2010, 2011 and 2012 and the three months ended March 31, 2013, approximately 9%, 21%, 31% and 21%, respectively, of our revenue was generated from sales to customers located outside of North America. We believe that a significant percentage of our future revenue will come from international sources as we expand our overseas operations and develop opportunities in additional areas. Engaging in international business involves a number of difficulties and risks, including:

required compliance with existing and changing foreign regulatory requirements and laws;

required compliance with anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act and U.K. Bribery Act, data privacy requirements, labor laws and anti-competition regulations;

export or import restrictions;

various reimbursement and insurance regimes;

laws and business practices favoring local companies;

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longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;

political and economic instability;

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potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements and other trade barriers;

difficulties and costs of staffing and managing foreign operations; and

difficulties protecting or procuring intellectual property rights.

As we expand internationally our results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates. Historically, most of our revenue has been denominated in U.S. dollars, although we have sold our products and services in local currency outside of the United States, principally the Euro. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States. As our operations in countries outside of the United States grow, our results of operations and cash flows will be subject to fluctuations due to changes in foreign currency exchange rates, which could harm our business in the future. For example, if the value of the U.S. dollar increases relative to foreign currencies, in the absence of a corresponding change in local currency prices, our revenue could be adversely affected as we convert revenue from local currencies to U.S. dollars.

If we dedicate significant resources to our international operations and are unable to manage these risks effectively, our business, operating results and prospects will suffer.

The enactment of legislation implementing changes in the U.S. taxation of international business activities or the adoption of other tax reform policies could materially impact our future financial position and results of operations.

Recent changes to U.S. tax laws, including limitations on the ability of taxpayers to claim and utilize foreign tax credits and the deferral of certain tax deductions until earnings outside of the United States are repatriated to the United States, as well as changes to U.S. tax laws that may be enacted in the future, could impact the tax treatment of future foreign earnings. Should the scale of our international business activities expand, any changes in the U.S. taxation of such activities could increase our worldwide effective tax rate and harm our future financial position and results of operations.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2012, we had federal net operating loss carryforwards, or NOLs, to offset future taxable income of approximately \$62.2 million, which expire in various years beginning in 2023, if not utilized. A lack of future taxable income would adversely affect our ability to utilize these NOLs. In addition, under Section 382 of the Internal Revenue Code, a corporation that undergoes an ownership change is subject to limitations on its ability to utilize its NOLs to offset future taxable income. We may have already experienced one or more ownership changes. Depending on the timing of any future utilization of our carryforwards, we may be limited as to the amount that can be utilized each year as a result of such previous ownership changes. However, we do not believe such limitations will cause our NOL and credit carryforwards to expire unutilized. In addition, future changes in our stock ownership, including this or future offerings, as well as other changes that may be outside of our control, could result in additional ownership changes under Section 382 of the Internal Revenue Code. Our NOLs may also be impaired under similar provisions of state law. We have recorded a full valuation allowance related to our NOLs and other deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

Provisions of our debt instruments may restrict our ability to pursue our business strategies.

Our credit facility requires us, and any debt instruments we may enter into in the future may require us, to comply with various covenants that limit our ability to, among other things:

dispose of assets;

complete mergers or acquisitions;

incur indebtedness;

encumber assets;

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pay dividends or make other distributions to holders of our capital stock;

make specified investments;

change certain key management personnel; and

engage in transactions with our affiliates.

These restrictions could inhibit our ability to pursue our business strategies. In addition, we are subject to a financial covenant based on life sciences revenue. If we default under our credit facility, and such event of default was not cured or waived, the lenders could terminate commitments to lend and cause all amounts outstanding with respect to the debt to be due and payable immediately, which in turn could result in cross defaults under other debt instruments. Our assets and cash flow may not be sufficient to fully repay borrowings under all of our outstanding debt instruments if some or all of these instruments are accelerated upon a default.

We may incur additional indebtedness in the future. The debt instruments governing such indebtedness could contain provisions that are as, or more, restrictive than our existing debt instruments. If we are unable to repay, refinance or restructure our indebtedness when payment is due, the lenders could proceed against the collateral granted to them to secure such indebtedness or force us into bankruptcy or liquidation.

We may need to raise additional capital, which may not be available on favorable terms, if at all, and which may cause dilution to stockholders, restrict our operations or adversely affect our ability to operate our business.

We may need or decide to raise additional funds through public or private debt or equity financing. We cannot be certain that we will be able to obtain additional financing on favorable terms, if at all, and any additional financings could result in additional dilution to our then existing stockholders. If we raise funds by issuing equity securities, the percentage ownership of our stockholders will be reduced. If we need additional capital and cannot raise it on acceptable terms, we may not be able to meet our business objectives, our stock price may fall and investors may lose some or all of their investment.

Acquisitions or joint ventures could disrupt our business, cause dilution to our stockholders and otherwise harm our business.

We may acquire other businesses, products or technologies as well as pursue strategic alliances, joint ventures, technology licenses or investments in complementary businesses. We have not made any acquisitions to date, and our ability to do so successfully is unproven. Any of these transactions could be material to our financial condition and operating results and expose us to many risks, including:

disruption in our relationships with customers, distributors or suppliers as a result of such a transaction;

unanticipated liabilities related to acquired companies;

difficulties integrating acquired personnel, technologies and operations into our existing business;

diversion of management time and focus from operating our business to acquisition integration challenges;

increases in our expenses and reductions in our cash available for operations and other uses; and

possible write-offs or impairment charges relating to acquired businesses.

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Foreign acquisitions involve unique risks in addition to those mentioned above, including those related to integration of operations across different cultures and languages, currency risks and the particular economic, political and regulatory risks associated with specific countries.

Also, the anticipated benefit of any acquisition may not materialize. Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our financial condition. We cannot predict the number, timing or size of future joint ventures or acquisitions, or the effect that any such transactions might have on our operating results.

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If we are unable to recruit, train and retain key personnel, we may not achieve our goals.

Our future success depends on our ability to recruit, train, retain and motivate key personnel, including our senior management, research and development, manufacturing and sales and marketing personnel. Competition for qualified personnel is intense, particularly in the Seattle, Washington area. Our growth depends, in particular, on attracting, retaining and motivating highly-trained sales personnel with the necessary scientific background and ability to understand our systems at a technical level to effectively identify and sell to potential new customers. In particular, the commercial launch of Prosigna requires us to establish a dedicated oncology diagnostics sales force to fully optimize the breast cancer diagnostic market opportunity. We do not maintain fixed term employment contracts or key man life insurance with any of our employees. Because of the complex and technical nature of our products and the dynamic market in which we compete, any failure to attract, train, retain and motivate qualified personnel could materially harm our operating results and growth prospects.

Undetected errors or defects in our products could harm our reputation, decrease market acceptance of our products or expose us to product liability claims.

Our products may contain undetected errors or defects when first introduced or as new versions are released. Since our current customers use our products for research and may, if cleared or approved, in the future use them for diagnostic applications, disruptions or other performance problems with our products may damage our customers' business and could harm our reputation. If that occurs, we may incur significant costs, the attention of our key personnel could be diverted, or other significant customer relations problems may arise. We may also be subject to warranty and liability claims for damages related to errors or defects in our products. A material liability claim or other occurrence that harms our reputation or decreases market acceptance of our products could harm our business and operating results.

The sale and use of products or services based on our technologies, or activities related to our research and clinical studies, could lead to the filing of product liability claims if someone were to allege that one of our products contained a design or manufacturing defect which resulted in the failure to adequately perform the analysis for which it was designed. A product liability claim could result in substantial damages and be costly and time consuming to defend, either of which could materially harm our business or financial condition. We cannot assure investors that our product liability insurance would adequately protect our assets from the financial impact of defending a product liability claim. Any product liability claim brought against us, with or without merit, could increase our product liability insurance rates or prevent us from securing insurance coverage in the future.

We face risks related to handling of hazardous materials and other regulations governing environmental safety.

Our operations are subject to complex and stringent environmental, health, safety and other governmental laws and regulations that both public officials and private individuals may seek to enforce. Our activities that are subject to these regulations include, among other things, our use of hazardous materials and the generation, transportation and storage of waste. We could discover that we or an acquired business is not in material compliance with these regulations. Existing laws and regulations may also be revised or reinterpreted, or new laws and regulations may become applicable to us, whether retroactively or prospectively, that may have a negative effect on our business and results of operations. It is also impossible to eliminate completely the risk of accidental environmental contamination or injury to individuals. In such an event, we could be liable for any damages that result, which could adversely affect our business.

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Risks Related to Government Regulation and Diagnostic Product Reimbursement

Our research use only products for the life sciences market could become subject to regulation as medical devices by the FDA or other regulatory agencies in the future which could increase our costs and delay our commercialization efforts, thereby materially and adversely affecting our life sciences business and results of operations.

In the United States, our products are currently labeled and sold for research use only, or RUO, and not for the diagnosis or treatment of disease, and are sold to pharmaceutical and biotechnology companies, academic institutions and life sciences laboratories. Because such products are not intended for use in clinical practice in diagnostics, and the products cannot include clinical or diagnostic claims, they are not subject to regulation by the FDA as medical devices. In particular, while the FDA regulations require that RUO products be labeled, For Research Use Only. Not for use in diagnostic procedures, the regulations do not subject such products to the FDA's pre- and post- market controls for medical devices. However, in June 2011, the FDA issued a draft guidance document that, if finalized as drafted, could restrict the provision of our RUO products, and it is unclear whether the FDA will issue a final guidance and if so what the contents of the guidance will be. If in the future the FDA modifies its approach to regulating our products labeled for research use only, it could reduce our revenue or increase our costs and adversely affect our business, prospects, results of operations or financial condition. In the event that the FDA requires marketing authorization of our RUO products in the future, there can be no assurance that the FDA will ultimately grant any clearance or approval requested by us in a timely manner, or at all.

Approval and/or clearance by the FDA and foreign regulatory authorities for our diagnostic tests will take significant time and require significant research, development and clinical study expenditures and ultimately may not succeed.

Before we begin to label and market our products for use as clinical diagnostics in the United States, thereby subjecting them to FDA regulation as medical devices, unless an exemption applies, we would be required to obtain either prior 510(k) clearance or prior pre-market approval, or PMA, from the FDA. In December 2012, we submitted an application, known as a 510(k), to the FDA seeking clearance in the United States for a version of Prosigna. In March 2013, we received a written response from the FDA requesting additional information for its review of our 510(k) submission. A request for additional information is common following an initial 510(k) submission. In May 2013, we submitted an initial response to the FDA's request for additional information and met with the FDA to discuss our response. In this meeting, we discussed, among other issues raised by the FDA, the specific elements and format of a potential report generated by Prosigna, including the appropriate name for the risk score, the appropriate graphic presentation of the risk score, and, specifically for the potential report for node-positive patients, the numerical range of the risk score and the appropriate number of risk groups. Based on pre-submission interactions with the FDA and the FDA's written response to our 510(k) submission, we expect Agendia's MammaPrint to serve as the legally marketed predicate that, if Prosigna is cleared, would enable us to market a version of Prosigna in the United States to assess a patient's risk of recurrence for breast cancer. In the FDA's written response to our 510(k) submission, 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 a risk score and three distinct risk groups in patient reports for all patients tested. If Prosigna is not cleared by the FDA to include a specific risk score or if Prosigna is limited to classifying node-negative patients into high or low risk groups only, the prognostic information provided by Prosigna and our ability to differentiate our test from alternatives may be adversely affected in the United States. As with all *in vitro* diagnostic products, the FDA reserves the right to redefine the regulatory path at the time of submission or during the review process, and could require a more burdensome approach, including a PMA. In the future we plan to submit a separate application for approval of Prosigna to report intrinsic subtype, and we expect that this application will require a PMA supported by additional clinical studies. We intend to pursue additional intended uses for Prosigna, which may require more burdensome regulatory processes than the 510(k) clearance process, including PMAs. Even if granted, a 510(k) clearance or PMA approval for any future product would likely place substantial restrictions on how our device is marketed or sold, and the FDA will continue to place considerable restrictions on our products, including, but not limited to, quality system regulations, or QSR, registering

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manufacturing facilities, listing the products with the FDA, and complying with labeling, marketing, complaint handling, adverse event and medical device reporting requirements and corrections and removals. Obtaining FDA clearance or approval for diagnostics can be expensive and uncertain, and generally takes from several months to several years, and generally requires detailed and comprehensive scientific and clinical data. Notwithstanding the expense, these efforts may never result in FDA approval or clearance. Even if we were to obtain regulatory approval or clearance, it may not be for the uses we believe are important or commercially attractive, in which case we would not be permitted to market our product for those uses.

Sales of our diagnostic products outside the United States will be subject to foreign regulatory requirements governing clinical studies, vigilance reporting, marketing approval, manufacturing, product licensing, pricing and reimbursement. These regulatory requirements vary greatly from country to country. As a result, the time required to obtain approvals outside the United States may differ from that required to obtain FDA approval and we may not be able to obtain foreign regulatory approvals on a timely basis or at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other countries or by the FDA and foreign regulatory authorities could require additional testing. In addition, FDA regulates exports of medical devices. Failure to comply with these regulatory requirements or obtain required approvals could impair our ability to commercialize our diagnostic products outside of the United States.

We expect to rely on third parties to conduct any future studies of our diagnostic products that may be required by the FDA or other regulatory authorities, and those third parties may not perform satisfactorily.

We do not have the ability to independently conduct the clinical studies or other studies that may be required to obtain FDA and other regulatory clearance or approval for our diagnostic products, including Prosigna. Accordingly, we expect to rely on third parties, such as medical institutions and clinical investigators, to conduct such studies. Our reliance on these third parties for clinical development activities will reduce our control over these activities. These third-party contractors may not complete activities on schedule or conduct studies in accordance with regulatory requirements or our study design. Our reliance on third parties that we do not control will not relieve us of any applicable requirement to prepare, and ensure compliance with, various procedures required under good clinical practices. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if the third parties need to be replaced or if the quality or accuracy of the data they obtain is compromised due to their failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our studies may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory approval for our diagnostic products.

Even if we are able to obtain regulatory approval or clearance for our diagnostic products, we will continue to be subject to ongoing and extensive regulatory requirements, and our failure to comply with these requirements could substantially harm our business.

If we receive regulatory approval or clearance for our diagnostic products, we will be subject to ongoing FDA obligations and continued regulatory oversight and review, such as compliance with QSRs, inspections by the FDA, continued adverse event and malfunction reporting, corrections and removals reporting, registration and listing, and promotional restrictions, and we may also be subject to additional FDA post-marketing obligations. If we are not able to maintain regulatory compliance, we may not be permitted to market our diagnostic products and/or may be subject to fines, injunctions, and civil penalties; recall or seizure of products; operating restrictions; and criminal prosecution. In addition, we may be subject to similar regulatory regimes of foreign jurisdictions.

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If Medicare and other third-party payors in the United States and foreign countries do not approve reimbursement for diagnostic tests enabled by our technology, the commercial success of our diagnostic products would be compromised.

Successful commercialization of our diagnostic products depends, in large part, on the availability of adequate reimbursement for testing services that our diagnostic products enable from government insurance plans, managed care organizations and private insurance plans. There is significant uncertainty surrounding third-party reimbursement for the use of tests that incorporate new technology, such as Prosigna. If we are unable to obtain positive policy decisions from third-party payors approving reimbursement for our tests at adequate levels, the commercial success of our products would be compromised and our revenue would be significantly limited. Even if we do obtain reimbursement for our tests, Medicare, Medicaid and private and other payors may withdraw their coverage policies, cancel their contracts with us at any time, review and adjust the rate of reimbursement, require co-payments from patients or stop paying for our tests, which would reduce revenue for testing services based on our technology, and indirectly, demand for diagnostic products. In addition, insurers, including managed care organizations as well as government payors such as Medicare and Medicaid, have increased their efforts to control the cost, utilization and delivery of healthcare services, which may include decreased coverage or reduced reimbursement. From time to time, Congress has considered and implemented changes to the Medicare fee schedules in conjunction with budgetary legislation, and pricing and payment terms, including the possible requirement of a patient co-payment for Medicare beneficiaries for tests covered by Medicare, and are subject to change at any time. Reductions in the reimbursement rate of third-party payors have occurred and may occur in the future. Reductions in the prices at which testing services based on our technology are reimbursed could have a negative impact on our revenue.

In many countries outside of the United States, various coverage, pricing and reimbursement approvals are required. We expect that it will take several years to establish broad coverage and reimbursement for testing services based on our products with payors in countries outside of the United States, and our efforts may not be successful.

We may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws and other federal and state laws applicable to our marketing practices. If we are unable to comply, or have not complied, with such laws, we could face substantial penalties.

If we obtain FDA approval or clearance for any of our diagnostic product candidates and begin commercializing those products in the United States, our operations will be directly, or indirectly through our customers, subject to various federal and state fraud and abuse laws, including, without limitation, the federal and state anti-kickback statutes and state and federal marketing compliance laws. These laws may impact, among other things, our proposed sales and marketing and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include:

the federal Anti-kickback Law and state anti-kickback prohibitions;

the federal physician self-referral prohibition, commonly known as the Stark Law, and the state equivalents;

the federal Health Insurance Portability and Accountability Act of 1996, as amended;

the Medicare civil money penalty and exclusion requirements; and

the federal False Claims Act civil and criminal penalties and state equivalents.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

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Healthcare policy changes, including recently enacted legislation reforming the United States healthcare system, may have a material adverse effect on our financial condition and results of operations.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, collectively, the PPACA, enacted in March 2010, makes changes that are expected to significantly impact the pharmaceutical and medical device industries and clinical laboratories. Beginning in 2013, each medical device manufacturer will have to pay a sales tax in an amount equal to 2.3% of the price for which such manufacturer sells its medical devices. We expect that the new tax may apply to some or all of our diagnostic products. The PPACA also mandates a reduction in payments for clinical laboratory services paid under the Medicare Clinical Laboratory Fee Schedule of 1.75% for the years 2011 through 2015 and a productivity adjustment to the Clinical Laboratory Fee Schedule. These or any future proposed or mandated reductions in payments may apply to some or all of the clinical laboratory tests that our diagnostics customers use our technology to deliver to Medicare beneficiaries, and may indirectly reduce demand for our diagnostic products.

Other significant measures contained in the PPACA include coordination and promotion of research on comparative clinical effectiveness of different technologies and procedures, initiatives to revise Medicare payment methodologies, such as bundling of payments across the continuum of care by providers and physicians, and initiatives to promote quality indicators in payment methodologies. The PPACA also includes significant new fraud and abuse measures, including required disclosures of financial arrangements with physician customers, lower thresholds for violations and increasing potential penalties for such violations. In addition, the PPACA establishes an Independent Payment Advisory Board, or IPAB, to reduce the per capita rate of growth in Medicare spending. The IPAB has broad discretion to propose policies to reduce health care expenditures, which may have a negative impact on payment rates for services, including our tests. The IPAB proposals may impact payments for clinical laboratory services that our future diagnostics customers use our technology to deliver beginning in 2016 and for hospital services beginning in 2020, and may indirectly reduce demand for our diagnostic products.

In addition to the PPACA, the effect of which cannot presently be quantified, various healthcare reform proposals have also emerged from federal and state governments. Changes in healthcare policy, such as the creation of broad test utilization limits for diagnostic products in general or requirements that Medicare patients pay for portions of clinical laboratory tests or services received, could substantially impact the sales of our tests, increase costs and divert management's attention from our business. Such co-payments by Medicare beneficiaries for laboratory services were discussed as possible cost savings for the Medicare program as part of the debt ceiling budget discussions in mid-2011 and may be enacted in the future. In addition, sales of our tests outside of the United States will subject us to foreign regulatory requirements, which may also change over time.

We cannot predict whether future healthcare initiatives will be implemented at the federal or state level or in countries outside of the United States in which we may do business, or the effect any future legislation or regulation will have on us. The taxes imposed by the new federal legislation and the expansion in government's effect on the United States healthcare industry may result in decreased profits to us, lower reimbursements by payors for our products or reduced medical procedure volumes, all of which may adversely affect our business, financial condition and results of operations.

Risks Related to Intellectual Property

If we are unable to protect our intellectual property effectively, our business would be harmed.

We rely on patent protection as well as trademark, copyright, trade secret and other intellectual property rights protection and contractual restrictions to protect our proprietary technologies, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. As of May 31, 2013, we owned or exclusively licensed five issued U.S. patents and approximately 24 pending U.S. patent applications, including provisional and non-provisional filings. We also owned or licensed approximately 64 pending and granted counterpart applications worldwide, including 22 country-specific validations of three

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European patents. If we fail to protect our intellectual property, third parties may be able to compete more effectively against us and we may incur substantial litigation costs in our attempts to recover or restrict use of our intellectual property.

We cannot assure investors that any of our currently pending or future patent applications will result in issued patents, and we cannot predict how long it will take for such patents to be issued. Further, we cannot assure investors that other parties will not challenge any patents issued to us or that courts or regulatory agencies will hold our patents to be valid or enforceable. We cannot guarantee investors that we will be successful in defending challenges made against our patents and patent applications. Any successful third-party challenge to our patents could result in the third party or the unenforceability or invalidity of such patents.

The patent positions of life sciences companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such companies' patents has emerged to date in the United States. Furthermore, in the biotechnology field, courts frequently render opinions that may affect the patentability of certain inventions or discoveries, including opinions that may affect the patentability of methods for analyzing or comparing DNA.

In particular, the patent positions of companies engaged in development and commercialization of genomic diagnostic tests, like Prosigna, are particularly uncertain. Various courts, including the U.S. Supreme Court, have recently rendered decisions that impact the scope of patentability of certain inventions or discoveries relating to genomic diagnostics. Specifically these decisions stand for the proposition that patent claims that recite laws of nature (for example, the relationships between gene expression levels and the likelihood of risk of recurrence of cancer) are not themselves patentable unless those patent claims have sufficient additional features that provide practical assurance that the processes are genuine inventive applications of those laws rather than patent drafting efforts designed to monopolize the law of nature itself. What constitutes a sufficient additional feature is uncertain. Accordingly, this evolving case law in the United States may adversely impact our ability to obtain new patents and may facilitate third-party challenges to our existing owned and licensed patents. One of our main areas of intellectual property, namely patents we license directed to the use of gene expression markers as part of genomic diagnostic tests, may be affected by these decisions.

The laws of some non-U.S. countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patents. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

Changes in either the patent laws or in interpretations of patent laws in the United States or other countries may diminish the value of our intellectual property. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example:

We might not have been the first to make the inventions covered by each of our pending patent applications.

We might not have been the first to file patent applications for these inventions.

Others may independently develop similar or alternative products and technologies or duplicate any of our products and technologies.

It is possible that none of our pending patent applications will result in issued patents, and even if they issue as patents, they may not provide a basis for commercially viable products, may not provide us with any competitive advantages, or may be challenged and invalidated by third parties.

We may not develop additional proprietary products and technologies that are patentable.

The patents of others may have an adverse effect on our business.

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We apply for patents covering our products and technologies and uses thereof, as we deem appropriate. However, we may fail to apply for patents on important products and technologies in a timely fashion or at all.

In addition to pursuing patents on our technology, we take steps to protect our intellectual property and proprietary technology by entering into confidentiality agreements and intellectual property assignment agreements with our employees, consultants, corporate partners and, when needed, our advisors. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure. Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets.

In addition, competitors could purchase our products and attempt to replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of our intellectual property rights. If our intellectual property is not adequately protected so as to protect our market against competitors' products and methods, our competitive position could be adversely affected, as could our business.

We have not yet registered certain of our trademarks, including Prosigna, in all of our potential markets. If we apply to register these trademarks, our applications may not be allowed for registration, and our registered trademarks may not be maintained or enforced. In addition, opposition or cancellation proceedings may be filed against our trademark applications and registrations, and our trademarks may not survive such proceedings. If we do not secure registrations for our trademarks, we may encounter more difficulty in enforcing them against third parties than we otherwise would.

To the extent our intellectual property, including licensed intellectual property, offers inadequate protection, or is found to be invalid or unenforceable, we would be exposed to a greater risk of direct competition. If our intellectual property does not provide adequate protection against our competitors' products, our competitive position could be adversely affected, as could our business. Both the patent application process and the process of managing patent disputes can be time consuming and expensive.

We depend on certain technologies that are licensed to us. We do not control these technologies and any loss of our rights to them could prevent us from selling our products.

We rely on licenses in order to be able to use various proprietary technologies that are material to our business, including our core digital molecular barcoding technology licensed from the Institute for Systems Biology and technology relating to Prosigna licensed from Bioclassifier, LLC. We do not own the patents that underlie these licenses. Our rights to use these technologies and employ the inventions claimed in the licensed patents are subject to the continuation of and compliance with the terms of those licenses.

In some cases, we do not control the prosecution, maintenance, or filing of the patents to which we hold licenses, or the enforcement of these patents against third parties. Some of our patents and patent applications were either acquired from another company who acquired those patents and patent applications from yet another company, or are licensed from a third party. Thus, these patents and patent applications are not written by us or our attorneys, and we did not have control over the drafting and prosecution. The former patent owners and our licensors might not have given the same attention to the drafting and prosecution of these patents and applications as we would have if we had been the owners of the patents and applications and had control over the drafting and prosecution. We cannot be certain that drafting or prosecution of the licensed patents and patent applications by the licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights.

Enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents is often subject to the control or cooperation of our licensors. Certain of our licenses contain provisions that allow

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the licensor to terminate the license upon specific conditions. Our rights under the licenses are subject to our continued compliance with the terms of the license, including the payment of royalties due under the license. Because of the complexity of our products and the patents we have licensed, determining the scope of the license and related royalty obligation can be difficult and can lead to disputes between us and the licensor. An unfavorable resolution of such a dispute could lead to an increase in the royalties payable pursuant to the license or termination of the license. If a licensor believed we were not paying the royalties due under the license or were otherwise not in compliance with the terms of the license, the licensor might attempt to revoke the license. If such an attempt were successful, we might be barred from producing and selling some or all of our products.

In addition, certain of the patents we have licensed relate to technology that was developed with U.S. government grants. Federal regulations impose certain domestic manufacturing requirements with respect to some of our products embodying these patents.

We may be involved in lawsuits to protect or enforce our patents and proprietary rights, to determine the scope, coverage and validity of others' proprietary rights, or to defend against third-party claims of intellectual property infringement, any of which could be time-intensive and costly and may adversely impact our business or stock price.

We have received notices of claims of infringement and misappropriation or misuse of other parties' proprietary rights in the past and may from time to time receive additional notices. Some of these claims may lead to litigation. We cannot assure investors that we will prevail in such actions, or that other actions alleging misappropriation or misuse by us of third-party trade secrets, infringement by us of third-party patents and trademarks or other rights, or the validity of our patents, trademarks or other rights, will not be asserted or prosecuted against us.

Litigation may be necessary for us to enforce our patent and proprietary rights or to determine the scope, coverage and validity of the proprietary rights of others. Litigation could result in substantial legal fees and could adversely affect the scope of our patent protection. The outcome of any litigation or other proceeding is inherently uncertain and might not be favorable to us, and we might not be able to obtain licenses to technology that we require. Even if such licenses are obtainable, they may not be available at a reasonable cost. We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins. Further, we could encounter delays in product introductions, or interruptions in product sales, as we develop alternative methods or products. In addition, if we resort to legal proceedings to enforce our intellectual property rights or to determine the validity, scope and coverage of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, even if we were to prevail. Any litigation that may be necessary in the future could result in substantial costs and diversion of resources and could have a material adverse effect on our business, operating results or financial condition.

As we move into new markets and applications for our products, incumbent participants in such markets may assert their patents and other proprietary rights against us as a means of slowing our entry into such markets or as a means to extract substantial license and royalty payments from us. Our competitors and others may now and in the future have significantly larger and more mature patent portfolios than we currently have. In addition, future litigation may involve patent holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may provide little or no deterrence or protection. Therefore, our commercial success may depend in part on our non-infringement of the patents or proprietary rights of third parties. We are aware of a third party, Genomic Health, Inc., that has issued U.S. patents and pending patent applications that claim methods of using certain genes that are included in Prosigna. We believe that Prosigna will not infringe any valid issued claim. Numerous significant intellectual property issues have been litigated, and will likely continue to be litigated, between existing and new participants in our existing and targeted markets and competitors may assert that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. Third parties may assert that we are employing their proprietary technology without authorization. In addition, our competitors and others may have patents or may in the future obtain patents and claim that use of our products infringes these patents. We could incur substantial costs and divert the attention of our management and technical personnel in defending against

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any of these claims. Parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products, and could result in the award of substantial damages against us. In the event of a successful claim of infringement against us, we may be required to pay damages and obtain one or more licenses from third parties, or be prohibited from selling certain products. We may not be able to obtain these licenses at a reasonable cost, if at all. We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins. In addition, we could encounter delays in product introductions while we attempt to develop alternative methods or products to avoid infringing third-party patents or proprietary rights. Defense of any lawsuit or failure to obtain any of these licenses on favorable terms could prevent us from commercializing products, and the prohibition of sale of any of our products could materially affect our ability to grow and gain market acceptance for our products.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

In addition, our agreements with some of our suppliers, distributors, customers and other entities with whom we do business require us to defend or indemnify these parties to the extent they become involved in infringement claims against us, including the claims described above. We could also voluntarily agree to defend or indemnify third parties in instances where we are not obligated to do so if we determine it would be important to our business relationships. If we are required or agree to defend or indemnify any of these third parties in connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, operating results, or financial condition.

We may be subject to damages resulting from claims that we or our employees have wrongfully used or disclosed alleged trade secrets of our employees former employers.

Many of our employees were previously employed at universities or other life sciences companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. A loss of key research personnel work product could hamper or prevent our ability to commercialize certain potential products, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Our products contain third-party open source software components, and failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell our products.

Our products contain software tools licensed by third-party authors under open source licenses. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software we use. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create similar products with less development effort and time and ultimately could result in a loss of product sales.

Although we monitor our use of open source software to avoid subjecting our products to conditions we do not intend, the terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our

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ability to commercialize our products. Moreover, we cannot assure investors that our processes for controlling our use of open source software in our products will be effective. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our products on terms that are not economically feasible, to re-engineer our products, to discontinue the sale of our products if re-engineering could not be accomplished on a timely basis, or to make generally available, in source code form, our proprietary code, any of which could adversely affect our business, operating results, and financial condition.

We use third-party software that may be difficult to replace or cause errors or failures of our products that could lead to lost customers or harm to our reputation.

We use software licensed from third parties in our products. In the future, this software may not be available to us on commercially reasonable terms, or at all. Any loss of the right to use any of this software could result in delays in the production of our products until equivalent technology is either developed by us, or, if available, is identified, obtained and integrated, which could harm our business. In addition, any errors or defects in third-party software, or other third-party software failures could result in errors, defects or cause our products to fail, which could harm our business and be costly to correct. Many of these providers attempt to impose limitations on their liability for such errors, defects or failures, and if enforceable, we may have additional liability to our customers or third-party providers that could harm our reputation and increase our operating costs.

We will need to maintain our relationships with third-party software providers and to obtain software from such providers that does not contain any errors or defects. Any failure to do so could adversely impact our ability to deliver reliable products to our customers and could harm our results of operations.

Risks Related to Being a Public Company

Complying with the laws and regulations affecting public companies will increase our costs and the demands on management and could harm our operating results.

As a public company, and particularly after we cease to be an emerging growth company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act and rules subsequently implemented by the SEC and The NASDAQ Global Market impose numerous requirements on public companies, including requiring changes in corporate governance practices. Also, the Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and operating results. Our management and other personnel will need to devote a substantial amount of time to compliance with these laws and regulations. These requirements have increased and will continue to increase our legal, accounting, and financial compliance costs and have made and will continue to make some activities more time consuming and costly. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or to incur substantial costs to maintain the same or similar coverage. These rules and regulations could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or our board committees or as executive officers.

The Sarbanes-Oxley Act requires, among other things, that we assess the effectiveness of our internal control over financial reporting annually and the effectiveness of our disclosure controls and procedures quarterly. In particular, beginning January 1, 2014, Section 404 of the Sarbanes-Oxley Act, or Section 404, will require us to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on, and our independent registered public accounting firm potentially to attest to, the effectiveness of our internal control over financial reporting. As an emerging growth company, we expect to avail ourselves of the exemption from the requirement that our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting under Section 404. However, we may no longer avail ourselves of this exemption when we cease to be an emerging growth company. When our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of our compliance with Section 404 will correspondingly increase. Our compliance

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with applicable provisions of Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues as we implement additional corporate governance practices and comply with reporting requirements. Moreover, if we are not able to comply with the requirements of Section 404 applicable to us in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

Furthermore, investor perceptions of our company may suffer if deficiencies are found, and this could cause a decline in the market price of our stock. Irrespective of compliance with Section 404, any failure of our internal control over financial reporting could have a material adverse effect on our stated operating results and harm our reputation. If we are unable to implement these requirements effectively or efficiently, it could harm our operations, financial reporting, or financial results and could result in an adverse opinion on our internal controls from our independent registered public accounting firm.

We are an emerging growth company, and any decision on our part to comply only with certain reduced reporting and disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups, or JOBS, Act enacted in April 2012, and, for as long as we continue to be an emerging growth company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to emerging growth companies, including, but not limited to, not being required to have our independent registered public accounting firm audit our internal control over financial reporting under Section 404, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years following the completion of this offering, although, if we have more than \$1.0 billion in annual revenue, if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of June 30 of any year, or we issue more than \$1.0 billion of non-convertible debt over a three-year period before the end of that five-year period, we would cease to be an emerging growth company as of the following December 31. We cannot predict if investors will find our common stock less attractive if we choose to rely on these exemptions. If some investors find our common stock less attractive as a result of any choices to reduce future disclosure, there may be a less active trading market for our common stock and our stock price may be more volatile.

As an emerging growth company the JOBS Act allows us to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies. We have elected to use this extended transition period under the JOBS Act. As a result, our financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make our common stock less attractive to investors.

Risks Related to Our Common Stock and this Offering

We expect that our stock price will fluctuate significantly and investors may not be able to resell their shares at or above the initial public offering price.

The trading price of our common stock following this offering may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. These factors include:

actual or anticipated quarterly variation in our results of operations or the results of our competitors;

announcements by us or our competitors of new products, significant contracts, commercial relationships or capital commitments;

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failure to obtain or delays in obtaining product approvals or clearances from the FDA or foreign regulators;

adverse regulatory or reimbursement announcements;

issuance of new or changed securities analysts' reports or recommendations for our stock;

developments or disputes concerning our intellectual property or other proprietary rights;

commencement of, or our involvement in, litigation;

market conditions in the life sciences research and molecular diagnostics markets;

manufacturing disruptions;

any future sales of our common stock or other securities;

any change to the composition of the board of directors or key personnel;

expiration of contractual lock-up agreements with our executive officers, directors and security holders;

announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

general economic conditions and slow or negative growth of our markets; and

the other factors described in this section of the prospectus captioned "Risk Factors."

The stock market in general, and market prices for the securities of health technology companies like ours in particular, have from time to time experienced volatility that often has been unrelated to the operating performance of the underlying companies. These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of our operating performance. In several recent situations where the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders were to bring a lawsuit against us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management and harm our operating results.

An active trading market for our common stock may not develop.

Prior to this offering, there has been no public market for our common stock. Although we expect that our common stock will be approved for listing on The NASDAQ Global Market, an active trading market for our shares may never develop or be sustained following this offering. The initial price to public for our common stock was determined through negotiations with the underwriters, and the negotiated price may not be indicative of the market price of the common stock after the offering. The lack of an active market may impair investors' ability to sell their shares at the time they wish to sell them or at a price that they consider reasonable, may reduce the fair market value of their shares and may impair our ability to raise capital.

If securities or industry analysts do not publish research reports about our business, or if they issue an adverse opinion about our business, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of the analysts who cover us issues an adverse opinion about our company, our stock price would likely decline. If one or more of these analysts ceases coverage of us or fails to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Future sales of our common stock in the public market could cause our stock price to fall.

Our stock price could decline as a result of sales of a large number of shares of our common stock after this offering or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

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Upon completion of this offering, 14,601,766 shares of our common stock will be outstanding (15,411,766 shares of common stock will be outstanding assuming exercise of the underwriters' overallotment option in full), based on our shares outstanding as of May 31, 2013. All shares of common stock expected to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act unless held by our affiliates, as that term is defined in Rule 144 under the Securities Act. The resale of the remaining 9,201,766 shares, or 63.02% of our outstanding shares after this offering, are currently prohibited or otherwise restricted as a result of securities law provisions, market standoff agreements entered into by our stockholders with us or lock-up agreements entered into by our stockholders with the underwriters; however, subject to applicable securities law restrictions, these shares will be able to be sold in the public market beginning 180 days after the date of this prospectus. In addition, the shares subject to outstanding options and warrants, of which options and warrants to purchase 1,314,738 shares and 617,605 shares, respectively, were exercisable as of May 31, 2013, and the shares reserved for future issuance under our stock option and equity incentive plans will become available for sale immediately upon the exercise of such options and the expiration of any applicable market stand-off or lock-up agreements. For more information see the section of this prospectus captioned "Shares Eligible for Future Sale."

Holders of approximately 9,535,713 shares (including the shares underlying the warrants described in the section of this prospectus captioned "Shares Eligible for Future Sale - Warrants"), or 65.31%, of our common stock, will have rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register the offer and sale of all shares of common stock that we may issue under our equity compensation plans. Once we register the offer and sale of shares for the holders of registration rights and option holders, they can be freely sold in the public market upon issuance, subject to the lock-up agreements described in the section of this prospectus captioned "Underwriting."

In addition, in the future, we may issue additional shares of common stock or other equity or debt securities convertible into common stock in connection with a financing, acquisition, litigation settlement, employee arrangements or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

Our principal stockholders and management own a significant percentage of our stock and will be able to exercise significant influence over matters subject to stockholder approval.

Our executive officers, directors and principal stockholders, together with their respective affiliates, beneficially owned approximately 81.13% of our capital stock as of May 31, 2013, and we expect that upon completion of this offering, that same group will beneficially own at least 53.80% of our capital stock or 57.50% if investment entities affiliated with certain of our principal stockholders and certain of our other existing stockholders purchase a number of shares of common stock equal to that for which they have expressed an interest in purchasing (assuming an initial price to public of \$14.00, the midpoint of the range on the cover page of this prospectus), of which 7.67% will be beneficially owned by our executive officers. Accordingly, after this offering, our executive officers, directors and principal stockholders will be able to determine the composition of the board of directors, retain the voting power to approve all matters requiring stockholder approval, including mergers and other business combinations, and continue to have significant influence over our operations. This concentration of ownership could have the effect of delaying or preventing a change in our control or otherwise discouraging a potential acquirer from attempting to obtain control of us, which in turn could have a material adverse effect on our stock price and may prevent attempts by our stockholders to replace or remove the board of directors or management.

Our management team has broad discretion to use the net proceeds from this offering and its investment of these proceeds may not yield a favorable return. They may invest the proceeds of this offering in ways with which investors disagree.

Our management has broad discretion as to how to spend and invest the proceeds from this offering and we may spend or invest these proceeds in a way with which our stockholders disagree. Accordingly, investors will

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need to rely on our judgment with respect to the use of these proceeds. We intend to use the proceeds from this offering to: (1) commercialize Prosigna after obtaining regulatory authorization, including establishing a dedicated oncology sales force; (2) expand the clinical utility of Prosigna and to develop other potential diagnostic product opportunities; (3) expand life sciences commercial operations to grow and support the installed base of our nCounter Analysis Systems among life sciences research customers in the United States and internationally; (4) develop new life sciences applications, chemistry and instrumentation for our nCounter technology platform; and (5) for working capital and other general corporate purposes. We may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. These uses may not yield a favorable return to our stockholders.

We cannot specify with certainty all of the particular uses for the net proceeds to be received upon the closing of this offering. In addition, the amount, allocation and timing of our actual expenditures will depend upon numerous factors, including the revenue generated from the sale of our products to life sciences customers and the sale of Prosigna. Accordingly, we will have broad discretion in using these proceeds. Until the net proceeds are used, they may be placed in investments that do not produce significant income or that may lose value.

Anti-takeover provisions in our charter documents and under Delaware or Washington law could make an acquisition of us difficult, limit attempts by our stockholders to replace or remove our current management and limit our stock price.

Provisions of our certificate of incorporation and bylaws to be effective immediately following consummation of this offering may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our stock. Among other things, the certificate of incorporation and bylaws will:

permit the board of directors to issue up to 15,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate;

provide that the authorized number of directors may be changed only by resolution of the board of directors;

provide that all vacancies, including newly-created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;

divide the board of directors into three classes;

provide that a director may only be removed from the board of directors by the stockholders for cause;

require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and may not be taken by written consent;

provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner, and meet specific requirements as to the form and content of a stockholder's notice;

prevent cumulative voting rights (therefore allowing the holders of a plurality of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);

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provide that special meetings of our stockholders may be called only by the chairman of the board, our chief executive officer or by the board of directors; and

provide that stockholders will be permitted to amend the bylaws only upon receiving at least two-thirds of the total votes entitled to be cast by holders of all outstanding shares then entitled to vote generally in the election of directors, voting together as a single class.

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In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any interested stockholder for a period of three years following the date on which the stockholder became an interested stockholder. Likewise, because our principal executive offices are located in Washington, the anti-takeover provisions of the Washington Business Corporation Act may apply to us under certain circumstances now or in the future. These provisions prohibit a target corporation from engaging in any of a broad range of business combinations with any stockholder constituting an acquiring person for a period of five years following the date on which the stockholder became an acquiring person. See the section of this prospectus captioned Description of Capital Stock Anti-Takeover Effects of Delaware and Washington Law and Our Certificate of Incorporation and Bylaws for additional information.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that are based on management's beliefs and assumptions and on information currently available to management. Some of the statements under Prospectus Summary, Risk Factors, Management's Discussion and Analysis of Financial Condition and Results of Operations and Business and elsewhere in this prospectus contain forward-looking statements. In some cases, you can identify forward-looking statements by the following words: may, will, could, would, should, expect, intend, plan, anticipate, predict, project, potential, continue, ongoing or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words.

These statements involve risks, uncertainties and other factors that may cause actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. Forward-looking statements in this prospectus include, but are not limited to, statements about:

our ability to successfully commercialize Prosigna, our first product for which we have obtained a CE mark in the European Union;

our ability to secure regulatory clearance or approval, domestically and internationally, for the clinical use of our products, including a version of Prosigna in the United States;

the implementation of our business model and strategic plans for our business;

the regulatory regime for our products, domestically and internationally;

our strategic relationships, including with patentholders of our technologies, manufacturers and distributors of our products, and third parties who conduct our clinical studies;

our intellectual property position;

our expected use of proceeds;

our expectations regarding the market size and growth potential for our life sciences and diagnostic businesses;

any estimates regarding expenses, future revenues, capital requirements, and stock performance; and

our ability to sustain and manage growth, including our ability to develop new products and enter new markets.

In addition, you should refer to the Risk Factors section of this prospectus for a discussion of other important factors that may cause actual results to differ materially from those expressed or implied by the forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if the forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future

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events or otherwise, except as required by law. The Private Securities Litigation Reform Act of 1995 and Section 27A of the Securities Act of 1933 do not protect any forward-looking statements that we make in connection with this offering.

This prospectus contains market data and industry forecasts that were obtained from industry publications. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. We have not independently verified any third-party information. While we believe the market position, market opportunity and market size information included in this prospectus is generally reliable, such information is inherently imprecise.

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USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of the shares of common stock in this offering will be approximately \$67.0 million, or approximately \$77.6 million if the underwriters exercise their overallotment option in full, based upon an assumed initial price to public of \$14.00 per share, the mid-point of the range reflected on the cover page of this prospectus, and after deducting underwriting discounts and commissions and estimated offering expenses. Each \$1.00 increase (decrease) in the assumed initial price to public of \$14.00 per share would increase (decrease) the net proceeds to us from this offering by approximately \$5.0 million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) the net proceeds to us from this offering by approximately \$13.0 million, assuming that the assumed initial price to public remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We do not expect that a change in the initial price to public or the number of shares by these amounts would have a material effect on uses of the proceeds from this offering, although it may accelerate the time at which we will need to seek additional capital.

We currently expect to use the net proceeds from this offering as follows:

approximately \$25 million to commercialize Prosigna after obtaining regulatory authorization, including establishing a dedicated oncology sales force;

approximately \$15 million to expand the clinical utility of Prosigna and to develop other potential diagnostic product opportunities;

approximately \$15 million to expand life sciences commercial operations to grow and support the installed base of our nCounter Analysis Systems among life sciences research customers in the United States and internationally;

approximately \$10 million to develop new life sciences applications, chemistry and instrumentation for our nCounter technology platform; and

for working capital and other general corporate purposes.

We may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction.

We cannot specify with certainty all of the particular uses for the net proceeds to be received upon the closing of this offering. In addition, the amount, allocation and timing of our actual expenditures will depend upon numerous factors, including the revenue generated from the sale of our products to life sciences customers and the sale of Prosigna. Accordingly, we will have broad discretion in using these proceeds. Pending their uses, we plan to invest the net proceeds of this offering in short-term, interest-bearing, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

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DIVIDEND POLICY

We have never declared or paid any cash dividends on our common stock or any other securities. We anticipate that we will retain all available funds and any future earnings, if any, for use in the operation of our business and do not anticipate paying cash dividends in the foreseeable future. In addition, our credit facility materially restricts, and future debt instruments we issue may materially restrict, our ability to pay dividends on our common stock. Payment of future cash dividends, if any, will be at the discretion of the board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs, the requirements of current or then-existing debt instruments and other factors the board of directors deems relevant.

Table of Contents**CAPITALIZATION**

The following table summarizes our capitalization as of March 31, 2013:

on an actual basis; and

on a pro forma as adjusted basis, to reflect (1) a 1-for-32 reverse stock split of our common stock and preferred stock effected on June 12, 2013, (2) the conversion of all outstanding shares of convertible preferred stock into 8,631,427 shares of common stock upon the closing of this offering, (3) the conversion of warrants to purchase 604,563 shares of preferred stock into warrants to purchase 607,187 shares of common stock and (4) the sale and issuance by us of 5,400,000 shares of common stock in this offering at an assumed initial price to public of \$14.00 per share, the mid-point of the range reflected on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses.

Investors should read the information in this table together with the financial statements and related notes to those statements, as well as the sections of this prospectus captioned Selected Financial Data and Management's Discussion and Analysis of Financial Condition and Results of Operations.

	As of March 31, 2013	
	Actual	Pro Forma
	(In thousands, except per share amounts)	
Total long-term debt	\$ 12,835	\$ 12,835
Mandatorily redeemable convertible preferred stock, \$0.0001 par value per share; issuable in series, 8,978,672 authorized, 8,118,240 shares issued and outstanding, actual; no shares authorized, no shares issued or outstanding, pro forma as adjusted	105,964	
Stockholders' equity (deficit):		
Preferred stock, \$0.0001 par value per share; no shares authorized, issued or outstanding, actual; 15,000,000 authorized, no shares issued or outstanding, pro forma as adjusted		1
Common stock, \$0.0001 par value per share, 11,712,500 shares authorized, 563,318 shares issued and outstanding, actual; 150,000,000 shares authorized, 14,594,745 shares issued and outstanding, pro forma as adjusted		176,985
Additional paid-in capital		(102,808)
Accumulated deficit	(102,808)	(102,808)
Total stockholders' equity (deficit)	(102,808)	74,178
Total capitalization	\$ 15,991	\$ 87,013

- (1) Each \$1.00 increase (decrease) in the assumed initial price to public of \$14.00 per share, the mid-point of the range reflected on the cover page of this prospectus, would increase (decrease) each of additional paid-in capital, total stockholders' deficit and total capitalization by approximately \$5.0 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) each of additional paid-in capital, total stockholders' deficit and total capitalization by approximately \$13.0 million, assuming that the assumed initial price to public remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses. The pro forma as adjusted information discussed above is illustrative only and will adjust based on the actual initial price to public and other terms of this offering determined at pricing.

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The number of shares of common stock to be outstanding following this offering is based on 9,194,745 shares of common stock outstanding as of March 31, 2013, giving effect to the conversion of all outstanding shares of convertible preferred stock into an aggregate of 8,631,427 shares of common stock upon the closing of this offering. The outstanding share information in the table above excludes as of March 31, 2013:

1,806,273 shares of common stock issuable upon exercise of options outstanding as of March 31, 2013, at a weighted-average exercise price of \$3.02 per share;

1,984,972 shares of common stock reserved for future issuance under stock-based compensation plans, including 1,562,500 shares of common stock reserved for issuance under the 2013 Equity Incentive Plan, which will become effective on the date of this prospectus, and any future automatic increase in shares reserved for issuance under such plan, 281,250 shares of common stock reserved for issuance under the 2013 Employee Stock Purchase Plan, and any future automatic increase in shares reserved for issuance under such plan, and 141,222 shares of common stock reserved for issuance under the 2004 Stock Option Plan as of March 31, 2013, which shares will be added to the 2013 Equity Incentive Plan upon effectiveness of such plan;

607,187 shares of common stock issuable upon the exercise of warrants outstanding as of March 31, 2013, at a weighted-average exercise price of \$8.69 per share, after conversion of the convertible preferred stock; and

10,418 shares of common stock issuable upon the exercise of warrants at an exercise price of \$14.40 per share, after conversion of the convertible preferred stock, issued in connection with the April 2013 term loan borrowing under our credit facility.

Table of Contents**DILUTION**

Investors purchasing our common stock in this offering will experience immediate and substantial dilution in the pro forma net tangible book value of their shares of common stock. Dilution in pro forma net tangible book value represents the difference between the price to public per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after the offering.

Historical net tangible book value (deficit) per share represents our total tangible assets (total assets less intangible assets) less total liabilities divided by the number of shares of outstanding common stock. After giving effect to (1) a 1-for-32 reverse stock split of our common stock and preferred stock effected on June 12, 2013, (2) the conversion of all outstanding shares of convertible preferred stock into 8,631,427 shares of common stock upon the closing of this offering and (3) the conversion of warrants to purchase 604,563 shares of preferred stock into warrants to purchase 607,187 shares of common stock, the pro forma net tangible book value as of March 31, 2013 would have been approximately \$4.8 million, or \$0.53 per share.

After giving effect to the issuance of 5,400,000 shares of common stock in this offering at an assumed initial price to public of \$14.00 per share (the midpoint of the price range set forth on the cover of this prospectus), after deducting underwriting discounts and commissions and estimated offering expenses, the pro forma as adjusted net tangible book value as of March 31, 2013 would have been approximately \$74.2 million, or \$5.08 per share. This represents an immediate increase in pro forma as adjusted net tangible book value of \$4.55 per share to existing stockholders and an immediate dilution of \$8.92 per share to new investors purchasing common stock in this offering.

The following table illustrates this dilution on a per share basis to new investors:

Assumed initial price to public per share	\$ 14.00
Pro forma net tangible book value per share before this offering	\$ 0.53
Increase in net tangible book value per share attributable to investors participating in this offering	4.55
Pro forma as adjusted net tangible book value per share, as adjusted to give effect to this offering	5.08
Pro forma dilution per share to investors participating in this offering	\$ 8.92

Each \$1.00 increase (decrease) in the assumed initial price to public of \$14.00 per share would increase (decrease) the pro forma as adjusted net tangible book value by approximately \$5.0 million, or approximately \$0.34 per share, and increase (decrease) the pro forma dilution per share to investors in this offering by approximately \$0.66 per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses. We may also increase or decrease the number of shares we are offering. An increase of 1,000,000 in the number of shares offered by us would increase the pro forma as adjusted net tangible book value by approximately \$13.0 million, or \$0.51 per share, and the pro forma dilution per share to investors in this offering would be \$8.41 per share, assuming that the assumed initial price to public remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses. Similarly, a decrease of 1,000,000 shares in the number of shares offered by us would decrease the pro forma as adjusted net tangible book value by approximately \$13.0 million, or \$0.58 per share, and the pro forma dilution per share to investors in this offering would be \$9.50 per share, assuming that the assumed initial price to public remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses. The pro forma as adjusted information discussed above is illustrative only and will adjust based on the actual initial price to public and other terms of this offering determined at pricing.

If the underwriters exercise their option in full to purchase 810,000 additional shares of common stock in this offering, the pro forma as adjusted net tangible book value per share after the offering would be \$5.50 per share, the increase in the pro forma net tangible book value per share to existing stockholders would be \$4.97 per share and the pro forma dilution to new investors purchasing common stock in this offering would be \$8.50 per share.

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The following table summarizes, on a pro forma basis as of March 31, 2013, the differences between the number of shares of common stock purchased from us, the total consideration and the weighted-average price per share paid by existing stockholders and by investors participating in this offering at an assumed initial price to public of \$14.00 per share, before deducting underwriting discounts and commissions and estimated offering expenses (in thousands, except per share amounts):

	Shares Purchased		Total Consideration		Weighted-Average
	Number	Percent	Amount	Percent	Price Per Share
Existing stockholders before this offering	9,195	63.0%	\$ 83,800	52.6%	\$ 9.11
Investors participating in this offering	5,400	37.0	75,600	47.4	14.00
Total	14,595	100.0%	\$ 159,400	100.0%	

Each \$1.00 increase (decrease) in the assumed initial price to public of \$14.00 per share would increase (decrease) total consideration paid by new investors by approximately \$5.0 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses. We may also increase or decrease the number of shares we are offering. An increase (decrease) of 1,000,000 in the number of shares offered by us would increase (decrease) total consideration paid by new investors by \$13.0 million, assuming that the assumed initial price to public remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses.

The number of shares of common stock to be outstanding following this offering is based on 9,194,745 shares of common stock outstanding as of March 31, 2013, giving effect to the conversion of all outstanding shares of convertible preferred stock into an aggregate of 8,631,427 shares of common stock upon the closing of this offering. The outstanding share information in the table above excludes as of March 31, 2013:

1,806,273 shares of common stock issuable upon exercise of options outstanding as of March 31, 2013, at a weighted-average exercise price of \$3.02 per share;

1,984,972 shares of common stock reserved for future issuance under stock-based compensation plans, including 1,562,500 shares of common stock reserved for issuance under the 2013 Equity Incentive Plan, which will become effective on the date of this prospectus, and any future automatic increase in shares reserved for issuance under such plan, 281,250 shares of common stock reserved for issuance under the 2013 Employee Stock Purchase Plan, and any future automatic increase in shares reserved for issuance under such plan, and 141,222 shares of common stock reserved for issuance under the 2004 Stock Option Plan as of March 31, 2013, which shares will be added to the 2013 Equity Incentive Plan upon effectiveness of such plan;

607,187 shares of common stock issuable upon the exercise of warrants outstanding as of March 31, 2013, at a weighted-average exercise price of \$8.69 per share, after conversion of the convertible preferred stock; and

10,418 shares of common stock issuable upon the exercise of warrants at an exercise price of \$14.40 per share, after conversion of the convertible preferred stock, issued in connection with the April 2013 term loan borrowing under our credit facility.

Share reserves for the equity incentive plans will also be subject to automatic annual increases in accordance with the terms of the plans. To the extent that new options are issued under the equity benefit plans or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering.

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The following selected statement of operations data for the years ended December 31, 2010, 2011 and 2012 and the balance sheet data as of December 31, 2011 and 2012 have been derived from audited financial statements included elsewhere in this prospectus. The selected statements of comprehensive income for the three months ended March 31, 2012 and 2013 and the balance sheet data as of March 31, 2013 have been derived from unaudited interim financial statements included elsewhere in this prospectus. The selected statements of comprehensive income for the years ended December 31, 2008 and 2009 and the balance sheet data as of December 31, 2008, 2009 and 2010 have been derived from audited financial statements which are not included in this prospectus. In the opinion of management, the unaudited interim financial statements reflect all adjustments, which include only normal recurring adjustments, necessary for a fair presentation of the financial statements. Historical results are not necessarily indicative of the results that may be expected in the future and the results for the three months ended March 31, 2013 are not necessarily indicative of results to be expected for the full year or any other period. You should read the following selected financial and other data below in conjunction with the financial statements and related notes included elsewhere in this prospectus and the sections of this prospectus captioned Management's Discussion and Analysis of Financial Condition and Results of Operations.

	2008	Year Ended December 31,				Three Months Ended March 31,	
	2009	2010	2011	2012	2012	2013	
	(In thousands, except per share amounts)						
Consolidated Statements of Comprehensive Income:							
Revenue	\$ 1,613	\$ 7,288	\$ 11,730	\$ 17,800	\$ 22,973	\$ 4,502	\$ 5,676
Costs and expenses:							
Cost of revenue	1,450	5,874	9,128	9,777	12,361	2,656	2,882
Research and development	4,428	4,550	7,547	8,990	11,635	2,197	3,059
Selling, general and administrative	4,513	5,464	8,027	9,529	15,486	3,167	6,126
Total costs and expenses	10,391	15,888	24,702	28,296	39,482	8,020	12,067
Loss from operations	(8,778)	(8,600)	(12,972)	(10,496)	(16,509)	(3,518)	(6,391)
Other income (expense):							
Interest income	51	64	29	10	21	7	3
Interest expense	(193)	(320)	(94)	(599)	(804)	(112)	(385)
Other income (expense)			254	80	(29)	(13)	(4)
Revaluation of preferred stock warrant liability	35	19	15	73	(387)	26	(482)
Total other income (expense)	(107)	(237)	204	(436)	(1,199)	(92)	(868)
Net loss	\$ (8,885)	\$ (8,837)	\$ (12,768)	\$ (10,932)	\$ (17,708)	(3,610)	(7,259)
Accretion of mandatorily redeemable convertible preferred stock	(1,708)	(2,551)	(4,351)	(5,251)	(7,533)	(1,793)	(2,342)
Net loss attributable to common stockholders	\$ (10,593)	\$ (11,388)	\$ (17,119)	\$ (16,183)	\$ (25,241)	\$ (5,403)	\$ (9,601)
Net loss per share - basic and diluted	\$ (34.50)	\$ (36.62)	\$ (54.17)	\$ (50.10)	\$ (71.10)	\$ (16.52)	\$ (17.88)
Shares used in computing basic and diluted net loss per share	307	311	316	323	355	327	537
Pro forma net loss per share - basic and diluted (unaudited) ⁽¹⁾					\$ (2.16)		\$ (0.74)

Shares used in computing pro forma net loss per share, basic and diluted (unaudited) ⁽¹⁾	8,018	9,168
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	As of December 31,					As of
	2008	2009	2010	2011	2012	March 31, 2013
	(In thousands)					
Consolidated Balance Sheet Data:						
Cash and cash equivalents	\$ 3,508	\$ 1,739	\$ 4,366	\$ 10,868	\$ 21,692	\$ 11,794
Working capital	(4,224)	1,385	2,944	12,236	19,937	12,250
Total assets	9,564	9,367	13,275	24,584	37,406	29,575
Total long-term debt	8,878	1,274	1,829	1,887	12,759	12,835
Mandatorily redeemable convertible preferred stock	21,276	38,551	57,887	80,957	103,622	105,964
Total stockholders' deficit	(25,194)	(36,565)	(53,517)	(69,451)	(93,760)	(102,808)

- (1) Pro forma net loss per share represents net loss divided by the pro forma weighted-average shares outstanding, as though the 1-for-32 reverse stock split of our common stock and preferred stock and the conversion of the preferred stock into common stock occurred on the first day of the relevant period. Pro forma weighted-average shares outstanding reflects the 1-for-32 reverse stock split of our common stock and preferred stock and the conversion of the preferred stock (using the if-converted method) into common stock as though the conversion had occurred on the first day of the relevant period.

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**MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION
AND RESULTS OF OPERATIONS**

You should read the following discussion and analysis together with the financial statements and the related notes to those statements included elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. As a result of many factors, such as those set forth in the section of the prospectus captioned "Risk Factors" and elsewhere in this prospectus, our actual results may differ materially from those anticipated in these forward-looking statements.

Overview

We develop, manufacture and sell robust, intuitive products that unlock scientifically valuable and clinically actionable genomic information from minute amounts of tissue. Our nCounter Analysis System directly profiles hundreds of molecules simultaneously using a novel barcoding technology that is powerful enough for use in research, yet simple enough for use in clinical laboratories worldwide. We market systems and related consumables to researchers in academic, government, and biopharmaceutical laboratories for use in understanding fundamental biology and the molecular basis of disease. We have an installed base of more than 140 systems, which our customers have used to publish more than 220 peer-reviewed papers. As researchers discover how genomic information can be used to improve clinical decision-making, we seek to selectively translate their discoveries into molecular diagnostic products. In September 2012, we received European Union regulatory clearance for our first molecular diagnostic product, the Prosigna Breast Cancer Assay, or Prosigna, an assay providing an assessment of a patient's risk of recurrence for breast cancer and the intrinsic subtype of the patient's tumor. In February 2013, we commercially launched Prosigna in Europe and Israel. In December 2012, we submitted an application, known as a 510(k), to the FDA seeking clearance in the United States for a version of Prosigna providing an assessment of a patient's risk of recurrence for breast cancer.

The following is a chronology of some of our most significant achievements:

in 2003 the company was founded and in early 2004 we acquired an exclusive license to our core digital barcoding technology;

in October 2008 we sold our first nCounter Analysis System;

in April 2010 we obtained ISO 13485:2003 classification (which specifies requirements for a quality management system for medical device manufacturing) for our manufacturing facility and launched our miRNA application;

in July 2010 we licensed the intellectual property rights that form the basis of Prosigna, our first molecular diagnostic development program, and had our first pre-submission meeting with the FDA;

in October 2011 we launched the second generation of our nCounter Analysis System;

in December 2011 we announced the results from our first study clinically validating Prosigna, the TransATAC study;

in September 2012 we obtained CE mark designation for Prosigna and launched our Single Cell Gene Expression application;

in December 2012, we announced the results from our second study clinically validating Prosigna, our ABCSG8 study, which were consistent with the conclusions of our TransATAC study, and submitted to the FDA a 510(k) application seeking clearance to market a version of Prosigna in the United States; and

in February 2013, we commercially launched Prosigna in Europe and Israel and we secured an option from a customer to acquire an exclusive worldwide license for a gene signature that could be used, after appropriate regulatory authorization, for a molecular diagnostic product focused on hepatocellular carcinoma, or HCC.

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We derive a substantial majority of our revenue from the sale of our products, which consist of our nCounter instruments and related proprietary consumables, which we call CodeSets and Master Kits. We sell two types of CodeSets: custom orders and standard sets, which we call panels. We also derive revenue from processing fees related to proof-of-principle studies we conduct for potential customers and extended service contracts for our nCounter Analysis Systems.

Until recently, we have sold our products for research use only. After buying an nCounter Analysis System, customers purchase consumables from us for use in their experiments. Our instruments are designed to work only with our consumable products. Accordingly, as the installed base of our instruments grows, we expect recurring revenue from consumable sales to become an increasingly important driver of our operating results. The nCounter Analysis System is currently available for research use only in the United States.

We have begun to offer instruments and consumables for use in diagnostic testing. We have recently obtained a CE mark for Prosigna, our first diagnostic product, and, in February 2013 we commercially launched Prosigna in Europe, including in France, Germany, Italy, Spain and the United Kingdom, and Israel. In December 2012, we submitted an application, known as a 510(k), to the FDA seeking clearance in the United States for a version of Prosigna providing an assessment of a patient's risk of recurrence for breast cancer. In March 2013, we received a written response from the FDA requesting additional information for its review of our 510(k) submission. A request for additional information is common following an initial 510(k) submission. In May 2013, we submitted an initial response to the FDA's request for additional information and met with the FDA to discuss our response. In this meeting, we discussed, among other issues raised by the FDA, the specific elements and format of a potential report generated by Prosigna, including the appropriate name for the risk score, the appropriate graphic presentation of the risk score, and, specifically for the potential report for node-positive patients, the numerical range of the risk score and the appropriate number of risk groups. If the FDA clears Prosigna, we intend to launch Prosigna in the United States promptly following receipt of such clearance. We are currently planning for this commercial launch in the first quarter of 2014. The commercial launch of Prosigna requires us to establish a dedicated oncology diagnostics sales force. As a result, we expect sales and marketing expenses and operating losses to increase as we market the product in Europe and other countries outside of the United States, and to increase further upon the launch in the United States following clearance from the FDA. In addition, we expect sales in Europe to grow gradually as more systems are installed and Prosigna gains market acceptance and reimbursement by third-party payors becomes more broadly accepted.

We use third-party contract manufacturers to produce the two instruments comprising the nCounter Analysis System. We manufacture consumables at our Seattle, Washington facility. This operating model is designed to be capital efficient and to scale efficiently as our product volumes grow. We focus a substantial portion of our resources on developing new products and solutions. We invested \$7.5 million, \$9.0 million and \$11.6 million in 2010, 2011 and 2012, respectively, in research and development and intend to continue to make significant investments in research and development.

Our total revenue has increased to \$23.0 million in 2012 from \$17.8 million in 2011 and \$11.7 million in 2010, which was driven by the sale of additional nCounter Analysis Systems and consumables for use on our growing installed base of instruments. Historically, we have generated a substantial majority of our revenue from sales to customers in North America; however, we expect sales in other regions to increase over time. We have never been profitable and had net losses of \$12.8 million, \$10.9 million and \$17.7 million in 2010, 2011 and 2012, respectively. For the three months ended March 31, 2013, we had total revenue of \$5.7 million and a net loss of \$7.3 million, and as of March 31, 2013 our accumulated deficit was \$102.8 million.

Key Financial Metrics

We are organized as, and operate in, two reportable segments: our life sciences business and our diagnostics business. Our life sciences business provides instruments, consumables and services for efficiently profiling the activity of hundreds of genes simultaneously from a single tissue sample. Our diagnostics business will provide molecular diagnostic kits to pathology labs enabling complex molecular testing on a decentralized basis.

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Our chief operating decision maker is the chief executive officer. The chief operating decision maker reviews financial information presented on a total company basis, accompanied by information about segment revenue and certain direct sales and marketing expenses by segment. Our chief operating decision maker evaluates performance based on these two measures. The chief operating decision maker does not review segment information related to cost of revenue, research and development or other selling, general and administrative expenses.

As of March 31, 2013, we had begun negotiations for initial diagnostic instrument placements but we had not generated any revenue from our diagnostic business. Accordingly, discussion within this Management's Discussion and Analysis of Financial Condition and Results of Operations is primarily directed at trends and changes in our life sciences business. For additional information, see Note 13 Segment Reporting of the financial statements included in this prospectus.

Revenue

We generate revenue from the sale of our products and related services. We are organized as, and operate in, two reportable segments: life sciences and diagnostics. For a description of our revenue recognition policies, see the section of this prospectus captioned Critical Accounting Policies and Significant Estimates Revenue Recognition.

Product Revenue

Our products consist of our nCounter Analysis System and related consumables. Our nCounter Analysis System typically consists of one nCounter Digital Analyzer and one nCounter Prep Station. The U.S. list price of one nCounter Analysis System is \$235,000. Outside the United States, depending on the country, the list price is generally higher. Systems are sold to distributors at a discount to list price. Related consumables include (1) custom CodeSets, which we manufacture to the specific requirements of an individual researcher, (2) panels, which are standard pre-manufactured CodeSets, and (3) Master Kits, which are ancillary reagents, cartridges, tips and reagent plates required to setup and process samples in our instruments. Product revenue also includes payments for instrument installation. Currently, our customer base is primarily composed of academic institutions, government laboratories, and biopharmaceutical companies that perform analyses using our nCounter Analysis System and purchase consumables for research use only.

Service Revenue

Service revenue consists of fees associated with extended service contracts and conducting proof-of-principle studies. We include a one-year warranty with the sale of our instruments and offer extended service contracts, which are purchased by a majority of our customers. We selectively provide proof-of-principle studies to prospective customers in order to help them better understand the benefits of the nCounter Analysis System.

Revenue by Geography

We sell our life sciences products through our own sales force in the United States, Canada and certain European countries. We sell through distributors in other parts of the world. In the future, we intend to expand our sales force and establish additional distributor relationships outside the United States to better access international markets.

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The following table reflects product revenue by geography and as a percentage of total product revenue, based on the billing address of our customers. North America consists of the United States, Canada and Mexico; and Asia Pacific includes Japan, China, South Korea, Singapore and Australia.

	Year Ended December 31,						Three Months Ended March 31,			
	2010		2011		2012		2012		2013	
	(Dollars in thousands)									
North America	\$ 10,643	91%	\$ 14,044	79%	\$ 15,906	69%	\$ 3,162	70%	\$ 4,477	79%
Europe & Middle East	909	8	2,918	16	4,167	18	992	22	616	11
Asia Pacific	178	1	838	5	2,900	13	348	8	583	10
Total	\$ 11,730	100%	\$ 17,800	100%	\$ 22,973	100%	\$ 4,502	100%	\$ 5,676	100%

We initially launched the nCounter Analysis System in North America. As we have begun to build out our European direct sales force and enter into agreements with distributors of our products in Europe, the Middle East, Asia Pacific and South America. The absolute amount of revenue generated from geographies outside of North America has increased as well as the relative percentage of total revenue.

Most of our revenue is denominated in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States. Changes in foreign currency exchange rates have not materially affected us to date; however, they may become material to us in the future as our operations outside of the United States expand.

Cost of Revenue

Cost of revenue consists primarily of costs incurred in the production process, including costs of purchasing instruments from third-party contract manufacturers, consumable component materials and assembly labor and overhead, installation, warranty, service and packaging and delivery costs. In addition, cost of revenue includes royalty costs for licensed technologies included in our products, provisions for slow-moving and obsolete inventory and stock-based compensation expense. We provide a one-year warranty on each nCounter Analysis System sold and establish a reserve for warranty repairs based on historical warranty repair costs incurred.

We expect the average unit costs of our instruments to decline in future periods as a result of our ongoing efforts to develop a lower-cost nCounter Analysis System to expand our market opportunity among smaller laboratories. We expect the unit costs of consumable products to decline as a result of our ongoing efforts to improve our manufacturing processes and expected increases in production volume and yields. Although the unit costs of our custom CodeSets vary, they are generally higher as a percentage of the related revenue than our panels.

Operating Expenses*Research and Development*

Research and development expenses consist primarily of salaries and benefits, occupancy, laboratory supplies, consulting fees and related costs, costs associated with licensing molecular diagnostics rights and clinical study expenses (including the cost of tissue samples) to support the regulatory approval or clearance of diagnostic products. We have made substantial investments in research and development since our inception. Our research and development efforts have focused primarily on the tasks required to enhance our technologies and to support development and commercialization of new and existing products and applications.

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Given the relatively small size of our research and development staff and the limited number of active projects at any given time, we have found that, to date, it has been effective for us to manage our research and development activities on a departmental basis. Accordingly, we do not require employees to report their time by project nor do we allocate our research and development costs to individual projects. The following table shows the composition of total research and development expense by functional area for the periods indicated. Prior to 2012, research and development expense related to our core nCounter platform technology and diagnostic product development were combined.

	Year Ended December 31,			Three Months Ended March 31,	
	2010	2011	2012	2012	2013
	(In thousands)				
Core nCounter platform technology and diagnostic product development	\$ 3,649	\$ 4,359	\$	\$	\$
Core nCounter platform technology			1,537	314	612
Manufacturing process development	878	969	1,183	296	378
Life sciences products and applications	1,848	1,875	2,183	463	736
Diagnostic product development			4,783	648	938
Facility allocation	1,173	1,787	1,949	476	395
Total	\$ 7,548	\$ 8,990	\$ 11,635	\$ 2,197	\$ 3,059

Our clinical studies employ a retrospective / prospective design, which means that we use samples that were previously collected from patients and for which the treatment regimen and ultimate patient outcome is known. Such studies are capital efficient as they do not require recruiting new patients and running prospective trials and they can be completed much more quickly than typical prospective clinical trials. We intend to use a similar approach whenever possible for the additional clinical studies we intend to conduct in support of our future regulatory submissions to expand the indications for Prosigna and for future diagnostic products.

We expect to license additional molecular diagnostic rights as part of our strategy to develop additional diagnostic products. For example, in February 2013 we secured an option from a customer to acquire an exclusive worldwide license for a gene signature that could be used, after appropriate regulatory authorization, to identify patients with cirrhosis who are at highest risk of developing the most common type of liver cancer, HCC, and to determine whether a patient who has been diagnosed with HCC is likely to have a recurrence. The related option fee was expensed in the first quarter of 2013. Such arrangements may include upfront, milestone or annual cash payments and revenue-based royalties. We believe that our continued investment in research and development is essential to our long-term competitive position and expect these expenses to increase in future periods.

Selling, General and Administrative

Selling, general and administrative expenses consist primarily of costs for our sales and marketing, finance, human resources, information technology, business development and general management functions, as well as professional services, such as legal, consulting and accounting services. We expect selling, general and administrative expenses to increase in future periods as the number of sales, technical support and marketing and administrative personnel grows and we continue to introduce new products, broaden our customer base and grow our business. In particular, the commercial launch of Prosigna requires us to establish a dedicated oncology diagnostics sales force which will increase selling and marketing expenses significantly. We also expect legal, accounting and compliance costs to increase upon becoming a public company.

Factors Affecting Our Performance*Instrument Installed Base*

Our future financial performance will be driven in large part by the rate of sales of our nCounter Analysis Systems, which typically consist of one nCounter Digital Analyzer and one nCounter Prep Station. In some cases, our customers increase the throughput of their nCounter Analysis System by purchasing up to three nCounter Prep Stations per nCounter Digital Analyzer. We plan to grow our system sales in the coming years through multiple

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strategies, including expanding our sales efforts outside of the United States and continuing to enhance the underlying technology and applications for both life sciences research and future diagnostics use. As part of this strategy, we have increased our life sciences sales force by over 20% in 2013 in an effort to increase the rate of sales of our nCounter Analysis Systems. Similarly, since January 2013, we have contracted with five additional distributors bringing our total to 11. As our installed base of instruments grows, we solicit feedback from our customers and focus our research and development efforts on enabling the nCounter Analysis System for additional applications, which in turn helps to drive additional sales of our instruments and consumables. We are developing a new generation of the nCounter Analysis System that we believe will increase our addressable market and simplify the procurement processes of our potential customers. The new generation system will be a single instrument with a reduced footprint that combines the prep station and the digital analyzer. We plan to reduce the cost of the new generation system through the adoption of new, less expensive technologies. We are targeting release of the new generation system in 2014.

Our sales process involves numerous interactions with multiple individuals within an organization, and often includes in-depth analysis by potential customers of our products, performance of proof-of-principle studies, preparation of extensive documentation and a lengthy review process. As a result of these factors, the large capital investment required in purchasing our instruments and the budget cycles of our customers, the time from initial contact with a customer to our receipt of a purchase order can vary significantly and be up to 12 months or longer. Given the length and uncertainty of our sales cycle, we have in the past experienced, and likely will in the future experience, fluctuations in our instrument sales on a period-to-period basis. We are developing an nCounter Analysis System that we intend to offer at a lower price, which we believe will simplify the procurement processes of our potential customers as well as increase our addressable market.

We have sold more than 140 nCounter Analysis Systems, which we count based on the number of nCounter Digital Analyzers sold given that a system may couple an analyzer with multiple nCounter Prep Stations. Management focuses on instrument unit sales as a primary indicator of current business success and a leading indicator of likely future sales of consumables.

Recurring Consumable Revenue

Our instruments are designed to be used only with our consumables. This closed system model generates recurring revenue from each instrument we sell. Management focuses on recurring consumable revenue per system as an indicator of the continuing value generated by each system. We calculate recurring consumable revenue per system quarterly by dividing consumable revenue recognized in a particular quarter (other than consumable revenue related to proof-of-principle studies) by the total number of nCounter Analysis Systems installed as of the last day in the immediately preceding quarter. We believe that our recurring consumable revenue is driven by our customers' ability to extract value from up to 800 data points per sample and to process hundreds of samples in a relatively short period of time with little hands-on preparation using our nCounter Analysis System, enabling them to process more units of consumables per unit of time. In 2010, 2011 and 2012, our average consumable revenue per system exceeded \$100,000 per year.

As the installed base of the nCounter Analysis Systems expands, consumables revenue is expected to increase and over time should be an increasingly important contributor to our total revenue. Over time, we believe that consumables revenue should be subject to less period-to-period fluctuation than our instrument sales revenue.

Revenue Mix and Gross Margin

Our product revenue is derived from sales of the nCounter Analysis System and related consumables. Generally, our consumables have higher gross margins than our instruments. There will be fluctuations in mix between instruments and consumables from period to period. Over time, as our installed base of systems grows, consumables should constitute a larger percentage of total revenue, which would increase our gross margins. In addition, we expect both the average selling price and the manufacturing cost of our instruments to decrease following the introduction of future generations of our nCounter Analysis System. Future instrument selling prices and gross margins may fluctuate as we introduce new products and reduce our product costs and from variability in the timing of new product introductions.

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We derive service revenue from extended service contracts, which are purchased by a majority of our customers. Additionally, we selectively provide proof-of-principle studies in connection with prospective sales to customers to demonstrate the performance of our nCounter Analysis System.

The following table reflects instrument, consumable and service revenue in absolute dollars and as percentage of total revenue.

	Year Ended December 31,				Three Months Ended March 31,					
	2010	2011	2012	(Dollars in thousands)	2012	2013				
Product revenue:										
Instruments	\$ 6,472	55%	\$ 7,112	40%	\$ 8,786	38%	\$ 1,500	33%	\$ 1,639	29%
Consumables	5,034	43	9,997	56	13,036	57	2,703	60	3,699	65
Service revenue	224	2	691	4	1,151	5	299	7	338	6
Total	\$ 11,730	100%	\$ 17,800	100%	\$ 22,973	100%	\$ 4,502	100%	\$ 5,676	100%

Impact of Our Diagnostic Products Strategy

We intend to provide instruments and consumables for use in diagnostic testing, beginning with Prosigna. We recently obtained a CE mark for Prosigna and, in February 2013 we commercially launched Prosigna in Europe, including in France, Germany, Italy, Spain and the United Kingdom, and Israel. In April 2013, we installed the first diagnostic systems in Europe, which will initially be used for clinical studies of Prosigna's impact on adjuvant treatment decisions in early stage breast cancer called decision impact studies. In December 2012, we submitted an application, known as a 510(k), to the FDA seeking clearance in the United States for a version of Prosigna providing an assessment of a patient's risk of recurrence for breast cancer. In March 2013, we received a written response from the FDA requesting additional information for its review of our 510(k) submission. A request for additional information is common following an initial 510(k) submission. In May 2013, we submitted an initial response to the FDA's request for additional information and met with the FDA to discuss our response. The commercial launch of Prosigna requires us to establish a dedicated diagnostics sales force.

We intend to enable medical centers and commercial laboratories to conduct complex molecular diagnostic testing that they are unable to do today. After appropriate regulatory clearance, we will sell nCounter Analysis Systems to customers or lease them under reagent rental arrangements where an instrument is placed at a customer location at minimal direct cost and the customer commits to purchase a minimum volume of consumable diagnostic kits over a period of time. The revenue derived from the sale of diagnostic kits will be driven by a combination of the number of tests performed by our customers as well as the price of each kit. The list price of a Prosigna test in Europe is the equivalent of \$1,550 per patient. Although the price of Prosigna and our additional future diagnostic products will depend on many factors, including whether and how much third-party payors will reimburse laboratories for conducting such tests, we expect that the gross margin for our diagnostic kits will be higher than for our life sciences research consumables.

Over time, we intend to build a menu of additional diagnostic tests that can be run on our nCounter Analysis System. As researchers discover how genomic information can be used to improve clinical decision-making, we will seek to in-license intellectual property rights and translate their discoveries into molecular diagnostic products. We in-licensed the rights to intellectual property that forms the basis of Prosigna from Bioclassifier, LLC, which was founded by several of our life sciences research customers. We intend to enter into similar arrangements with our life sciences research customers and other researchers for future diagnostic gene signatures. Our strategy is to target intellectual property rights to potential diagnostic methods that are well understood, have the potential to facilitate changes in treatment with a major impact on outcome and cost, have the potential to support value-based pricing, and for which tissue samples for clinical validation are readily available. For example, in February 2013 we secured an option from a customer to acquire an exclusive worldwide license for a gene signature that could be used, after appropriate regulatory authorization, to identify patients with cirrhosis who are at highest risk of developing HCC and to determine whether a patient who has

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been diagnosed with HCC is likely to have a recurrence. This disciplined approach is designed to efficiently focus our research and development investment on development of potential products, rather than discovery of new gene signatures. Licenses may include upfront, milestone and/or annual cash payments and revenue-based royalties. The number and amount of such payments and royalty rates are expected to vary depending on the level of development and commercial potential of in-license opportunities.

We believe that our *in vitro* diagnostics business model is more capital efficient than the clinical laboratory services model and has the potential to become profitable on a relatively small revenue base. Our diagnostics business leverages many of the capabilities of our life sciences business, including our technology platform and product development, manufacturing, and administrative functions. Because we provide *in vitro* diagnostics kits rather than clinical laboratory services, we do not incur the costs of clinical laboratory infrastructure, sample logistics, or contracting with and billing managed care organizations. We believe that our customers will be motivated by the potential to improve patient care, broaden patient access and profit from testing services based on Prosigna and other potential nCounter-based diagnostics, which will encourage market adoption and potentially reduce sales and marketing expenditures relative to a centralized laboratory model.

Results of Operations**Comparison of Three Months Ended March 31, 2012 and 2013***Revenue; Cost of Revenue; Gross Profit*

	Three Months Ended March 31,		Change 2012 v. 2013	
	2012	2013	Dollars	Percentage
	(Dollars in thousands)			
Revenue:				
Product revenue:				
Instruments	\$ 1,500	\$ 1,639	\$ 139	9%
Consumables	2,703	3,699	996	37
Service revenue	299	338	39	13
Total revenue	4,502	5,676	1,174	26
Cost of revenue	2,656	2,882	226	9
Gross profit	\$ 1,846	\$ 2,794	\$ 948	51
Gross margin	41%	49%		

The increase in instrument revenue was attributable to an increase in the number of systems sold, primarily within North America. The increase in consumable revenue was generally consistent with the increase in our instrument installed base.

The increase in cost of revenue was attributable to an increase in the number of systems sold, as well as the increased costs associated with higher volumes of consumables sold. Gross margin increased due to a shift in product mix, with higher margin consumables representing 65% of total revenues in 2013, versus 60% in the prior year period. Additionally, gross margin on consumables increased in 2013 due to higher manufacturing capacity utilization.

Research and Development Expense

	Three Months Ended March 31,		Change 2012 v. 2013	
	2012	2013	Dollars	Percentage
	(Dollars in thousands)			
Research and development expense	\$ 2,197	\$ 3,059	\$ 862	39%

The increase was primarily attributable to a \$0.9 million increase in personnel-related expenses as a result of growth in research and development headcount to support the expansion of our life science business and the formation of our diagnostic business, and a \$0.2 million

increase in diagnostic external development costs.

Table of Contents*Selling, General and Administrative Expense*

	Three Months Ended March 31,		Change 2012 v. 2013	
	2012	2013	Dollars	Percentage
	(Dollars in thousands)			
Selling, general and administrative expense	\$ 3,167	\$ 6,126	\$ 2,959	93%

The increase was primarily attributable to a \$1.3 million increase in personnel-related expenses, primarily related to increased sales and administrative headcount to support the growth and expansion of our business, a \$0.9 million increase in marketing consulting costs, primarily in preparation for the commercial launch of Prosigna, a \$0.2 million increase in corporate and intellectual property-related legal costs, and a \$0.2 million increase in other professional fees and administrative services.

Other Income (Expense), Net

	Three Months Ended March 31,		Change 2012 v. 2013	
	2012	2013	Dollars	Percentage
	(Dollars in thousands)			
Interest income	\$ 7	\$ 3	\$ (4)	(57)%
Interest expense	(112)	(385)	(273)	244
Other income (expense)	(13)	(4)	9	(69)
Revaluation of preferred stock warrant liability	26	(482)	(508)	(1,954)
Total other income (expense), net	\$ (92)	\$ (868)	\$ (776)	843

The increase in interest expense was driven by the increase in borrowings under our existing credit facility compared to the prior period level of borrowings under our 2010 loan and security agreement and convertible subordinated notes. Our average outstanding indebtedness was \$13.0 million in 2013 compared to less than \$2.0 million in 2012.

The increase in expense from the revaluation of the preferred stock warrant liability was driven by an increase in the valuation of our stock.

*Comparison of Years Ended December 31, 2011 and 2012**Revenue; Cost of Revenue; Gross Profit*

	Year Ended December 31,		Change 2011 v. 2012	
	2011	2012	Dollars	Percentage
	(Dollars in thousands)			
Revenue:				
Product revenue:				
Instruments	\$ 7,112	\$ 8,786	\$ 1,674	24%
Consumables	9,997	13,036	3,039	30
Service revenue	691	1,151	460	67
Total revenue	17,800	22,973	5,173	29
Cost of revenue	9,777	12,361	2,584	26
Gross profit	\$ 8,023	\$ 10,612	\$ 2,589	32

Gross margin	45%	46%
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The increase in instrument revenue was attributable to an increase in the number of systems sold, primarily related to an increase in sales outside of the United States. The net selling price of our instruments was relatively flat. The increase in consumable revenue was related to our increased instrument installed base. Overall, we derived \$3.3 million in incremental revenue from customers outside of North America as a result of the expansion of our overseas sales and marketing efforts.

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The increase in cost of revenue was attributable to an increase in the number of systems sold, as well as the increased costs associated with higher volumes of consumables sold. Gross margin was relatively flat, consistent with the relatively constant product mix in the two years.

Research and Development Expense

	Year Ended December 31,		Change 2011 v. 2012	
	2011	2012	Dollars (Dollars in thousands)	Percentage
Research and development expense	\$ 8,990	\$ 11,635	\$ 2,645	29%

The increase was primarily attributable to a \$2.2 million increase in clinical study and sample acquisition costs and an \$0.8 million increase in facility-related costs due to the expansion of our facility. The increases were offset in part by the absence of \$0.5 million in third-party in-license fees incurred in 2011.

Selling, General and Administrative Expense

	Year Ended December 31,		Change 2011 v. 2012	
	2011	2012	Dollars (Dollars in thousands)	Percentage
Selling, general and administrative expense	\$ 9,529	\$ 15,486	\$ 5,957	63%

The increase was primarily attributable to a \$2.5 million increase in personnel-related expenses as a result of increased sales and administrative headcount to support the growth of our business, \$2.0 million in marketing consulting costs in preparation for the commercial launch of Prosigna, and \$0.9 million in corporate and intellectual property-related legal costs.

Other Income (Expense), Net

	Year Ended December 31,		Change 2011 v. 2012	
	2011	2012	Dollars (Dollars in thousands)	Percentage
Interest income	\$ 10	\$ 21	\$ 11	110%
Interest expense	(599)	(804)	(205)	34
Other income (expense)	80	(29)	(109)	(136)
Revaluation of preferred stock warrant liability	73	(387)	(460)	(630)
Total other income (expense), net	\$ (436)	\$ (1,199)	\$ (763)	175

The increase in interest expense was driven by the increase in borrowings under our existing credit facility compared to the prior period level of borrowings under our 2010 loan and security agreement and convertible subordinated notes.

The increase in expense from the revaluation of the preferred stock warrant liability was driven by an increase in the valuation of our stock.

Table of Contents**Comparison of Years Ended December 31, 2010 and 2011***Revenue; Cost of Revenue; Gross Profit*

	Year Ended December 31,		Change 2010 v. 2011	
	2010	2011	Dollars (Dollars in thousands)	Percentage
Revenue:				
Product revenue:				
Instruments	\$ 6,472	\$ 7,112	\$ 640	10%
Consumables	5,034	9,997	4,963	99
Service revenue	224	691	467	208
Total revenue	11,730	17,800	6,070	52
Cost of revenue	9,128	9,777	649	7
Gross profit	\$ 2,602	\$ 8,023	\$ 5,421	208
Gross margin	22%	45%		

The increase in instrument revenue was attributable to an increase in the number of systems sold, which was primarily related to an increase outside of the United States. The net selling price of our instruments was relatively flat. The increase in consumable revenue was related to our increased instrument installed base as well as the introduction of new applications and panel products. Overall, we derived \$2.7 million in incremental revenue from customers outside of North America as a result of the expansion of our overseas sales and marketing efforts.

The increase in cost of revenue was attributable to an increase in the number of systems sold, as well as the increased costs associated with higher volumes of consumables sold. This increase was largely offset by a decrease in manufacturing costs for certain consumable products. Gross margin increased primarily due to manufacturing process improvements, raw material costs reductions, increased manufacturing volumes, and a shift in product mix toward consumables, all of which lowered costs as a percentage of revenue.

Research and Development Expense

	Year Ended December 31,		Change 2010 v. 2011	
	2010	2011	Dollars (Dollars in thousands)	Percentage
Research and development expense	\$ 7,547	\$ 8,990	\$ 1,443	19%

The increase was primarily attributable to a \$0.9 million increase in personnel related expenses as a result of increased headcount, a \$0.7 million increase in facility costs as we leased additional space, and \$0.5 million in third-party in-license fees incurred in 2011. Partially offsetting the increase was the absence of \$0.7 million in development costs incurred in 2010 for a second generation of our instruments launched in 2011.

Selling, General and Administrative Expense

	Year Ended December 31,		Change 2010 v. 2011	
	2010	2011	Dollars (Dollars in thousands)	Percentage
Selling, general and administrative expense	\$ 8,027	\$ 9,529	\$ 1,502	19%

The increase was primarily attributable to a \$1.6 million increase in personnel-related expenses, largely as a result of increased sales and administrative headcount, and to a lesser extent, an increase in facility costs as we leased additional space. Partially offsetting the increase was

the reduction of \$0.5 million in consulting fees related to the evaluation of the Prosigna market opportunity.

Table of Contents*Other Income (Expense), Net*

	Year Ended December 31,		Change 2010 v. 2011	
	2010	2011	Dollars (Dollars in thousands)	Percentage
Interest income	\$ 29	\$ 10	\$ (19)	(66%)
Interest expense	(94)	(599)	(505)	(537)
Other income (expense)	254	80	(174)	(69)
Revaluation of preferred stock warrant liability	15	73	58	387
Total other income (expense), net	\$ 204	\$ (436)	\$ (640)	(314)

The increase in interest expense was driven by a \$5.0 million increase in borrowings under our 2010 loan and security agreement in November 2010 and the issuance of an aggregate of \$5.0 million in convertible promissory notes in June and September 2011. The decrease in other income was attributable to a one-time payment of \$0.2 million received in 2010 under the Qualifying Therapeutic Discovery Project Program.

Quarterly Results of Operations

The following tables set forth selected unaudited quarterly statements of operations data for the last nine fiscal quarters. The unaudited interim financial statements for each of these quarters have been prepared on the same basis as the audited financial statements included elsewhere in this prospectus and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to a fair statement of our results of operations and financial position for these periods. These data should be read in conjunction with the audited financial statements and accompanying notes included elsewhere in this prospectus. These quarterly operating results are not necessarily indicative of our operating results for any future period.

	Three Months Ended								
	March 31, 2011	June 30, 2011	September 30, 2011	December 31, 2011	March 31, 2012	June 30, 2012	September 30, 2012	December 31, 2012	March 31, 2013
	(Dollars in thousands)								
Revenue:									
Product revenue:									
Instruments	\$ 2,060	\$ 1,898	\$ 1,078	\$ 2,076	\$ 1,500	\$ 2,579	\$ 2,183	\$ 2,524	\$ 1,639
Consumables	2,147	2,843	2,634	2,373	2,703	3,054	3,568	3,711	3,699
Service revenue	137	138	181	235	299	310	284	258	338
Total revenue	4,344	4,879	3,893	4,684	4,502	5,943	6,035	6,493	5,676
Costs and expenses:									
Cost of revenue	2,532	2,477	2,189	2,579	2,656	3,334	3,086	3,285	2,882
Research and development	2,620	2,229	1,884	2,257	2,197	2,971	3,085	3,382	3,059
Selling, general and administrative	2,327	2,473	2,110	2,619	3,167	3,251	4,170	4,898	6,126
Other (income) expenses	19	67	282	68	92	(42)	360	789	868
Total costs and expenses	7,498	7,246	6,465	7,523	8,112	9,514	10,701	12,354	12,935
Net loss	\$ (3,154)	\$ (2,367)	\$ (2,572)	\$ (2,839)	\$ (3,610)	\$ (3,571)	\$ (4,666)	\$ (5,861)	\$ (7,259)

Consistent with others in our industry, we have experienced variations in revenue related to the ordering patterns of our customers. The third calendar quarter has tended to be relatively weak for instruments and consumables due to summer holidays and vacations of potential academic customers. In addition, we believe that

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instrument sales will be stronger in the fourth quarter of each calendar year due to the availability of residual funding for capital expenditures prior to the end of many customers' fiscal year and less strong in the first quarter of each calendar year as a result of such expenditures. As a result of such factors, we expect to continue to see seasonality and quarter-to-quarter variations in our revenue, especially related to instruments.

Cost of revenue tends to be higher on a percentage basis in the first calendar quarters due to lower revenue over which we must spread our fixed manufacturing and overhead costs. Product mix from quarter-to-quarter also impacts cost of revenue on a percentage basis.

Research and development expense has varied from quarter-to-quarter due to the timing of license payments and clinical study activity. For example, we incurred a \$0.5 million in-license fee in the first quarter of 2011 and incurred third-party clinical study costs of \$1.0 million, \$0.5 million and \$0.7 million in the second, third and fourth quarter of 2012, respectively. We believe that our continued investment in research and development is essential to our long-term competitive position and expect these expenses to continue to increase in future periods.

Selling, general and administrative expense has increased each quarter in 2012 primarily due to increased sales and marketing headcount and marketing consulting costs in preparation for the commercial launch of Prosigna.

Liquidity and Capital Resources

As of March 31, 2013, we had cash and cash equivalents of \$11.8 million, which consisted of highly-liquid investments with an original maturity of three months or less. Since inception, we have financed our operations primarily through the sale of equity securities and, to a lesser extent, from borrowings. Our principal uses of cash are funding our operations, debt service payments as described below, and capital expenditures.

Sources of Funds

Our cash used in operations for the year ended December 31, 2012 and the three months ended March 31, 2013 was \$14.8 million and \$9.0 million, respectively. During 2012, we incurred \$13.0 million in term loan borrowings under our credit facility and amended the credit facility to allow for the incurrence of up to an additional \$10.0 million in term loan borrowings. Also in 2012, we issued and sold shares of Series E preferred stock which generated proceeds after offering expenses of \$15.1 million. As of March 31, 2013 we had cash and cash equivalents of \$11.8 million and available borrowing under our credit facility of \$12.0 million, including \$10 million in term loan borrowings. In April 2013, we incurred \$5.0 million of the remaining term loan borrowings and amended our credit facility to allow for the incurrence of the remaining \$5.0 million in term loan borrowings on or before June 30, 2013. In our current mode of operations, our cash, cash equivalents and available borrowing capacity is sufficient to meet our anticipated cash needs at least through the end of 2013. However, our operating plan for 2013 reflects substantial incremental investment in the launch of our first diagnostic product, which we intend to fund through equity financing. Without this additional funding, we will be required to reduce the pace of our investment in the diagnostic product commercialization.

From time to time, we may explore additional financing sources and means to lower our cost of capital, which could include equity, equity-linked and debt financing. There can be no assurance that any additional financing will be available to us on acceptable terms.

Credit Facility

In March 2012, we entered into a loan and security agreement, which we refer to as our credit facility, pursuant to which we incurred \$7.5 million in term loan borrowings, which we refer to as Term A borrowings. Pursuant to the credit facility, we incurred an additional \$5.5 million of term loan borrowings in December 2012, which we refer to as Term B borrowings. Also in December 2012 and April 2013, we amended the credit facility to (1) allow for the incurrence on or prior to April 30, 2013 of up to an additional \$5.0 million in term loan borrowings, which we incurred on April 30, 2013 and refer to as Term C borrowings and (2) allow for the incurrence on or prior to June 30, 2013 of up to an additional \$5.0 million in term loan borrowings, which we refer to as Term D borrowings. Prior to incurring the Term D borrowings, we must satisfy a revenue-based milestone. Interest on term loan borrowings is determined at the time of borrowing and accrues at a fixed rate equal to the three month LIBOR.

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plus 8.39% (subject to a LIBOR floor of 0.50%). Through June 2013, we are required to only pay interest on outstanding term borrowings on a monthly basis. Pursuant to the April 2013 amendment, if the offering contemplated by this prospectus is completed on or prior to June 30, 2013 and generates gross proceeds of at least \$50.0 million, the period during which we are required to only pay interest on outstanding term borrowings will be extended through January 2014 and the maturity date for all term borrowings will be similarly extended by eight months. Following the expiration of the interest only payment period, we are required to pay principal and interest in 29 equal monthly installments, or 30 equal monthly payments if the offering contemplated by this prospectus is completed on or prior to June 30, 2013 and generates gross proceeds of at least \$50.0 million, plus an end of term payment equal to 5.5% of the amount borrowed. We may at our option prepay all of the term loan borrowings by paying the lender, among other things, all principal and accrued interest, the end of term payment plus a make-whole premium. Pursuant to the credit facility, from time to time we can also incur revolver borrowings of up to the lesser of \$2.0 million and a borrowing base tied to the amount of eligible accounts receivable. Interest on revolver borrowings accrues at a floating rate equal to the prime rate plus 3.70% (subject to a floor of 6.95%) and is payable monthly. We are also required to pay a fee of 0.075% per month on the unused portion of the revolver borrowings.

The credit facility contains customary conditions to borrowing, events of default and covenants, including covenants that restrict our ability to dispose of assets, merge with or acquire other entities, incur indebtedness, incur encumbrances, make distributions to holders of our capital stock, make investments or engage in transactions with our affiliates. In addition, we must comply with a financial covenant based on life sciences revenue. This financial covenant is measured monthly on a trailing three month basis. We were in compliance with all covenants as of December 31, 2012 and March 31, 2013. Our obligations under the credit facility are secured by substantially all of our assets other than intellectual property.

As of March 31, 2013, we had \$7.5 million of Term A borrowings outstanding and \$5.5 million of Term B borrowings, which each accrue interest at 8.89%. In April 2013, we incurred \$5.0 million of Term C borrowings, which accrues interest at 8.89%.

We issued the lenders warrants to purchase an aggregate of 44,389 shares of our Series D preferred stock in connection with entering into the credit facility and warrants to purchase an additional 32,551 shares of Series D preferred stock in connection with the incurrence of the Term B borrowings. Such warrants have ten year terms and an exercise price of \$8.45 per share. In December 2012 we issued the lenders warrants to purchase an aggregate 20,837 shares of our Series E preferred stock at an exercise price of \$14.40 per share in connection with the amendment of the credit facility. In addition, in April 2013 we issued the lenders warrants to purchase an aggregate of 10,418 shares of our Series E preferred stock at an exercise price of \$14.40 per share in connection with the incurrence of Term C borrowings. It is a condition to the incurrence of any Term D borrowings that we issue the lenders additional warrants to purchase shares of our Series E preferred stock. Assuming we incur the Term D borrowings in full, we would be required to issue the lenders warrants to purchase an aggregate of 10,418 shares of our Series E preferred stock. Following the offering contemplated by this prospectus, such warrants will be exercisable for our common stock.

Convertible Promissory Notes

In June 2011 and September 2011, we issued approximately \$5.0 million aggregate principal amount of our subordinated convertible promissory notes to existing investors. Interest on the notes accrued on the unpaid principal balance at 8.0% per year. The principal amount of and accrued interest on the subordinated convertible notes converted into an aggregate of 602,172 shares of our Series D preferred stock in November 2011. In addition, we issued warrants to purchase an aggregate of 118,368 shares of our Series D preferred stock at an exercise price of \$8.45 per share to the holders of the subordinated convertible notes. These warrants will expire upon the earliest of (1) November 1, 2018, (2) a change in control of our company and (3) the sale of all or substantially all of our assets. Following the offering contemplated by this prospectus, such warrants will be exercisable for our common stock.

2010 Loan and Security Agreement

In November 2010, we amended our then-existing loan and security agreement to provide for up to \$2.0 million of equipment term borrowings and, subject to certain conditions, up to \$3.0 million in revolver

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borrowings. Under the agreement, we incurred \$1.9 million of equipment term borrowings, which were payable over periods of up to 36 months in equal monthly installments of principal and interest. In addition, we incurred maximum borrowings under the revolver of \$2.7 million. As amended, interest on borrowings under the 2010 loan and security agreement accrued at a floating rate equal to the bank's prime reference rate (subject to a floor of LIBOR plus 2.5%, or, if LIBOR cannot be determined, then 2.5%), plus up to 1.5% depending on the facility. All of the indebtedness incurred under the 2010 loan and security agreement was repaid in 2012 in connection with the entry into our existing credit facility.

We also issued the lender under the 2010 loan and security agreement warrants to purchase 4,691 shares of our Series B preferred stock at an exercise price of \$17.47 per share. After giving effect to the anti-dilution provisions of such warrant, in connection with the offering contemplated by this prospectus, it will become exercisable for 7,315 shares of our common stock. These warrants will expire in October 2014.

Use of Funds

Our principal uses of cash are funding our operations, satisfaction of our obligations under our debt instruments, and other working capital requirements. Over the past several years, our revenue has increased significantly from year to year and, as a result, our cash flows from customer collections have increased. However, our operating expenses have also increased as we have invested in growing our existing life sciences business and in developing Prosigna and preparing it for commercialization. As a result, our cash used in operating activities has either remained relatively constant or increased. We expect our operating cash requirements to increase in the future as we (1) increase sales and marketing activities to expand the installed base of our nCounter Analysis Systems among life sciences research customers, (2) commercialize, and conduct studies to expand the clinical utility of, Prosigna, and (3) develop new applications, chemistry and instruments for our nCounter platform.

We will need to raise additional funds to support our operations, and such funding may not be available to us on acceptable terms, or at all. If we are unable to raise additional funds when needed, our operations and ability to execute our business strategy could be adversely affected. We may seek to raise additional funds through equity, equity-linked or debt financings. If we raise additional funds through the incurrence of indebtedness, such indebtedness would have rights that are senior to holders of our equity securities and could contain covenants that restrict our operations. Any additional equity financing may be dilutive to our stockholders.

Historical Cash Flow Trends

The following table shows a summary of our cash flows for the periods indicated:

	Years Ended December 31,			Three Months Ended March 31,	
	2010	2011	2012	2012	2013
	(In thousands)				
Cash used in operating activities	\$ (10,965)	\$ (10,692)	\$ (14,808)	\$ (2,915)	\$ (9,010)
Cash used in investing activities	(1,932)	(2,800)	(428)	(132)	(136)
Cash provided by (used in) financing activities	15,524	19,994	26,060	5,962	(752)

Operating Cash Flows

We derive operating cash flows from cash collected from the sale of our products and services. These cash flows received are outweighed by our use of cash for operating expenses to support the growth of our business. As a result, we have historically experienced negative cash flows from operating activities as we have expanded our business in the United States and other markets and this will likely continue for the foreseeable future.

Net cash used in operating activities for the three months ended March 31, 2013 consisted of our net loss of \$7.3 million and changes in our operating assets and liabilities of \$3.1 million, which included a \$1.0 million increase in accounts receivable, an \$0.8 million increase in prepaid expenses and a \$1.2 million decrease in accrued liabilities. These uses were partially offset by non-cash expense items such as depreciation and

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amortization of our equipment and leasehold improvements of \$0.5 million, revaluation of preferred stock warrant liability of \$0.5 million, stock-based compensation of \$0.2 million and interest accrued on long term debt of \$0.1 million.

Net cash used in operating activities for the three months ended March 31, 2012 consisted of our net loss of \$3.6 million and changes in our operating assets and liabilities of \$0.1 million, which were partially offset by non-cash expense items such as depreciation and amortization of our equipment and leasehold improvements of \$0.5 million, stock-based compensation of \$0.3 million, amortization of debt discounts and issuance cost of \$0.1 million and revaluation of preferred stock warrant liability of \$26,000.

Net cash used in operating activities for 2012 consisted of our net loss of \$17.7 million and changes in our operating assets and liabilities of \$0.4 million, which were partially offset by non-cash expense items such as depreciation and amortization of our equipment and leasehold improvements of \$1.9 million, stock-based compensation of \$0.7 million, revaluation of preferred stock warrant liability of \$0.4 million and amortization of debt discounts and issuance cost of \$0.1 million.

Net cash used in operating activities for 2011 consisted of our net loss of \$10.9 million and changes in our operating assets and liabilities of \$1.8 million, which were partially offset by non-cash expense items including depreciation and amortization of our equipment and leasehold improvements of \$1.5 million, amortization of debt discounts and issuance costs of \$0.3 million and stock-based compensation of \$0.2 million.

Net cash used in operating activities for 2010 consisted of our net loss of \$12.8 million, offset in part by a \$0.6 million change in operating assets and liabilities and non-cash expense items such as depreciation and amortization of our equipment and leasehold improvements of \$1.0 million and stock-based compensation of \$0.1 million.

Investing Cash Flows

Net cash used in investing activities for each of the periods presented was primarily for the purchase of laboratory, manufacturing and computer equipment and software to support our expanding infrastructure. In 2011, we leased additional laboratory and office space and incurred \$1.8 million in expenses related to leasehold improvements and our restricted cash related to this leased space increased by \$0.1 million. In 2012 and 2013, we purchased lesser amounts of property and equipment required to support the growth and expansion of our operations. Other than the purchase of nCounter Analysis Systems for loan or rental to clinical laboratories in support of Prosigna commercialization in jurisdictions where we have regulatory authorization, we have no major capital expenditures planned for the remainder of 2013.

Financing Cash Flows

Historically, we have funded our operations through the issuance of preferred stock and the incurrence of indebtedness.

For the three months ended March 31, 2013, net cash used in financing activities consisted of payments related to deferred offering costs of \$1.0 million and repayments of borrowings of \$0.1 million. This was partially offset by proceeds from the exercise of stock options of \$0.3 million.

For the three months ended March 31, 2012, net cash provided by financing activities consisted of \$7.5 million of borrowing under our credit facility, which was partially offset by repayments of borrowings under our 2010 loan and security agreement of \$1.6 million.

For 2012, net cash provided by financing activities consisted of \$13.0 million of borrowing under our credit facility and \$15.1 million from the issuance of Series E preferred stock. This was partially offset by repayments of borrowings under our 2010 loan and security agreement of \$1.7 million and payments related to deferred offering costs of \$0.6 million.

For 2011, net cash provided by financing activities consisted of the issuance of Series D preferred stock which generated proceeds of \$14.9 million, issuance of our subordinated convertible notes which generated proceeds of \$5.0 million and incurrence of an aggregate of \$5.0 million of borrowings under our 2010 loan and security agreement, which were offset in part by repayment of \$4.9 million of such borrowings.

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For 2010, net cash provided by financing activities consisted of the issuance of \$15.0 million of Series C preferred stock and net incurrence of indebtedness under our 2010 loan and security agreement of \$0.5 million.

Contractual Obligations

The following table reflects a summary of our contractual obligations as of December 31, 2012.

Contractual Obligations ⁽¹⁾	Total	Payments due by period			
		Less than 1 Year	1-3 Years (In thousands)	3-5 Years	More than 5 Years
Operating lease obligations ⁽²⁾	\$ 7,295	\$ 2,009	\$ 3,950	\$ 1,336	\$
Long-term debt obligations ⁽³⁾	13,993	3,009	10,984		
Inventory purchase obligations ⁽⁴⁾	2,604	2,604			
Total	\$ 23,892	\$ 7,622	\$ 14,934	\$ 1,336	\$

(1) Excludes royalty obligations based on net sales of products, including royalties payable to the Institute for Systems Biology, as any such amounts are not currently determinable.

(2) Operating lease costs are primarily for office, laboratory and manufacturing space at our headquarters.

(3) Includes principal and interest on long-term debt obligations.

(4) Purchase obligations consist of contractual and legally binding commitments under outstanding purchase orders to purchase long lead time inventory items.

Critical Accounting Policies and Significant Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our financial statements which have been prepared in accordance with U.S. generally accepted accounting principles, or GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and related disclosure of contingent assets and liabilities, revenue and expenses at the date of the financial statements. Generally, we base our estimates on historical experience and on various other assumptions in accordance with GAAP that we believe to be reasonable under the circumstances. Actual results may differ from these estimates.

Critical accounting policies and estimates are those that we consider the most important to the portrayal of our financial condition and results of operations because they require our most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Our critical accounting policies and estimates include those related to:

revenue recognition;

stock-based compensation;

inventory valuation;

fair value measurements; and

income taxes.

Revenue Recognition

We generate revenue from sales of our products and services. Our products consist of our proprietary nCounter Analysis Systems and related consumables. Services consist of extended service contracts and service fees for assay processing.

Revenue is recognized when all of the following criteria are met: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services have been rendered; (3) the price to the customer is fixed or

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determinable; and (4) collectability is reasonably assured. The evaluation of these revenue recognition criteria requires significant management judgment. For instance, we use judgment to assess collectability based on factors such as the customer's creditworthiness and past collection history, if applicable. If we determine that collection of a payment is not reasonably assured, revenue recognition is deferred until receipt of payment. We also use judgment to assess whether a price is fixed or determinable including but not limited to, reviewing contractual terms and conditions related to payment terms.

Some of our sales arrangements involve the delivery or performance of multiple products or services. Significant interpretation is sometimes required to determine the appropriate accounting, including whether the deliverables specified in a multiple element arrangement should be treated as separate units of accounting for revenue recognition purposes, and, if so, how the related sales price should be allocated among the elements, when to recognize revenue for each element, and the period over which revenue should be recognized. Revenue recognition for arrangements with multiple deliverables is based on the individual units of accounting determined to exist in the arrangement. A delivered element is considered a separate unit of accounting when the delivered element has value to the customer on a stand-alone basis. Elements are considered to have stand-alone value when they are sold separately or when the customer could resell the element on a stand-alone basis.

For multiple-element arrangements, we allocate arrangement consideration at the inception of the arrangement to the deliverables based on the relative selling price method. The selling price used for each deliverable is based on vendor-specific objective evidence, or VSOE, if available, third-party evidence, or TPE, if VSOE is not available, or best estimated selling price, or BEBP, if neither VSOE nor TPE is available. BEBP is determined in a manner consistent with that used to establish the price to sell the deliverable on a stand-alone basis. To date, selling prices have been established by reference to VSOE based on stand alone sales transactions for each deliverable. VSOE is considered to have been established when a substantial majority of individual sales transactions within the previous 12 month period fall within a reasonably narrow range, which we have defined to be plus or minus 15% of the median sales price of actual stand alone sales transactions. Allocated revenue is only recognized for each deliverable when the revenue recognition criteria have been met.

We calibrate our nCounter Analysis System prior to shipment, but it must be recalibrated and tested on installation at the customer premises. Installation and calibration is therefore considered to be essential to the functionality of our nCounter Analysis System. To date, customers have relied upon us to perform the installation and calibration service. Systems and related installation and calibration are considered to be one separate unit of accounting and revenue is recognized once the installation and calibration has been completed.

Revenue from the sales of our products that are not part of multiple element arrangements is recognized when no significant obligations remain undelivered and collection of the receivables is reasonably assured, which is generally when delivery has occurred.

Accruals for estimated warranty expenses are made at the time that the associated revenue is recognized. We use judgment to estimate these accruals and, if we were to experience an increase in warranty claims or if costs of servicing our products under warranty were greater than our estimates, our cost of revenue could be adversely affected in future periods.

Revenue from the sales of our services is recognized when no significant obligations remain undelivered and collection of the receivables is reasonably assured, which is generally when delivery has occurred. We offer extended service contracts on our nCounter Analysis Systems for periods ranging from 12 to 36 months after the end of the standard 12-month warranty period. Revenue from extended service contracts is deferred and recognized in income on a straight-line basis over the contract period.

Stock-based Compensation

We have granted stock options at exercise prices believed to be equal to the fair value of the common stock underlying such options as determined by the board of directors, with input from management, on the date of grant. Because our common stock is not currently publicly traded, the board of directors exercises significant judgment in determining the fair market value of our common stock. Changes in judgments could have a material impact on our

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results of operations and financial position. Members of the board of directors and management team have extensive business, financial and investing experience. In assessing the fair value of our common stock as of option grant dates, the board of directors considered numerous objective and subjective factors including:

our financial projections and future prospects;

the current lack of marketability of our common stock as a private company;

the stock price performance of comparable public companies;

the hiring of key personnel;

the likelihood of achieving a liquidity event for the shares of common stock underlying the options, given prevailing market conditions;

our results of operations, history of losses and other financial metrics;

conditions in our industry and the economy generally; and

contemporaneous valuations of our common stock, including those performed as of December 1, 2011, September 30, 2012, December 31, 2012 and March 31, 2013 by an independent valuation specialist.

As of each stock option grant date listed below, the board of directors believes it made a thorough evaluation of the relevant factors to determine the fair market value of our common stock and accordingly set the exercise price of the options granted equal to its estimate of the fair value of our common stock determined as of such date. On each option grant date, the board of directors considered the most recent valuation of our common stock as one of several factors in estimating the fair value of our common stock. In addition, the board of directors considered changes in our financial condition that had occurred subsequent to the previous valuation date, then-current general economic and market conditions as described more fully below and the other objective and subjective factors described above. Based on these considerations, the board of directors also determined that no significant change in our business or expectations of future business had occurred as of each grant date since the most recent valuation that would have warranted a materially different determination of value of common stock than that suggested by the valuation. The valuations were consistent with the guidance and methods outlined in the AICPA Practice Aid *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, or AICPA Practice Aid, for all option grant dates listed below.

December 2011 Valuation. In conducting the December 2011 valuation of our common stock we used a two-step methodology. First we estimated the enterprise value of our company, and then we allocated the enterprise value to each element of the capital structure, including our common stock, to determine the fair value of a single share of common stock.

We estimated our enterprise value using the guideline public company approach. The guideline public company approach entailed applying the median of the 2011 revenue to enterprise value ratios of public companies similar to us to our revenue projections. Management and the independent valuation specialist considered operational area, size, business model, industry, the description of comparable companies' respective businesses set forth in public filings and the stage of their respective product development/commercialization efforts. Life sciences tool companies selected included Complete Genomics, Inc., Enzo Biochem Inc., Harvard Bioscience Inc., Fluidigm Corporation and Affymetrix Inc. Diagnostics companies included CombiMatrix Corporation, Nanosphere, Inc., GenMark Diagnostics, Inc., QIAGEN Marseilles S.A. (formerly Ipsogen SA), Exact Sciences Corporation and Genomic Health Inc. Companies with both life sciences tools and diagnostics businesses included MEDTOX Scientific Inc., Sequenom Inc. and Luminex Corporation. Importantly, like us, all but CombiMatrix and Exact Sciences of the comparable companies generate revenue from the sale of products. Given that our company is relatively unique insofar as it has both a life

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sciences business and a diagnostics business, for the purposes of the valuation it was necessary to include comparable companies that participate solely in either the life sciences or diagnostics business. By taking into account similar numbers of life sciences and diagnostic companies, along with the relatively few number of companies that combine such businesses within a single enterprise, the valuation specialist arrived at a blended multiple representative of our company's then current and future businesses. Based on the performance and stage of our life sciences segment and the

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prospects of and risks associated with our diagnostics segment, the median revenue to enterprise value of such comparable companies equal to 3.5x was selected. Given the consideration of the factors described above, no further adjustments were considered necessary. This multiple was applied to our 2011 revenue projection as of the December 2011 valuation date. The guideline public company approach suggested that our enterprise value was \$59.4 million.

The resulting estimates of our enterprise value were then allocated to the various securities that comprise our capital structure, using the Black-Scholes option pricing model. This option pricing model treats the rights of the holders of preferred and common stock as equivalent to that of call options on any value of the enterprise above certain break points of value based on the claims of lenders and the liquidation preferences and rights of participation and conversion of the holders of preferred stock set forth in our certificate of incorporation. To determine the break points, we made estimates of the anticipated timing of a potential liquidity event and estimates of the volatility of our equity securities based on available information on volatility of stocks of publicly-traded companies similar to ours.

We applied the Black-Scholes option pricing model based on a liquidity event that would occur two years in the future. We assumed a volatility of our common stock of 61%, which corresponds to the third quartile of the volatilities of common stock of the publicly-traded companies deemed to be similar to us. The risk-free interest rate was based on U.S. Treasury Securities matching the expected timing of the liquidity event. Based on this information, we determined the total value of each security in our capital structure and a discount was then applied to reflect the lack of marketability of our common stock based on put option analyses of the publicly-traded companies deemed to be similar to us, which suggested a lack of marketability discount of 46.0%, and the Finnerty Model, which suggested a lack of marketability discount of 24.8%. The put option analysis provides that a privately-held security has the same value as the combination of such security and an at-the-money put option with respect to such security, with the term of such option equal to the expected period that the security will not be publicly traded. The lack of marketability discount, calculated as the ratio of the put value to the value of the security, represents the discount which is deemed necessary to induce a prospective purchaser to purchase the subject company's security instead of an alternative investment identical in all respects other than its marketability. The Finnerty Model provides that the marketability discount of a privately-held security can be estimated by the value of an average strike put option. An average strike put option conveys the right to sell at the average price attained by the subject during the life of an option and the Finnerty Model assumes that investors do not have the unique ability to time the market. If investors are not able to time the market, the restriction has the effect of depriving them of maximum, not average, trading profits. Both approaches, which are supported by the AICPA Practice Aid, were considered in connection with the valuation and it was concluded that a capped lack of marketability discount of 30% was appropriate. The fair value of our common stock suggested by the December 2011 valuation was \$1.92 per share.

September 2012 Valuation. The September 2012 valuation was conducted using a hybrid approach consisting of the same methodology as the December 2011 valuation and the probability weighted expected return method, or PWERM. The PWERM method was added in recognition of the increased probability that we would pursue an initial public offering in 2013.

For purposes of the guideline public company approach, the same comparable companies from the December 2011 valuation were considered other than MEDTOX Scientific Inc., which was excluded from the September 2012 valuation because it was acquired by another company in June 2012. Based on the receipt of the CE mark for Prosigna and the success of our TransATAC clinical study, a third quartile revenue to enterprise value multiple was applied to our diagnostics business. A median multiple was applied to our life sciences business given the more mature stage of that business and the impact of the uncertainty regarding government spending on research and development. Given the consideration of the factors described above in the disclosure of the December 2011 valuation, no further adjustments were considered necessary. A weighted-average of the revenue to enterprise value multiples equal to 1.5x, 2.4x and 2.2x, respectively, was applied to our 2012, 2013 and 2014 projected revenue. Our projected revenue was based on our historical financial results, projected growth, the success of our TransATAC clinical study, the receipt of the CE mark for Prosigna and other recent developments. The guideline public company approach suggested that our enterprise value was \$105.5 million.

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We then applied the Black-Scholes option pricing model based on the following assumptions: (1) a liquidity event that would occur one and a half years in the future; (2) a volatility of our common stock of 54%, which corresponds to the mean of the volatilities of common stock of the publicly-traded companies deemed to be similar to us; and (3) a risk-free interest rate based on U.S. Treasury Securities matching the expected timing of the liquidity event. The volatilities of publicly-traded life sciences and diagnostics companies is correlated with the regulatory risk associated with their products. Given the reduction of the regulatory risk associated with obtaining the CE mark for Prosigna in September 2012, the mean of the volatilities of the comparable public companies was used for the September 2012 valuation instead of the third quartile of those volatilities used in connection with the December 2011 valuation. Based on this information, we determined the total value of each security in our capital structure. The fair value of our common stock suggested by this methodology was \$4.16 per share.

As part of the PWERM, we estimated the likely outcome of an initial public offering to arrive at a weighted equity value. We estimated a multiple of invested capital to equity value based on the outcome of comparable companies that recently completed initial public offerings. We assumed that an initial public offering would occur in mid-2013 based on a valuation multiple in line with the median of the comparable company analysis. After giving effect to the proceeds we would receive upon exercise of our outstanding warrants and the automatic conversion of our preferred stock in connection with an initial public offering, we determined a per share value of our common stock. We then applied a discount factor derived from the estimated risk-adjusted cost of capital and expected timing of an initial public offering. The fair value of our common stock suggested by this methodology was \$14.72 per share.

After weighting the fair value suggested by the option pricing model at 75% and the fair value suggested by the PWERM at 25%, a discount of 25% was applied to reflect the lack of marketability of our common stock. As with the December 2011 valuation, the put option analysis (which suggested a lack of marketability discount of 36.9%) and the Finnerty Model (which suggested a lack of marketability discount of 20.4%) were considered. It was concluded that a capped lack of marketability discount of 25% was appropriate. The decrease in the lack of marketability discount relative to our December 2011 valuation reflected our evolving view regarding the likelihood and timing of a potential initial public offering. This discount was based on put option analyses of the publicly-traded companies deemed to be similar to us. We concluded that the fair value of our common stock was \$5.12 per share.

December 2012 Valuation. The December 2012 valuation was conducted using the same methodology as the September 2012 valuation.

For purposes of the guideline public company approach, the same comparable companies from the September 2012 valuation were considered. Based on the receipt of the CE mark for Prosigna, the success of our TransATAC and ABCSG8 clinical studies and our plan to develop additional diagnostic products, a third quartile revenue to enterprise value multiple was applied to our diagnostics business given the more mature stage of that business and the impact of the uncertainty regarding government spending on research and development. Given the consideration of the factors described above in the disclosure of the December 2011 valuation, no further adjustments were considered necessary. A median multiple was applied to our life sciences business. A weighted-average of the revenue to enterprise value multiples equal to 1.9x was applied to each of our 2013 and 2014 projected revenue. Our projected revenue was based on our historical financial results, projected growth, the success of our TransATAC and ABCSG8 clinical studies, the receipt of the CE mark for Prosigna and other recent developments. The guideline public company approach suggested that our enterprise value was \$114.7 million. We then applied the Black-Scholes option pricing model based on the following assumptions: (1) a liquidity event that would occur one and a half years in the future; (2) a volatility of our common stock of 58%, which corresponds to the mean of the volatilities of common stock of the publicly traded companies deemed to be similar to us; and (3) a risk-free interest rate based on U.S. Treasury Securities matching the expected timing of the liquidity event. The volatilities of publicly-traded life sciences and diagnostics companies is correlated with the regulatory risk associated with their products. Given the reduction of the regulatory risk associated with obtaining the CE mark for Prosigna in September 2012 and consistent with the September 2012 valuation, the mean of the volatilities of the comparable public companies was used for the December 2012 valuation. Based on this information, we determined the total value of each security in our capital structure. The fair value of our

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common stock suggested by this methodology was \$3.20 per share. The decrease in the fair value of our common stock relative to the September 2012 valuation was largely attributable to the sale of Series E preferred stock and the liquidation preference associated with such shares.

As part of the PWERM, we assumed that an initial public offering would occur in mid-2013 based on a valuation multiple in line with the median of the comparable company analysis. After giving effect to the proceeds we would receive upon exercise of our outstanding warrants and the automatic conversion of our preferred stock in connection with an initial public offering, we determined a per share value of our common stock. We then applied a discount factor derived from the estimated risk-adjusted cost of capital and expected timing of an initial public offering. The fair value of our common stock suggested by this methodology was \$15.04 per share.

After weighting the fair value suggested by the option pricing model at 50% and the fair value suggested by the PWERM at 50%, a discount of 25% was applied to reflect the lack of marketability of our common stock. We increased the weighting of the fair value suggested by the PWERM relative to that in the September 2012 valuation given our expectation that the completion of an initial public offering was increasingly likely. As with the previous valuations, the put option analysis (which suggested a lack of marketability discount of 36.1%) and the Finnerty Model (which suggested a lack of marketability discount of 19.9%) were considered. It was concluded that a capped lack of marketability discount of 25% was appropriate. The consistency of the lack of marketability discount relative to our September 2012 valuation reflected our continuing view regarding the timing of a potential initial public offering. This discount was based on put option analyses of the publicly-traded companies deemed to be similar to us. We concluded that the fair value of our common stock was \$6.72 per share.

March 2013 Valuation. The March 2013 valuation was conducted using the same methodology as the December 2012 valuation.

For purposes of the guideline public company approach, the same comparable companies from the December 2012 valuation were considered other than Complete Genomics, Inc., which was excluded from the March 2013 valuation because it was acquired by another company in March 2013. A median quartile revenue to enterprise value multiple was applied to our diagnostics business. This was a decrease from the third quarter revenue to enterprise value multiple applied in the December 2012 valuation. We made this change due to the inclusion of Exact Sciences Corporation, a high growth company in early stages of commercialization, which increased enterprise to revenue multiples. Exact Sciences Corporation was disregarded for the purposes of deriving such multiple in prior valuations because the results of the clinical trial of its colorectal cancer screening test had not yet been published and its inclusion would have required us to make a subjective adjustment to take into account the uncertainty related to the results of the trial. A median multiple was applied to our life sciences business consistent with prior valuations. A weighted-average of the revenue to enterprise value multiples equal to 2.1x was applied to our 2013 projected revenue and 2.5x to our 2014 projected revenue. Our projected revenue was based on our historical financial results, projected growth, the success of our TransATAC and ABCSG8 clinical studies, the receipt of the CE mark for Prosigna, the commercial launch of Prosigna in Europe and Israel in February 2013 and other recent developments. The guideline public company approach suggested that our enterprise value was \$111.2 million.

We then applied the Black-Scholes option pricing model based on the following assumptions: (1) a liquidity event that would occur one and a half years in the future; (2) a volatility of our common stock of 57%, which corresponds to the mean of the volatilities of common stock of the publicly traded companies deemed to be similar to us; and (3) a risk-free interest rate based on U.S. Treasury Securities matching the expected timing of the liquidity event. Based on this information, we determined the total value of each security in our capital structure. The fair value of our common stock suggested by this methodology was \$3.84 per share.

As part of the PWERM, we assumed that an initial public offering would occur in the third quarter of 2013 and we estimated a pre-money equity value in line with the median of initial public offerings by comparable companies. After giving effect to the proceeds we would receive upon exercise of our outstanding warrants and the automatic conversion of our preferred stock in connection with an initial public offering, we determined a per

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share value of our common stock. We then applied a discount factor derived from the estimated risk-adjusted cost of capital and expected timing of an initial public offering. The fair value of our common stock suggested by this methodology was \$14.40 per share.

After weighting the fair value suggested by the option pricing model at 35% and the fair value suggested by the PWERM at 65%, a discount of 15% was applied to reflect the lack of marketability of our common stock. We increased the weighting of the fair value suggested by the PWERM relative to that in the December 2012 valuation given our expectation that the probability of a completed initial public offering was more likely. As with the previous valuations, the put option analysis (which suggested a lack of marketability discount of 32.6%) and the Finnerty Model (which suggested a lack of marketability discount of 18.2%) were considered. It was concluded that a capped lack of marketability discount of 15% was appropriate, which we decreased from the December 2012 valuation given our expectation that the probability of a completed initial public offering was more likely. We concluded that the fair value of our common stock was \$8.96 per share.

In connection with the preparation of our financial statements for the nine months ended September 30, 2012, we assessed our estimate of fair value of our common stock for financial reporting purposes given our improving financial performance and prospects, evolving belief during the second half of 2012 that an initial public offering was increasingly viable and the generally improving conditions in the capital markets in the fourth quarter of 2012. We determined that for financial reporting purposes the fair value of our common stock was higher than the board of directors' fair market value estimate for each of the option grant dates from March 1, 2012 through September 17, 2012. As a result, we adjusted the fair value per common share as of each such grant date based on the progress of our business at each relevant date. In establishing the fair value of our common stock for the March 2012 option grants, particular emphasis was given to increasing product sales. In establishing the fair value of our common stock for the April 2012 option grants, particular emphasis was given to the March 2012 announcement of the launch of three life sciences applications, the closing of our credit facility which improved our financial position and the hiring of our senior vice president of research and development. In establishing the fair value of our common stock for the May 2012 option grants, particular emphasis was given to the May 2012 acceptance of employment by our senior vice president and general manager of our diagnostics business. In establishing the fair value of our common stock for the September 2012 option grants, particular emphasis was given to the addition of the chairman of our audit committee in July 2012 and the acceptance of employment by our chief financial officer in September 2012. Both of such persons have significant public company experience and their joining our company reflected our evolving belief that an initial public offering was increasingly viable. In establishing the fair value of our common stock for the October 2012 option grants, particular emphasis was given to the September 2012 publication of the Cancer Genome Atlas, which highlighted the importance of intrinsic subtyping enabled by the PAM50 gene signature, the September 2012 announcement of our single cell gene expression application, receipt of the CE mark for Prosigna, our increasing product revenue and the September 2012 valuation of our common stock. In establishing the fair value of our common stock for the January 2013 option grants, particular emphasis was given to the success of our ABCSG8 clinical study, our plans to develop additional diagnostic products, our improved cash position due to the completion of our Series E preferred stock financing and borrowing of \$5.5 million in term loan borrowings under our existing credit facility and the December 2012 valuation of our common stock. In determining the fair value of our common stock for the purpose of establishing the exercise price for the March 2013 option grants, our board of directors gave particular emphasis to the absence of changes to our business that had not already been contemplated by the December 2012 valuation and option grants in January 2013, the poor performance of a diagnostics company's recent initial public offering and the postponement and withdrawal of two other diagnostics companies' initial public offerings and the continued uncertainty regarding the impact of the sequestration budget cuts. In determining the fair value of our common stock for the purpose of establishing the exercise price for the May 2013 option grants, our board of directors gave particular emphasis to the absence of changes to our business that had not already been contemplated by the March 2013 valuation.

In connection with the preparation of an amendment to the registration statement of which this prospectus forms a part in late May 2013, we assessed the estimate of fair value of our common stock for financial reporting purposes as of March 1 and May 13, 2013 in light of our evolving views regarding the probability of successfully

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completing an initial public offering in the near term and determined that for financial reporting purposes the fair value of our common stock as of such dates was higher than the board of directors' fair value estimate for the option grant as of such dates. With respect to the March 1, 2013 option grants, for financial reporting purposes we adjusted the fair value per common share as of March 1, 2013 to be consistent with the \$8.96 per share value suggested by the March 2013 valuation. With respect to the May 13, 2013 grants, although there was no significant change in our business that had not already been contemplated by the March 2013 valuation, we determined that it was appropriate to adjust certain assumptions contained in the March 2013 valuation. Specifically, we increased the relative weighting of the PWERM from 65% to 90% and decreased the discount for lack of marketability from 15% to 10%. As a result for financial reporting purposes we adjusted the fair value per common share as of May 1, 2013 to \$12.16.

From January 1, 2012 through the date of this prospectus, we granted stock options with exercise prices and fair value assessments as follows:

Grant Date	Common Shares Underlying Options Granted	Exercise Price Per Share	Fair Value Per Common Share for Financial Reporting Purposes at Grant Date	Intrinsic Value Per Underlying Common Share
March 1, 2012	730,860	\$ 1.92	\$ 2.24	\$ 0.32
March 26, 2012	39,000	1.92	2.24	0.32
April 19, 2012	87,563	1.92	2.56	0.64
May 25, 2012	106,813	1.92	2.88	0.96
July 17, 2012	22,469	1.92	3.20	1.28
September 17, 2012	1,563	1.92	4.16	2.24
October 16, 2012	125,875	5.12	5.12	
January 10, 2013	213,032	6.72	6.72	
March 1, 2013	82,000	6.72	8.96	2.24
May 13, 2013	19,500	8.96	12.16	3.20

Based on an assumed initial price to public of \$14.00 per share, the mid-point of the price range set forth on the cover page of this prospectus, the intrinsic value of stock options outstanding at March 31, 2013 was \$19.8 million, of which \$6.6 million and \$13.2 million related to stock options that were vested and unvested, respectively, at that date.

We account for stock-based compensation at fair value. Stock-based compensation costs are recognized based on their grant date fair value estimated using the Black-Scholes option pricing model. Stock-based compensation expense recognized in the statement of operations is based on options ultimately expected to vest and has been reduced by an estimated forfeiture rate based on our historical and expected forfeiture patterns. We use the straight-line method of allocating compensation cost over the requisite service period of the related award.

Determining the fair value of stock-based awards at the grant date under the Black-Scholes option pricing model requires judgment, including estimating the value per share of our common stock, risk-free interest rate, expected term and dividend yield and volatility. The assumptions used in calculating the fair value of stock-based awards represent our best estimates based on management judgment and subjective future expectations. These estimates involve inherent uncertainties. If any of the assumptions used in the Black-Scholes option pricing model significantly change, stock-based compensation for future awards may differ materially from the awards granted previously.

The expected term of options granted is based on historical experience of similar awards and expectations of future employee behavior. The risk-free interest rate for the expected term of the option is based on the U.S. Treasury yield curve in effect at the time of grant. We have not paid and do not anticipate paying cash dividends on our common stock; therefore, the expected dividend yield is assumed to be zero. We based our estimate of volatility on the estimated volatility of similar companies whose share prices are publicly available. For 2010, we based our estimate on a calculation of equity volatility, which is higher than corresponding asset volatility, because we believed that this better reflected the financing and business risk associated with our company given our early stage of development. Additionally, in 2010 we had little debt financing and a relatively low aggregate liquidation

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preference associated with our then outstanding classes of preferred stock. As a result, the impact of our capital structure on the fair value of our common stock was more limited than in subsequent periods. For subsequent periods, we determined that an estimate based on asset volatility was more appropriate for determining the fair value of our stock options because our increased levels of debt and aggregate preferred stock liquidation preference represented a significant hurdle before value would accrue to holders of common stock. This change was driven in large part by the issuance by us of Series D preferred stock and the related liquidation preference associated with such shares. Key assumptions utilized in estimating the fair values of stock-based awards are as follows:

	Year Ended December 31,			Three Months Ended	
	2010	2011	2012	March 31, 2012	2013
Risk-free interest rates	2.42%-3.14%	2.2%-3.14%	0.85%-1.44%	1.23%-1.44%	1.05%-1.11%
Expected term (years)	6.25	6.25	6.25	6.25	6.25
Expected dividend yield					
Volatility	92.4%	73.0%	54.0%-61.0%	61.0%	58.0%

The weighted-average grant date fair value per share of employee stock options granted during 2010, 2011 and 2012 was \$1.74, \$1.83 and \$1.59, respectively. The weighted-average grant date fair value per share of employee stock options granted during the three months ended March 31, 2012 and 2013 was \$1.35 and \$4.23, respectively. The total compensation cost related to unvested stock option grants not yet recognized as of March 31, 2013 was \$2.8 million, and the weighted-average period over which these grants are expected to vest is three years. The total fair value of options vested during 2010, 2011 and 2012 was \$0.1 million, \$0.2 million, and \$0.7 million, respectively. The total fair value of options vested during the three months ended March 31, 2012 and 2013 was \$0.3 million and \$0.2 million, respectively.

Inventory Valuation

Inventory consists of raw materials, certain component parts to be used in manufacturing our products and finished goods. Inventory is stated at the lower of cost or market. Cost is determined using a standard cost system, whereby the standard costs are updated periodically to reflect current costs and market represents the lower of replacement cost or estimated net realizable value. We record adjustments to inventory for potentially excess, obsolete, slow-moving or impaired items. The business environment in which we operate is subject to rapid changes in technology and customer demand. We regularly review inventory for excess and obsolete products and components, taking into account product life cycle and development plans, product expiration and quality issues, historical experience and our current inventory levels. If actual market conditions are less favorable than anticipated, additional inventory adjustments could be required.

Fair Value Measurements

We record preferred stock warrant liability at fair value. We establish fair value using the price that would be received to sell an asset or paid to transfer a financial liability in an orderly transaction between market participants at the measurement date. A fair value hierarchy is used to measure fair value. The three levels of the fair value hierarchy are as follows:

Level 1 Quoted prices in active markets for identical assets and liabilities.

Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.

Level 3 Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

Whenever possible, we use observable market data and rely on unobservable inputs only when observable market data are not available. Preferred stock warrant liability is categorized as Level 3 because it was valued based on unobservable inputs and our judgment due to the absence of quoted market prices, inherent lack of liquidity and

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the long-term nature of such financial instruments. We perform a fair value assessment of the preferred stock warrant inputs on a quarterly basis using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model are inherently subjective and involve significant judgment. Changes in our judgments could have a material impact on our results of operations and financial position. Any change in fair value is recognized as a component of other income (expense) on the statements of operations.

Income Taxes

We use the liability method of accounting for income taxes. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. Deferred tax assets and liabilities are measured using enacted tax rates expected to be in effect when such assets and liabilities are recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the year that includes the enactment date. We determine deferred tax assets including net operating losses and liabilities, based on temporary differences between the book and tax bases of assets and liabilities. We believe that it is currently more likely than not that our deferred tax assets will not be realized, and as such, a full valuation allowance is required.

We utilize a two-step approach for evaluating uncertain tax positions. Step one, recognition, requires us to determine if the weight of available evidence indicates that a tax position is more likely than not to be sustained upon audit, including resolution of related appeals or litigation processes, if any. If a tax position is not considered more likely than not to be sustained, no benefits of the position are recognized. If we determine that a position is more likely than not to be sustained, then we proceed to step two, measurement, which is based on the largest amount of benefit which is more likely than not to be realized on effective settlement. This process involves estimating our actual current tax exposure, including assessing the risks associated with tax audits, together with assessing temporary differences resulting from the different treatment of items for tax and financial reporting purposes. If actual results differ from our estimates, our net operating loss and credit carryforwards could be materially impacted.

At December 31, 2012, we had federal net operating loss carryforwards, or NOLs, of approximately \$62.2 million and federal research and experimentation credit carryforwards of approximately \$1.0 million, which may be used to reduce future taxable income or offset income taxes due. These NOLs and credit carryforwards expire beginning in 2023 through 2032.

Our realization of the benefits of the NOLs and credit carryforwards is dependent on sufficient taxable income in future fiscal years. We have established a valuation allowance against the carrying value of our deferred tax assets, as it is not currently more likely than not that we will be able to realize these deferred tax assets. In addition, utilization of NOLs and credits to offset future income subject to taxes may be subject to substantial annual limitations due to the change in ownership provisions of the Internal Revenue Code of 1986, or the Code, and similar state provisions. We may have already experienced one or more ownership changes. Depending on the timing of any future utilization of our carryforwards, we may be limited as to the amount that can be utilized each year as a result of such previous ownership changes. However, we do not believe such limitations will cause our NOL and credit carryforwards to expire unutilized. We are in the process of determining whether this offering would constitute an ownership change resulting in further limitations on our ability to use our net operating loss and tax credit carryforwards. If an ownership change is deemed to have occurred as a result of this offering, potential near term utilization of these assets could be reduced.

We do not anticipate that the amount of our existing unrecognized tax benefits will significantly increase or decrease within the next 12 months. Due to the presence of NOLs in most jurisdictions, our tax years remain open for examination by taxing authorities back to the inception of the company.

Recent Accounting Pronouncements

We have reviewed recent accounting pronouncements and concluded that they are either not applicable to our business or that no material effect is expected on the consolidated financial statements as a result of future adoption.

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As an emerging growth company the JOBS Act allows us to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies. As a result, our financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies.

Off-Balance Sheet Arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or for any other contractually narrow or limited purpose.

Inflation

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could adversely affect our business, financial condition and results of operations.

Quantitative and Qualitative Disclosures about Market Risk

We are exposed to various market risks, including changes in commodity prices and interest rates. Market risk is the potential loss arising from adverse changes in market rates and prices. Prices for our products are denominated in U.S. dollars and, as a result, we do not face significant risk with respect to foreign currency exchange rates.

Interest Rate Risk

The principal market risk we face is interest rate risk. We had cash and cash equivalents of \$11.8 million as of March 31, 2013, which consisted of highly-liquid investments with an original maturity of three months or less. The goals of our investment policy are liquidity and capital preservation; we do not enter into investments for trading or speculative purposes. We believe that we do not have any material exposure to changes in the fair value of these assets as a result of changes in interest rates due to the short term nature of our cash and cash equivalents. Declines in interest rates, however, would reduce future investment income. A 1% decline in interest rates, occurring on April 1, 2013 and sustained throughout the period ended March 31, 2014, would not be material.

As of March 31, 2013, the principal and accrued interest outstanding under our term borrowings was \$13.2 million. The interest rates on our term borrowings under our credit facility are fixed. If overall interest rates had increased by 10% during the periods presented, our interest expense would not have been affected.

Foreign Currency Exchange Risk

As we expand internationally our results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates. Historically, a majority of our revenue has been denominated in U.S. dollars, although we sell our products and services in local currency outside of the United States, principally the Euro. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States. The effect of a 10% adverse change in exchange rates on foreign denominated cash, receivables and payables would not have been material for the periods presented. As our operations in countries outside of the United States grow, our results of operations and cash flows will be subject to fluctuations due to changes in foreign currency exchange rates, which could harm our business in the future. To date, we have not entered into any material foreign currency hedging contracts although we may do so in the future.

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BUSINESS

Overview

We develop, manufacture and sell robust, intuitive products that unlock scientifically valuable and clinically actionable genomic information from minute amounts of tissue. Our nCounter Analysis System directly profiles hundreds of molecules simultaneously using a novel barcoding technology that is powerful enough for use in research, yet simple enough for use in clinical laboratories worldwide. We market systems and related consumables to researchers in academic, government, and biopharmaceutical laboratories for use in understanding fundamental biology and the molecular basis of disease. We have an installed base of more than 140 systems, which our customers have used to publish more than 220 peer-reviewed papers. As researchers discover how genomic information can be used to improve clinical decision-making, we seek to selectively translate their discoveries into molecular diagnostic products. In September 2012, we received European Union regulatory clearance for our first molecular diagnostic product, the Prosigna Breast Cancer Assay, or Prosigna, an assay providing an assessment of a patient's risk of recurrence for breast cancer and the intrinsic subtype of the patient's tumor. In February 2013, we commercially launched Prosigna in Europe and Israel. In December 2012, we submitted an application, known as a 510(k), to the FDA seeking clearance in the United States for a version of Prosigna providing an assessment of a patient's risk of recurrence for breast cancer.

The role of genomic information in research and medical practice is evolving rapidly. The advent of new technologies that sequence and digitally count discrete nucleic acids, commonly referred to as next generation sequencing, or NGS, is accelerating the discovery of the relationships between the genome and human disease. Researchers are applying this wealth of new information to identify biological pathways, which are networks of tens or hundreds of genes that act in concert to produce biological functions. Researchers then seek to translate this understanding of the genomic basis of disease into the development of diagnostic tools that can be used to profile an individual patient's biological pathways as well as develop targeted drug therapies. Precise, simple and robust profiling of biological pathways presents both an analytical challenge for researchers and an opportunity to improve patient outcomes in the future.

Our nCounter Analysis System enables research on a scale appropriate for pathway-based biology by digitally quantifying the activity of up to 800 genes simultaneously in a single experiment. The sensitivity and precision of our novel barcoding chemistry allows researchers to measure subtle changes in genomic activity efficiently, which is essential because tissue samples are often available only in very small quantities. This problem is especially acute in cancer research, which is typically conducted using biopsies that are often stored in a format known as formalin-fixed paraffin embedded, or FFPE, which complicates subsequent analysis of genetic material. The nCounter Analysis System is an easy-to-use and flexible solution that allows researchers to efficiently test hypotheses across thousands of different samples. As a result, the nCounter Analysis System is particularly useful for discovering and validating networks of genes that characterize and help predict disease states, enabling the development of diagnostics and medicines designed specifically for treating patients with certain genomic profiles. When researchers succeed in these endeavors, our strategy is to selectively partner with them to translate their discoveries into clinically valuable molecular diagnostic applications.

Prosigna, our first molecular diagnostic test, is based on a collection of 50 genes known as the PAM50 gene signature, which was discovered by several of our life sciences customers. We secured an exclusive worldwide license to the PAM50 gene signature in 2010. Prosigna can provide a breast cancer patient and her physician with a subtype classification based on the fundamental biology of the patient's tumor, as well as a prognostic score that predicts the probability of cancer recurrence over 10 years. Our goal is for physicians to use Prosigna to guide therapeutic decisions so that patients receive only therapeutic interventions from which they are likely to benefit. In 2011, we conducted a clinical study, which we refer to as our TransATAC study, based on material extracted from tumor samples of more than 1,000 evaluable patients from the ATAC study. In our study, investigators performed Prosigna on these samples that had been previously analyzed using Genomic Health's Oncotype DX, the historical market leader in breast cancer recurrence testing. The results of our TransATAC study demonstrated the ability of Prosigna to indicate risk of recurrence in postmenopausal women with hormone results of this study and multi-site analytical validation studies, we received European Union, or EU, regulatory clearance for Prosigna, known as a CE mark. As part of our preparation for regulatory submission in the United

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States, we conducted a second clinical study, which we refer to as our ABCSG8 study, based on tumor samples of more than 1,400 evaluable patients from the Austrian Breast & Colorectal Cancer Study Group 8. Our ABCSG8 study confirmed the conclusion that Prosigna can indicate risk of recurrence as previously demonstrated in our TransATAC study. In December 2012, we submitted an application, known as a 510(k), to the FDA seeking clearance in the United States for a version of Prosigna providing an assessment of a patient's risk of recurrence for breast cancer. In March 2013, we received a written response from the FDA requesting additional information for its review of our 510(k) submission. A request for additional information is common following an initial 510(k) submission. In May 2013, we submitted an initial response to the FDA's request for additional information and met with the FDA to discuss our response. In this meeting, we discussed, among other issues raised by the FDA, the specific elements and format of a potential report generated by Prosigna, including the appropriate name for the risk score, the appropriate graphic presentation of the risk score, and, specifically for the potential report for node-positive patients, the numerical range of the risk score and the appropriate number of risk groups. If the FDA clears Prosigna, we intend to launch Prosigna in the United States promptly following receipt of such clearance. We are currently planning for this commercial launch in the first quarter of 2014. We plan to conduct future clinical studies to evaluate Prosigna's ability to guide physicians and patients in making additional treatment decisions, including the selection of the appropriate chemotherapy regimen and whether to use adjuvant radiation therapy, and, if such studies are successfully completed, to seek 510(k) clearance or PMA approval for such indications in the future.

Prosigna will be regulated as an *in vitro* diagnostic test and we intend to distribute it as a kit for use on our nCounter Analysis System in clinical laboratories after regulatory authorizations are obtained. We expect that our future diagnostic products will be regulated and distributed in a similar manner. This is in contrast to most complex genomic tests, which are currently regulated as services and are usually offered only by a limited number of specialized laboratories. The current centralized laboratory model for complex genomic testing can result in complicated logistics for the treating physician, including slower test result turnaround times and limited international access to tests as compared to local testing. In addition, most clinical laboratories cannot currently share in the revenue associated with offering patients complex genomic tests. We believe that our decentralized model will transform the current paradigm of complex genomic testing by allowing physicians worldwide to provide more comprehensive personalized diagnoses, broadening patient access, and increasing the degree to which clinical laboratories can profit by providing molecular diagnostic testing services.

We generated revenue of \$11.7 million, \$17.8 million and \$23.0 million in 2010, 2011 and 2012, respectively, and \$5.7 million in the three months ended March 31, 2013, while incurring net losses of \$12.8 million, \$10.9 million and \$17.7 million in 2010, 2011 and 2012, respectively, and \$7.3 million in the three months ended March 31, 2013.

Our Market Opportunity

Every living organism has a genome that contains the full set of biological instructions required to build and maintain life. By analyzing the variations in genomes, genes and gene activity in and between organisms, researchers can determine their functions and roles in health and disease. An improved understanding of the genome and its functions allows researchers to drive advancements in scientific discovery. As they make scientific discoveries, researchers have been able to translate some of these findings into clinical applications that improve patient care.

A gene is a specific set of instructions embedded in the DNA of a cell. For a gene to be turned on, or expressed, the cell must first transcribe a copy of its DNA sequence into molecules of messenger RNA. Then, the cell translates the expressed information contained in the RNA into proteins that control most biological processes. In addition to the translated RNAs, there are many types of non-coding RNAs that are involved in many cellular processes and the control of gene expression, including microRNA, or miRNA, and long noncoding RNA, or lncRNA.

Biological pathways are the networks of tens or hundreds of genes that work in concert to produce a biological function. Understanding the activation state of pathways and disruptions in individual elements of these pathways provides significant insight into the fundamental basis of disease and facilitates data driven treatment decisions. Therapeutic interventions, such as drugs, can be used to treat disease by activating or

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inactivating biological pathways that are relevant to disease. As a result, pathway-based biology has become a widely adopted paradigm that researchers use to understand biological processes and has assisted them in the development of diagnostics and drugs to treat disease. To be successful in their research, these scientists need the ability to precisely and simultaneously measure the activation state of the tens or hundreds of genes that comprise biological pathways.

Over the last decade, methods of measuring genomic information have advanced substantially. However pathway-based research and the development of diagnostic tests require analysis of multiple genes and sensitivity to small changes in expression, which can be challenging for traditional genomic tools. In general DNA microarrays and tube-based qPCR methods, require complex, time consuming workflows and relatively large amounts of sample tissue to accurately characterize biological pathway activation. In both life sciences research and clinical medicine, there is a growing need for improved technologies that can precisely and rapidly measure the activation state of hundreds of genes simultaneously across a large number of precious samples, thereby providing a simple and reliable means to characterize biological pathways within minute tissue specimens.

Existing Technologies***Microarrays***

Microarrays are tools used to measure gene expression based on the relative brightness of a fluorescent dot on a glass, silicon or other semiconductor surface. Microarrays are sometimes referred to as an analog technology because an indirect measurement of the brightness level, rather than a direct measurement of the molecule, is used to infer the level of gene expression. Traditional microarrays are capable of cost effectively analyzing a large number of targets on a small number of samples, however they have limited sensitivity, precision and dynamic range. In addition, the relatively low throughput and complex workflows of microarrays makes them challenging to use in diagnostic applications.

Next Generation Sequencing

Next generation sequencing, or NGS, is a technology that rapidly sequences nucleic acids, and then uses a computationally intense process to count discrete copies of each nucleic acid. While the primary application of this technology is to decode the sequence of DNA, researchers can also use NGS to quantify gene expression using an application called RNA sequencing, or RNA-Seq, which counts the number of times a specific gene sequence is detected in a sample. This is referred to as a digital technology because it relies on a direct count of molecules, rather than an indirect analog measurement of the level of gene expression. This digital gene expression analysis technology can provide higher sensitivity, precision, and dynamic range than traditional analog gene expression tools, such as microarrays. As a result, RNA-Seq is replacing microarrays as the platform of choice for genome-wide expression analysis in research. In recent years, many innovations have been made to improve the precision, workflow and automation of these systems. However, RNA-Seq is not well suited for diagnostic use in most clinical laboratories due to its complexity, computational intensity, limited throughput and need for expert technicians. In addition, it is challenging to perform RNA-Seq analyses with small amounts of tissue, especially FFPE samples, which is a limiting factor in large scale studies and many clinical applications.

Real-time or Quantitative Polymerase Chain Reaction

Quantitative polymerase chain reaction, or qPCR, is a technique that can measure gene expression usually on a single target in a particular cell or tissue. First, an enzyme is used to create a complementary DNA, or cDNA, of the RNA target to be measured. Then polymerase chain reaction, or PCR, is used to amplify the cDNA copy through the use of enzymes and repeated heating and cooling cycles, with fluorescent dyes being incorporated during each amplification cycle. Finally, the expression of the gene of interest is inferred based on the number of amplification cycles required for the fluorescent amplified target to become detectable. qPCR is sometimes referred to as an analog technology because the number of cycles of amplification, rather than a direct measure, is used to infer the level of gene expression. The wide availability of qPCR chemistry makes it a popular approach for measuring the expression of a single gene but expanding this method to the analysis of

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multiple hundreds of genes requires complex liquid handling automation and process optimization. Recently, researchers have used microfluidic approaches that divide samples across multiple parallel qPCR reactions, each measuring a single gene, in order to profile multiple genes in parallel. This approach requires additional liquid-handling steps and can result in less efficient use of tissue samples. Finally, the use of enzymes in numerous cycles of amplification can introduce distortion and bias into the data, depending on the process controls and expertise of the person conducting the experiment.

Life Sciences Research

According to Strategic Directions International, Inc., life sciences researchers spent approximately \$28 billion on tools and related consumables in 2011. In the decade since the completion of the Human Genome Project, improvements in NGS technology have greatly reduced the cost of sequencing a human genome and increased throughput and precision, which has led to an abundance of new biological information. In order to gather insights from this information, researchers must first distill and then efficiently analyze large pools of data. Gene expression analysis has emerged as a primary tool that researchers use to extract meaningful insights from networks of genes, which enables them to validate and then translate their findings into the development of diagnostics and medicines. According to Percepta Associates, a provider of consulting services to bioscience companies, the 2012 global market for gene expression profiling products is estimated to be \$1.2 billion.

Academic, government, and biopharmaceutical researchers engaged in gene expression analysis typically focus on making biological discoveries that may lead to the development of relevant medical products and better informed treatment decisions for physicians and patients. They have traditionally performed these experiments using microarrays or qPCR. Recently, RNA-Seq has dramatically enhanced researchers' ability to discover patterns of gene expression that have biological meaning. However, researchers are increasingly performing analyses on a larger number of genes and samples and are seeking new methods of interrogation that would allow them to:

increase the number of genes that can be analyzed simultaneously in order to understand the complete biological pathway involving multiple genes;

improve the overall efficiency of their laboratories by simplifying workflow and accelerating the rate of successfully completing their research;

provide more reliable, precise and reproducible data about targeted genes and biological pathways;

maximize the amount of genomic information extracted from precious tissue samples;

minimize the computational intensity of complex genomic analysis;

process difficult-to-work-with specimens, such as tumor biopsies stored in FFPE format; and

create more systematic and reliable ways to help transition their research discoveries into future clinical products.

We believe that the above items create an opportunity for technologies that are optimized for pathway-based biology. Based on 2011 market data regarding the installed base of microarray systems at that technology's peak, we estimate that the potential market opportunity of our current generation of nCounter Analysis System is approximately 3,000 systems.

Molecular Diagnostics

As researchers have discovered links between specific genomic variants and diseases, their discoveries have led to the development of genome-based diagnostics that have the potential to inform therapeutic interventions, predict the risk or onset of disease and detect residual disease on an individualized basis. As a result, these molecular diagnostic tests have made individualized treatment possible and have an

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increasingly important influence on decisions that physicians and patients make regarding treatment and care.

According to Frost and Sullivan, the molecular diagnostics market totaled approximately \$4.1 billion in 2010 and is expected to reach \$6.2 billion by 2014. Growth in the molecular diagnostics market has been driven

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by technological innovations that have increased sensitivity, decreased turnaround times, simplified workflow, and lowered costs when compared to other techniques. In addition, the medical community has seen a trend in favor of decentralized diagnostic testing as a result of the convenience of local testing, hospitals and medical centers increasingly viewing their laboratories as profit centers and a need to increase access to tests for patients outside of the United States. We believe that there is an opportunity to improve the quality of diagnosis and treatment of diseases by developing and commercializing comprehensive, simple and widely available diagnostic products based on gene expression analysis.

Cancer is a disease generally caused by genetic mutations in cells. The behavior of cancer cells is extremely complex, depending on many different genes and the interactions of those genes. It is often impossible for researchers to identify a single gene that adequately signals a more aggressive or less aggressive type of cancer. However, in some cases, researchers have been able to identify more aggressive or less aggressive types of cancer through gene expression analysis of biological pathways. Multi-gene expression analysis has the potential to considerably improve the decisions of oncologists as they care for their patients. Based on the pattern of gene expression, oncologists can determine which specific treatments are most likely to be effective for an individual patient, monitor a patient's response to those treatments, and determine the likelihood of recurrence.

Enhanced understanding of the genomic basis of disease has driven the development of molecular diagnostics for a number of indications. This trend is exemplified by the development of multi-gene tests for breast cancer. Over the last decade, genomic tests for breast cancer have improved the accuracy of prognosis and efficacy of treatment by providing risk assessments particular to individual patients. As a result of individualized risk profiling, thousands of patients have been spared unnecessary treatment while many others have been placed on more appropriate treatment regimens.

These multi-gene breast cancer tests are widely available in the United States, but are not generally available in other countries, despite the fact that the United States accounts for less than 15% of the global annual breast cancer incidence. The following provides a summary of the incidence of breast cancer worldwide in 2008 based on data published by the World Health Organization:

Multi-gene molecular diagnostic tests for breast cancer are provided by several companies today, including Genomic Health, Agendia and Clariant (a GE Healthcare company). These tests are offered as services with the analysis conducted at company-owned centralized laboratories. When a physician orders the test, the pathologist

⁽¹⁾ Ferlay J, Shin HR, Bray F, Forman D, Mathers C and Parkin DM. GLOBOCAN 2008 v2.0, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 10 [Internet]. Lyon, France: International Agency for Research on Cancer; 2010. Available from: <http://globocan.iarc.fr>, accessed on 03/11/2012.

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sends a tumor block or thin sections from the biopsy specimen to the centralized laboratory for analysis. The lab operator then uses a multi-gene panel to determine a risk category for each patient, which predicts that individual's likelihood of recurrence. The lab operator typically analyzes the tumor tissue and delivers results to the treating physician within 10 to 14 days of receipt of the tumor sample.

Despite their positive impact on patient care, existing molecular diagnostic tests for breast cancer available prior to Prosigna, which we call first-generation tests, have several limitations, including:

High Frequency of Intermediate Risk Results. The first-generation tests generally sort patients into two or three risk categories, such as high/intermediate/low risk. In clinical practice, patients who are low risk are generally spared chemotherapy and patients who are high risk generally receive chemotherapy. In contrast, there is no standard of care for how intermediate risk patients should be treated. The ambiguity of treatment and outcomes associated with an intermediate risk score is challenging for physicians and unsettling for patients.

Available Exclusively from Specialized Laboratories. The first-generation tests are based on techniques such as qPCR, microarrays or multiplexed immunohistochemistry and are generally administered by highly-skilled technicians usually working in centralized laboratories. This centralized model may result in complicated logistics for the treating physician, including slow test result turnaround times, added shipping and logistics costs and limited international access to tests. In addition, the economic value of providing the centralized genomic tests that improve clinical decision-making has been captured by a small number of specialized laboratories. Most clinical laboratories are unable to perform or profit from these tests. In addition, because most of the specialized laboratories are in the United States, patients living outside of the United States may be challenged to gain access to these genomic tests.

Unclear Utility in Other Treatment Decisions. The first-generation tests were specifically designed to provide a physician with an understanding of the residual risk of recurrence for patients receiving hormonal therapy, thereby informing the physician's decision whether to also administer adjuvant chemotherapy. The genes included in the first-generation tests were selected primarily, and in many cases exclusively, based on the correlation of their expression with the risk of cancer recurrence in such patients. It remains unclear as to whether the specific genes included in these first-generation tests will be able to inform other important treatment decisions, such as the selection of specific adjuvant chemotherapy regimens, the duration of adjuvant endocrine therapy, or the decision of whether to administer adjuvant radiation therapy.

In contrast to the central laboratory-based first-generation molecular diagnostic test for breast cancer, the medical community has seen a trend in favor of decentralized diagnostic testing. Tests for HIV, Hepatitis C, Influenza and MRSA, which were once centralized, are now often conducted in hospital laboratories or at the point of care. We believe that this trend of decentralized testing will continue as a result of many factors, including:

Convenience. We believe that physicians would prefer that molecular diagnostic tests be performed at a local level and in the same laboratory that performs other tests that the physicians may order. Local molecular diagnostic testing could provide physicians the same rapid turnaround of test results that they have learned to expect for other types of tests.

Economic Advantages. We believe that hospitals and medical centers desire to make their clinical laboratories profit centers by performing tests and billing third-party payors. As diagnostic technologies become less complicated to administer, hospitals and medical centers tend to favor in-sourcing tests.

International Availability. There is a critical need to increase access to molecular diagnostic tests for patients that live outside the United States. Currently, patients living outside the United States may be challenged to gain access to tests that are provided only by specialized laboratories located within the United States. We believe genomic testing will become more available to patients throughout the world when it can be provided by their local clinical laboratories.

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We believe that the market for complex molecular diagnostics will require increased precision, increased breadth of decision making information, and a decentralized approach that is in line with other applications of diagnostic testing.

Our Solution

Our nCounter Analysis System is an automated, multi-application, digital detection and counting system which directly profiles hundreds of molecules simultaneously using a novel barcoding technology that is powerful enough for use in research, yet simple enough for use in clinical laboratories worldwide. Our nCounter Analysis System consists of two automated instruments that prepare and analyze tissue samples using proprietary reagents that we call CodeSets, which can only be obtained from us. Our life sciences research customers purchase instruments from us and then purchase our panels or custom CodeSets and related consumables for the specific experiment they wish to conduct. Beginning with Prosigna, our future diagnostics customers will either purchase or lease instruments from us and also purchase one of our diagnostic kits for each test that they intend to run.

Our nCounter Analysis System offers a number of compelling advantages, including:

Optimized for Pathway-Based Biology. The nCounter Analysis System can profile up to 800 molecules in a single test tube, which allows researchers to analyze interactions among hundreds of genes that mediate biological pathways. In addition, our nCounter Analysis System offers customers the freedom to order panels or custom CodeSets specific to their experiment.

Digital Precision. Our molecular barcodes hybridize directly to the target molecules in a sample allowing them to be counted. This generates digital data (1 molecule = 1 count) of excellent quality over a wide dynamic range of measurements and provides excellent reproducibility.

Simple Workflow. The nCounter Analysis System's minimal sample preparation and automated workflow enable the performance of gene expression analysis across hundreds of genes simultaneously in approximately 24 hours with only approximately 15 minutes of hands-on preparation time. Our nCounter Analysis System generates data that customers can evaluate without the use of complex bioinformatics.

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Flexible Sample Requirements. The nCounter Analysis System is able to unlock genomic information from minute amounts of a variety of challenging tissue samples, including FFPE samples, cell lysates and single cells.

Our nCounter Analysis System supports research and the development of future clinical applications from basic discovery to the development of future molecular diagnostic tests on a single platform. We believe that our nCounter Analysis System is complementary to and synergistic with digital gene expression on next generation sequencers (using RNA-Seq).

Many of our research customers are transitioning their efforts to discover important patterns of gene expression away from the analog technology of microarrays to the digital technology of NGS, using the application RNA-Seq. Often, these customers perform follow-up experiments to validate the results of their RNA-Seq discovery experiments by testing hundreds or thousands of samples. Increasingly, researchers are performing these validation experiments using our nCounter Analysis System, which combines the precision of digital gene expression with the high throughput and simple workflow required to efficiently process large numbers of samples. Because our nCounter Analysis System can directly measure RNA without the use of enzymes or amplification (except for single-cell applications), we believe that researchers view the nCounter Analysis System as providing an independent means of validating that observations made initially using RNA-Seq are real rather than artifacts associated with the complex series of steps necessary for sequencing. In addition, because the operation of our nCounter Analysis System is simple and intuitive, it provides a practical technology enabling the translation of potential biomarkers into diagnostic tests that can be performed in the clinical laboratory, after appropriate regulatory authorization.

The figure below illustrates the current and future uses of and opportunities for digital technology in translational genomics.

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Life Sciences Research

The nCounter Analysis System enables our life sciences research customers to conduct research on a scale that is well suited for pathway-based biology. The precision, ease of use and flexibility of our nCounter Analysis System allows researchers to efficiently test their hypotheses in thousands of different samples and is particularly useful for identifying networks of genes that characterize and predict disease.

Life Sciences Applications

Our nCounter Analysis System is capable of supporting a number of life sciences applications based upon the measurement of the concentration or amount of a target nucleic acid. Key applications currently supported include:

Gene Expression. Researchers use the nCounter Analysis System to measure the degree to which individual genes in pathways are turned on or off by simultaneously quantifying the amount of messenger RNA, or mRNA, associated with each of up to 800 genes.

Single Cell Gene Expression. Historically, most gene-expression profiling has been performed on populations of cells where observed expression levels represent an average of the unique expression states of each cell within the population. The nCounter Analysis System is capable of measuring gene expression of 20 to 800 genes from a single cell, thereby elucidating previously hidden relationships between individual cells within a population.

miRNA Expression. Researchers can use the nCounter Analysis System to measure the simultaneous expression levels of up to 800 different miRNAs. The nCounter Analysis System is capable of highly multiplexed, direct digital detection and counting of miRNAs in a single reaction without amplification, thereby delivering high levels of sensitivity, specificity, precision, and linearity. We currently enable miRNA experiments for use in tissue from humans, mice, rats, and fruit flies.

Copy Number Variation. Researchers can use the nCounter Analysis System to probe for structural variations that result in cells having an abnormal number of copies of one or more sections of the DNA. Researchers are able to conduct large-scale, statistically-powered studies of these copy number variations, or CNVs, by leveraging the nCounter Analysis System's multiplexing capacity to assay up to 800 DNA regions in a single tube, with as little as 300 ng of DNA.

We also support research directed toward particular gene fusions, gene-expression regulatory elements called long non-coding RNA, or lncRNA, and experiments based on a technique used to investigate the DNA targets of transcription factors called chromatin immunoprecipitation, or ChIP.

Case Studies

Our nCounter Analysis System allows researchers to efficiently probe multiple pathways over large number of samples, quickly generating large data sets. Since 2009, more than 220 peer-reviewed papers have been published by researchers using the nCounter Analysis System, including:

Vanderbilt-Ingram Comprehensive Cancer Center Resistance to Breast Cancer Chemotherapy. Approximately 70% of breast cancer patients do not respond completely to neoadjuvant chemotherapy. The goal of this study was to discover the genomic causes of chemotherapy resistance in breast cancer. Researchers designed a 355 gene CodeSet to probe biological pathways that had been associated with chemotherapy resistance in previous studies, and used the nCounter Analysis System to test formalin-fixed paraffin-embedded, or FFPE, tumor biopsies from 49 patients who had been previously treated with neoadjuvant chemotherapy. The data and analysis from this study made specific predictions concerning the mechanism of chemotherapy resistance in breast cancer, and resolved potentially prognostic biomarkers. The results suggest that patients with residual disease following neoadjuvant chemotherapy may benefit from receiving a drug targeted to inhibit a specific biological target, the tyrosine-threonine kinase known as MEK. This study was published in Nature Medicine Online in June 2012.

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Pfizer Oncology and Drug Safety Drug Mechanism-of-Action Testing and Biomarker Discovery. The goal of this study was to use a mouse model of human cancer, known as a xenograft, to help establish the mechanism-of-action for a potential breast cancer therapeutic in preclinical development, and to discover biomarkers for enrolling clinical studies. The researchers designed a custom CodeSet targeting 40 genes in the Notch signaling pathway, including receptors, ligands, and regulators. The researchers used the nCounter Analysis System to test tumor samples from 18 xenograft models, of which 10 had shown significant response to the potential therapeutic. The researchers found that the Notch pathway target gene expression correlated with the antitumor efficacy and can potentially serve as biomarkers for proof-of-mechanism and patient enrichment. This study was published in *Clinical Cancer Research* in July 2012.

The Broad Institute of Harvard and MIT Rapid Identification of Pathogens and Antibiotic Susceptibilities. The goal of this study was to provide proof-of-principle for using RNA transcript signatures to rapidly assess pathogens and antibiotic susceptibilities from a variety of difficult sample types, including blood and urine. This study explored an approach using mRNA detection because mRNA detection allows both genotypic and phenotypic organism response information to be obtained. Making extensive use of pathway-based biology and public-domain gene expression databases, the researchers designed a CodeSet containing approximately 110 gene targets covering different bacteria, viruses, fungi, and parasites. The nCounter Analysis System was then used to successfully screen for a broad spectrum of infectious agents in tissue samples. In addition, the bacterial mRNA response to a brief antibiotic pulse was demonstrated to rapidly differentiate drug-susceptible and drug-resistant organisms using blood and urine samples. The authors concluded from this work that transcriptional signatures could provide a standard approach applicable across a broad range of infectious diseases. This study was published in April 2012 in *Proceedings of the National Academy of Sciences*.

Memorial Sloan-Kettering Cancer Center Identification of Potential Drug Targets in Lung Cancer. The goal of this study was to discover potential therapeutic targets in lung cancer based on genomic aberrations called fusions in the genes coding for tyrosine kinase proteins. The researchers designed a CodeSet that simultaneously probed 93 kinases at both ends of the mRNA transcript. The researchers then scanned 69 frozen lung adenocarcinomas tumor samples for novel tyrosine kinase fusions by looking for those transcripts showing significantly fewer probes at one end of the transcript. Two novel fusion transcripts were found. One of these, the KIF5B-RET fusion, defines an additional subset of lung cancer that can now be targeted for potential therapeutic development. This work appeared in *Clinical Cancer Research* in October 2012.

Comprehensive Cancer Center of Ohio State University MicroRNAs and Cancer. The goal of this study was to understand the role of miRNA in the development and progression of a form of brain cancer known as glioblastoma multiforme, or GBM. Researchers used our Human miRNA Expression Assay panel, which simultaneously probes over 700 human and human-viral miRNAs, to scan for differences in miRNA expression between GBM cells in the presence or absence of P53 induction via Nutlin-3a. The researchers found that induction of P53 resulted in the repression of 17 miRNAs. The authors concluded that a combination of Nutlin-3a and two particular miRNAs, miR-25 and miR-32, may provide a route to therapeutic miRNA intervention in cancer. This study was published in April 2012 in *Proceedings of the National Academy of Sciences*.

Our customers have used the nCounter Analysis System to publish more than 220 peer-reviewed papers. In 2012 alone, our customers published more than 100 peer-reviewed papers incorporating data generated using the nCounter Analysis System. Approximately 30% of the 2012 papers were published in high-impact⁽¹⁾ journals that are most widely cited in the research community. The most frequent topic of nCounter-based peer-reviewed publications is cancer research, including biomarker discovery and validation. Other frequent topics include immunology and inflammation, infectious disease and developmental and cell biology.

⁽¹⁾ Science, Nature, Cell, PNAS, or affiliated scientific journals with a SCImago Journal Rank indicator of 5.0 or greater. SCImago. (2007). SJR SCImago Journal & Country Rank. Retrieved March 12, 2013, from <http://www.scimagojr.com>.

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Consumables

Following their purchase of our nCounter Analysis System, our life sciences research customers purchase consumables from us consisting of CodeSets and other consumables that are designed for the specific experiment that they intend to run. Our instruments are designed to be used only with our consumables. This closed system model generates recurring revenue from each instrument we sell. We believe that our recurring consumable revenue is driven by our customers' ability to extract value from up to 800 data points per sample and to process hundreds of samples in a relatively short period of time with little hands-on preparation using our nCounter Analysis System, enabling them to process more units of consumables per unit of time.

Molecular Diagnostics

We believe that the attributes that make the nCounter Analysis System attractive to researchers also have the potential to make the system attractive to hospitals and clinical laboratories that desire to conduct molecular diagnostic tests. Once approved for a particular diagnostic test, the precision, ease of use and flexibility of the nCounter Analysis System will allow medical technicians in pathology labs to conduct complex molecular diagnostic tests with minimal training.

Prosigna is designed to address the limitations of first-generation tests, including:

Fewer Intermediate Risk Patients in Node-Negative Disease. In our TransATAC study, Prosigna was performed on material extracted from tumor samples from more than 1,000 evaluable patients that were previously analyzed using Genomic Health's Oncotype DX, a widely-used first-generation test that is offered as a laboratory-developed test. Each patient in the study was assigned to a risk group based on risk estimates generated separately by Prosigna and Oncotype DX, and using prospectively defined risk cutoffs. Cutoffs for low, intermediate and high were <10%, 10% to 20% and >20% estimated risk of recurrence, respectively. In a comparison of the sizes of the risk groups in patients with node-negative disease, Prosigna assigned 26% fewer patients to an intermediate score than Oncotype DX. The reduction in the size of the intermediate risk group in node-negative patients is a result primarily of Prosigna's ability to reclassify patients that are classified by Oncotype DX as intermediate risk to high risk. We believe this study provides evidence of Prosigna's potential ability to clarify treatment decisions.

Available on a Decentralized Basis. Prosigna will be available for use on the nCounter Analysis System on a distributed basis in the clinical laboratories of hospitals and medical centers worldwide, which aligns Prosigna with the evolving trend towards decentralized testing. We believe that by distributing molecular diagnostics to local labs, we will provide faster turnaround for patients and enable succinct, comprehensive reports from pathologists, resulting in enhanced patient care. We also believe that this model will increase the degree to which clinical laboratories can profit by providing molecular diagnostic testing services. In addition, our decentralized model can help address the needs of patients outside of the United States by enabling local laboratories to provide testing.

Potentially More Treatment Decisions. Prosigna measures the expression of up to 50 genes, providing a more detailed profile of the biology of a patient's tumor than the first-generation tests. In addition, Prosigna utilizes the concept of intrinsic subtypes, a fundamental method of classifying breast tumors into the four distinct subtypes of that disease. By providing a more detailed view of tumor biology and determining the intrinsic subtype of breast cancer patients, Prosigna has the potential to inform not only the decision of whether to administer adjuvant chemotherapy, but also potentially inform other important treatment decisions. These decisions may include the selection of specific adjuvant chemotherapy for individual patients, the duration of adjuvant endocrine therapy, and the use of adjuvant radiation therapy. We intend to perform clinical studies validating Prosigna's ability to inform additional treatment decisions, and to seek a PMA to enable Prosigna to report these intrinsic subtypes for use in informing clinical decisions within the United States.

We believe that the strengths of our diagnostics platform, which will enable us to commercialize Prosigna on a decentralized basis, could be applied to other cancers after securing the requisite regulatory authorizations. Over time, we intend to identify other tests and develop them for use on our nCounter Analysis System.

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Our Strategy

Our goal is to provide products that empower scientists to understand the molecular basis of disease and empower physicians to put genomic medicine into practice. To accomplish this goal, we intend to continue providing technologies that are powerful enough for research, yet simple and robust enough for use in clinical laboratories worldwide.

Our strategy includes the following key elements:

Establish the nCounter Analysis System as the Global Standard for Gene Expression Analysis. We will promote the power of pathway-based biology and the benefits of digitally-quantified gene expression. One element of this strategy is to recognize and publicize the breadth of scientific achievements and peer-reviewed publications in top-tier journals based on our nCounter Analysis System. Since 2009, more than 220 peer-reviewed papers have been published by researchers using the nCounter Analysis System. We plan to also highlight successful examples of using the nCounter Analysis System to translate research discoveries into diagnostic tests, beginning with Prosigna as well as future examples as they emerge.

Expand the Installed Base of the nCounter Analysis Systems in Biopharmaceutical and Academic Research. We will continue to engage with researchers through direct sales efforts in North America and Europe, increasing the installed base of our nCounter Analysis Systems. We will target translational researchers in genome centers, academic medical centers and biopharmaceutical companies. We will continue to focus primarily on cancer researchers, because these researchers recognize the significant value of our technology when analyzing small biopsy samples stored in challenging formats such as FFPE. We also intend to expand our existing geographic reach, both directly and through distributors.

Broaden the Addressable Market of the nCounter Analysis System through Continued Innovation. We will continue to invest in product development efforts that increase the capabilities of our nCounter Analysis System and expand the universe of potential customers. We expect that these investments will lead to additional protocols, enhanced chemistries, and new generations of instruments and software. We will prioritize innovations that increase the flexibility of the nCounter Analysis System to process small and degraded samples, and increase the ease and speed with which users can select target genes and design CodeSets for their particular experimental needs. We will also prioritize innovations that are expected to reduce the cost and footprint of the nCounter Analysis System, which will help us to target a broader range of customers.

Build a Menu of Proprietary Diagnostics in Collaboration with Researchers. We intend to continue cultivating relationships with leading researchers who are working to establish the connection between genomics and clinical decision-making, many of whom are already using the nCounter Analysis System today in their translational research. When these researchers invent new diagnostic methods, we intend to selectively gain exclusive access to these clinically valuable gene signatures through licensing and collaboration arrangements. For example, the intellectual property that forms the basis of Prosigna was in-licensed from Bioclassifier, LLC, which was founded by several of our life sciences research customers. In addition, in February 2013, we secured an option from The Broad Institute to acquire an exclusive worldwide license for a gene signature that could be used, after appropriate regulatory authorization, for a second molecular diagnostic product focused on hepatocellular carcinoma, or HCC. We will seek to enter into similar arrangements with our life sciences research customers and other researchers for future diagnostic gene signatures. Our strategy is to target intellectual property rights to potential diagnostic methods that are well understood, have the potential to facilitate changes in treatment with a major impact on outcome and cost, have the potential to support value-based pricing, and for which tissue samples for clinical validation are readily available. This disciplined approach is designed to efficiently focus our research and development investment on the development of potential products, rather than discovery of new gene signatures. Our initial focus will be on cancer gene signatures with the goal to individualize major treatment decisions so that patients are more likely to receive only those interventions from which they are likely to benefit.

Execute High Quality Clinical Studies to Support Regulatory Authorizations, Market Adoption and Reimbursement of Diagnostic Products. For each diagnostic product we intend to develop, we plan to design

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and execute clinical programs that achieve high standards of clinical evidence. Whenever possible, these programs will be designed to achieve Level 1 clinical evidence, the standard generally required for inclusion in clinical practice guidelines. We will take advantage of tissue samples and outcomes from past controlled randomized clinical studies wherever possible. This strategy has been demonstrated in the first two studies for Prosigna where we were able to access the tissue and outcome information from breast cancer drug trials that totaled more than 2,400 evaluable patients.

Enable Clinical Laboratories Worldwide to Provide Complex Genomic Testing Using Our In Vitro Diagnostic Products. We intend to offer diagnostic tests to clinical laboratories worldwide by distributing a menu of nCounter Analysis System-based *in vitro* diagnostic kits. Our strategy is to drive improved and more efficient clinical decisions while allowing laboratories to profit from the valuable testing services enabled by our technology. By providing the nCounter Analysis Systems to labs that already conduct most of the diagnostic testing and control access to tissue samples, we intend to enable pathologists and labs to provide advanced genomic testing that previously required the shipment of tissue samples to a centralized lab.

Drive Physician Demand for nCounter Analysis System-Based Diagnostic Products. We will continue to establish a commercial organization that will seek to both build an installed base of nCounter Analysis Systems in clinical laboratories in regions where we have secured the necessary regulatory authorizations, and drive orders for nCounter Analysis System-based diagnostic tests toward those laboratories. Our sales force will directly target its efforts on the oncologists and pathologists, and will adopt promotional and marketing practices that have been employed successfully by the biopharmaceutical industry to educate treating physicians on the ability of our molecular tests to inform treatment decisions in accordance with the product labeling. We will communicate with patients, oncologists, pathologists, hospital administrators and other key stakeholders to outline the clinical and economic advantages of bringing complex genomic tests in-house.

Capture Capital Efficiencies Stemming from our Diagnostics Business Model. We plan to leverage the capabilities we have built to support our life sciences business, including our technology platform and product development, manufacturing, and administrative functions, to build our diagnostics business at minimal incremental cost. We will rely on the clinical laboratory infrastructure, sample logistics, managed care contracting and billing operations of our laboratory service customers, further reducing our capital requirement. We intend to coordinate commercial efforts with the sales and marketing personnel of the clinical laboratories offering clinical testing services based on our diagnostic products. We believe that this approach will yield a diagnostics business model that is more capital efficient than a clinical laboratory services model and has the potential to become profitable on a relatively small revenue base.

Our Products and Technology

The fundamental technology employed in our nCounter Analysis System was conceived at the Institute for Systems Biology in the laboratories of Dr. Leroy Hood, a renowned pioneer in genomics and personalized medicine. Our life sciences research customers purchase instruments from us and then purchase our panels or custom CodeSets and related consumables for the specific experiment they wish to conduct. Beginning with Prosigna, our future diagnostics customers will either purchase or lease instruments from us and also purchase one of our diagnostic kits for each test that they intend to run.

nCounter Analysis System

The nCounter Analysis System is an automated, multi-application, digital detection and counting system consisting of one or more nCounter Prep Stations and one nCounter Digital Analyzer.

Instruments and Software

The nCounter Prep Station is the automated liquid handling component of the nCounter Analysis System that processes samples after they are hybridized and prepares the samples for data collection on the nCounter

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Digital Analyzer. The nCounter Digital Analyzer collects data from samples by taking images of the immobilized fluorescent reporters in the sample cartridge and processing the data into output files, which include the target identifier and related count numbers along with a broad set of internal controls that validate the precision of each assay. The currently available nCounter Prep Station and nCounter Digital Analyzer were designed and are manufactured under ISO 13485:2003, the quality standard for *in vitro* diagnostic platforms and medical devices. We also provide our customers with the nSolver Analysis Software, a data analysis program that offers nCounter Analysis System users the ability to quickly and easily quality check, normalize, and analyze their data without having to use any additional software for data analysis.

Simple and Rapid NanoString Workflow

The nCounter Analysis System's simple three step workflow takes approximately 24 hours and requires approximately 15 minutes of hands-on time by the user:

during step 1, up to 12 targeted tissue samples, or up to 48 samples with sample multiplexing, and our CodeSets or diagnostic kits are injected into strip tubes that we provide and allowed to hybridize overnight;

in step 2, the strip tube is loaded into our nCounter Prep Station, which purifies the mixtures and moves them onto a cartridge with 12 flow-cells where the fluorescent barcodes are captured and affixed onto a glass surface of the cartridge and oriented in one direction; and

in step 3, the cartridge is placed into our nCounter Digital Analyzer, which uses fluorescent microscopy and image analysis software to automatically count the barcodes and provide the level of expression of each target in the sample.

A user can process up to approximately 36 samples per day by installing one Prep Station with a single Digital Analyzer. One can increase the number of samples analyzed to 108 samples per day on a single Digital Analyzer if it is coupled with three Prep Stations. The throughput of the nCounter Analysis System can be quadrupled using sample multiplexing for experiments targeting 200 genes or fewer.

Life Sciences Research

Following purchase of our nCounter Analysis System, life sciences research customers purchase panels and custom CodeSets targeted to a specific experiment.

Panels

We offer more than 20 panels that are pre-manufactured and targeted to a specific experiment, including the following:

Gene Expression Panels. Preassembled CodeSets that include all of the consumables required to perform the assay on the nCounter Analysis System. We offer nCounter Gene Expression Panels to conduct a wide variety of gene analysis, including analysis of kinase genes, cancer-related human genes, immunology-related genes, and inflammation-related genes.

miRNA Expression Assay Kits. A family of panels that provide a cost-effective profiling solution capable of highly multiplexed, direct digital detection and counting of up to 800 miRNAs in a single reaction without amplification. These provide our customers with high levels of sensitivity, specificity, precision, and linearity. Separate panels are available for use with samples from humans, mice, rats, and fruit flies.

Cancer Copy Number Variation Panel. Allows researchers to conduct large-scale, copy number variation projects by leveraging the nCounter Analysis System's multiplexing capacity to assay up to 800 regions in a single tube, with as little as 300 ng of starting material.

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nCounter Leukemia Fusion Gene Expression Assay Kit. A panel that allows researchers to profile a broad set of fusion genes which result from balanced translocations in different leukemia subtypes. In addition to fusion genes, the kit includes probes for 11 wild-type genes involved in translocations and 12 leukemia-related biomarkers.

Human Karyotype Panel. Allows for the simultaneous measurement of all 23 pairs of human chromosomes, including 338 individual regions.

Custom CodeSets

We also work with our customers to develop custom CodeSets to enable them to evaluate specific genes that are the subject of their study. Our customers provide us a list of targets for which we subsequently build a unique CodeSet. Our design process leverages full length sequences for the DNA or RNA molecules that our customers are interested in detecting and prevents cross hybridization to non-target molecules in the sample. The custom CodeSet design process occurs in four distinct steps:

Master Kits

Our nCounter Master Kit includes all of the ancillary reagents and plasticware required for our customers to be able to setup and process samples in the nCounter Prep Station and nCounter Digital Analyzer. The components of the Master Kit include the sample cartridge, strip tubes, tips, buffers, and reagent plates.

Molecular Diagnostics

Our nCounter Analysis System's ability to simultaneously quantify gene expression on tens or hundreds of genes from minimal amounts of FFPE tissue make it well suited for profiling pathway activation in tumor samples. In addition, the nCounter Analysis System has the precision, reproducibility, and simple workflow required of technologies used in clinical laboratories.

We intend to develop and sell diagnostic kits for use in molecular diagnostic testing in clinical laboratories worldwide beginning with Prosigna. Following purchase or lease of our nCounter Analysis System, our future diagnostics customers will purchase *in vitro* diagnostic kits for use in testing patient samples. These customers will use the nCounter Analysis System and *in vitro* diagnostic kits to provide clinical diagnostic services. Initially, Prosigna will be the only kit available for diagnostic use on our nCounter Analysis System. Over time, we intend to develop, obtain regulatory authorization for, and sell additional kits, each of which will enable a unique diagnostic test.

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Informing Breast Cancer Treatment using the PAM50 Gene Signature

In 2009, leading cancer researchers first described a new gene expression signature, called PAM50, based on the expression of 50 genes in tumor tissue. PAM50 provides two types of information regarding a breast cancer patient's tumor. First, PAM50 assigns each patient's tumor to one of four intrinsic subtypes, a classification based on the fundamental biology of that individual's breast tumor. Second, PAM50 provides a prognostic risk of recurrence, or ROR, score that assesses the probability that a cancer will recur in the future in patients who will be treated with hormonal therapy.

The intrinsic subtypes of breast cancer were first described in 2000 and have been repeatedly observed across multiple studies and technology platforms. Each patient's breast cancer can be classified into one of four intrinsic subtypes (Luminal A, Luminal B, HER2-enriched, and Basal-like) that describe the fundamental biology of the tumor, conveying valuable information about an individual patient's prognosis and likelihood of response to specific therapies. In June 2011, the widely-recognized St. Gallen International Breast Cancer Treatment Guidelines adopted the intrinsic subtypes as a standard approach to classifying early stage breast cancer, and in general, the basis for systemic therapy recommendations. The PAM50 gene signature represents a molecular approach to intrinsic subtyping and has been described in multiple peer-reviewed publications.

In September 2012 the online edition of the journal Nature published a study of the molecular biology of breast cancer, using the intrinsic subtypes as defined by the PAM50 gene signature as an organizing framework for analyzing genomic and proteomic aberrations. This study, which was an outcome of The Cancer Genome Atlas Initiative and was titled "Comprehensive molecular portraits of human breast tumours," represents a thorough description of breast cancer genomics. The study involved the analysis of tissue from 800 breast cancer tumors by a total of six technology platforms, covering genomics, epigenetics, and proteomics. The research concluded that diverse genetic and epigenetic alterations converge phenotypically into the four main breast cancer subtypes defined by PAM50.

Studies using PAM50 and other methods for assigning intrinsic subtype have suggested that PAM50 may be useful in improving several treatments decisions in breast cancer by:

providing prognostic information that may help physicians and patients decide whether the addition of adjuvant chemotherapy to hormonal therapy is appropriate;

providing prognostic information that may help physicians and patients decide whether extended endocrine therapy is appropriate;

providing information that may help physicians choose which adjuvant chemotherapy regimen to select for an individual patient; and

providing information that may help physicians and patients decide whether adjuvant radiation therapy is appropriate.

Development and Validation of the Prosigna Breast Cancer Assay

In 2010, we acquired an exclusive worldwide license to develop *in vitro* diagnostic and research products for breast cancer based on the PAM50 gene signature. In 2010, we began developing an *in vitro* diagnostic kit based on the PAM50 gene signature, simplifying and optimizing the test for use on the nCounter Analysis System. In 2011, we performed the first in a series of clinical studies designed to validate the test's ability to provide prognostic information for postmenopausal women with HR+ early stage breast cancer treated with endocrine therapy alone using material extracted from tumor samples from 1,017 patients from the TransATAC population of which 1,007 samples passed prespecified criteria and yielded evaluable results. TransATAC is a translational study group that has used the tumor tissue and data from a subset of the 9,366 women enrolled (1996-2000) in the ATAC (Arimidex, Tamoxifen, Alone or in Combination) trial to study the molecular characteristics of tumors in postmenopausal women with HR+ early stage breast cancer of pathological grade 1, 2 or 3. Access to the samples is controlled by a steering committee of the TransATAC study group. In 2010, we submitted a proposal to the steering committee seeking access to the samples and data to validate Prosigna, and our proposal was approved. In 2011, we jointly designed the study with a member of the TransATAC study

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group who subsequently served as the lead investigator in our study. Following the steering committee's approval of our proposed study, we agreed to cover the costs of the study. The TransATAC population had been previously used in 2008 to clinically validate the current market leader in breast cancer prognosis and prediction, Genomic Health's *Oncotype DX*, which is a laboratory-developed test that is administered using a centralized laboratory service model. Our study used RNA that had been extracted by Genomic Health from 1,017 tumor samples from patients with postmenopausal HR+ early stage breast cancer during the 2008 study. Because both the *Oncotype DX* results and the outcomes of the patients associated with each RNA sample were known, the study provided an opportunity to measure both the ability of PAM50 to provide prognostic information, and how the prognostic information provided by Prosigna compares to data previously collected using *Oncotype DX*. Results of our TransATAC study were presented in December 2011 at the CTRC-AACR San Antonio Breast Cancer Symposium and in March 2013 a manuscript describing the results was accepted for publication in the *Journal of Clinical Oncology*.

In 2012, we performed a second clinical validation study to test the ability of Prosigna to estimate the prognosis of postmenopausal women with HR+ early stage breast cancer treated with endocrine therapy alone that evaluated tumor samples from 1,620 patients enrolled in the Austrian Breast & Colorectal Cancer Study Group 8, or ABCSG8, trial, of which 1,478 samples passed prespecified criteria and yielded evaluable results. The ABCSG8 trial enrolled 3,714 women (1996-2003) to compare the safety and efficacy of tamoxifen alone to sequential treatment with tamoxifen followed by anastrozole in postmenopausal women with HR+ early stage breast cancer of pathological grade 1 or 2. Access to the ABCSG8 samples and data is controlled by the chairman of the ABCSG, who, in 2010, agreed to collaborate with us as the lead investigator on a study to validate Prosigna. In 2011, we jointly designed the study with him and agreed to cover the costs of the study. Investigators at the British Columbia Cancer Agency, or BCCA, performed the Prosigna test using the nCounter Analysis System installed in BCCA's Center for Translational and Applied Genomics on tumor samples which had been stored in FFPE format from participants in the original ABCSG8 study. Results of our ABCSG8 study were presented in December 2012 at the CTRC-AACR San Antonio Breast Cancer Symposium.

Beginning in 2012, we planned and executed a series of prospectively defined analyses of the data sets from the ATAC and ABCSG8 trials designed to clinically validate additional features and benefits of Prosigna. Results from three of these analyses have been presented publicly at medical meetings. At the European Society of Medical Oncology meeting in September 2012, the investigators of our TransATAC study presented results indicating that the ROR score provided by Prosigna adds significant prognostic information to clinical-pathology variables for recurrence between five and 10 years after diagnosis, which is often referred to as late recurrence. In May 2013, a manuscript describing these results was accepted for publication in the *Journal of the National Cancer Institute*. At the IMPAKT Breast Cancer Conference in May 2013, the investigators of our TransATAC study and our ABCSG8 study presented additional analyses providing further evidence that Prosigna provides valuable information that could assist with treatment decisions by helping to identify patients at highest risk of this late recurrence. In addition, the results of an analysis of the combined data set of the ABCSG8 and ATAC studies was presented during the 2013 Annual American Society of Clinical Oncology, or ASCO, Meeting in June 2013 and demonstrated that Prosigna can identify a clinically significant number of low risk patients with one or two positive nodes. Several additional analyses of the ABCSG8 and ATAC studies are planned or ongoing.

In 2012, we performed a series of multi-site analytical validation studies intended to show that Prosigna provides consistent and reliable results, independent of the specific instrument, laboratory or operator performing the testing. We presented results from these analytical validation studies in March 2013 at the United States & Canadian Academy of Pathology annual meeting.

Clinical Validation of Prosigna for Indicating Prognosis in Postmenopausal HR+ Early Stage Breast Cancer Patients

Our TransATAC and ABCSG8 studies were performed using similar statistical analysis plans, allowing results on the prognostic performance of Prosigna in each study to be compared. Both studies met their primary and secondary objectives, and the data support the following conclusions:

in satisfaction of the primary objective of both studies, the ROR score was significantly related to outcome, and added significant prognostic information about 10 year distant recurrence risk to standard

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clinical-pathological variables in the study populations as a whole. In satisfaction of a secondary objective of both studies, similar results were achieved in all three prospectively defined clinically important subsets of patients: node-negative, node-positive and HER2-negative;

in satisfaction of the primary objective of our ABCSG8 study, the low, intermediate, and high risk patient groups as defined by Prosigna had different distant recurrence free survival rates at 10 years in the study population as a whole, showing that Prosigna can accurately categorize patients based on prognosis; and

in satisfaction of a secondary objective of both studies, patients with different intrinsic subtypes as reported by Prosigna had significantly different outcomes when treated with endocrine therapy alone, reinforcing the power of intrinsic subtyping as a descriptor of breast cancer tumor biology.

When taken together, we believe that our TransATAC and ABCSG8 studies provide strong evidence for Prosigna's clinical validity. The following tables and figures summarize the prognostic performance of Prosigna.

Prosigna's ROR score is significantly related to outcome in both node-negative and node-positive breast cancer patients (TransATAC study)

These curves illustrate the relationship of the ROR score to 10 year risk of distant recurrence in node-negative patients, patients with one to three positive nodes and patients with four or more positive nodes in the TransATAC population. In each subset of patients, as the ROR score increases, so too does 10 year risk of distant recurrence.

Prosigna adds statistically significant prognostic information beyond standard clinical-pathological variables in both studies

Patient population	Number of patients	TransATAC		Number of patients	ABCSG8	
		DLR-X ²	p-value		DLR-X ²	p-value
All evaluable	1,007	34.2	<0.0001	1,478	53.5	<0.0001
Node-negative	739	25.0	<0.0001	1,047	25.6	<0.0001
Node-positive	268	9.3	0.0023	382 ⁽¹⁾	26.0	<0.0001
Her2-negative	888	28.9	<0.0001	1,397	47.5	<0.0001

(1) Includes patients with only one to three positive nodes.

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The above table shows the prognostic information provided by the ROR score in the TransATAC and ABCSG8 study populations. The statistic DLR-X² measures the amount of prognostic information which the ROR score provides beyond the standard clinical-pathological variables. Since statistical significance is defined as p<0.05, these studies showed that the ROR score is significantly related to outcome and adds statistically significant prognostic information about 10 year distant recurrence risk to standard clinical-pathological variables in the study population as a whole and in all three prospectively defined clinically important subsets of patients in both studies.

Prosigna's risk groups have statistically significant different outcomes in the study populations as a whole

Risk Group	TransATAC Estimated DRFS at			ABCSG8 Estimated DRFS at		
	Number of Patients (%)	10 years		Number of Patients (%)	10 years	
		Percent [95% CI] ⁽¹⁾	p-value ⁽²⁾		Percent [95% CI] ⁽¹⁾	p-value ⁽²⁾
Low	437 (43%)	96% [94%-98%]	<0.0001	502 (34%)	97% [95%-98%]	0.0093
Intermediate	254 (25%)	86% [81%-90%]	NA	478 (32%)	91% [88%-94%]	NA
High	316 (31%)	63% [57%-69%]	<0.0001	498 (34%)	80% [76%-83%]	0.0004
<i>Total</i>	<i>1,007 (100%)</i>			<i>1,478 (100%)</i>		

(1) DRFS = Distant Recurrence Free Survival; CI = Confidence Interval.

(2) P-value calculated based on comparison to intermediate risk group.

The above table illustrates the result that in both studies the Prosigna-defined risk groups in the study populations as a whole have different 10 year distant recurrence free survival rates. In both studies, the low and high risk groups showed distant recurrence free survivals with statistically significant differences from the intermediate risk group.

Patients with node-negative disease categorized as Luminal A subtype had higher distant recurrence free survival than those categorized as Luminal B subtype

Subtype	TransATAC Estimated DRFS at			ABCSG8 Estimated DRFS at		
	Number of Patients (%)	10 years		Number of Patients (%)	10 years	
		Percent [95% CI] ⁽¹⁾	p-value ⁽²⁾		Percent [95% CI] ⁽¹⁾	p-value ⁽²⁾
Luminal A	529 (72%)	94% [92%-96%]	NA	725 (69%)	95% [93%-96%]	NA
Luminal B	176 (24%)	74% [68%-81%]	<0.0001	284 (27%)	87% [83%-90%]	0.0019
<i>Total⁽³⁾</i>	<i>705 (95%)</i>			<i>1,009 (96%)</i>		

(1) DRFS = Distant Recurrence Free Survival; CI = Confidence Interval.

(2) P-value calculated based on comparison to Luminal A group.

(3)

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Total number of patients is less than 100% of evaluable patients because a small number of patients were categorized as Basal-like or HER2-enriched subtypes.

The above table illustrates the result that in both studies intrinsic subtypes as defined by Prosigna in the node-negative patients have different 10 year distant recurrence free survivals. In each study, patients categorized as Luminal A have a statistically significantly higher estimated distant recurrence free survival at 10 years than patients categorized as Luminal B.

Comparison of Prosigna and Oncotype DX Performance in Our TransATAC Study

The TransATAC population had been previously used in 2008 to clinically validate the current market leader in breast cancer prognosis and prediction, Genomic Health's Oncotype DX, which is a laboratory-

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developed test that uses a centralized laboratory service model. The PAM50 study used RNA that had been extracted by Genomic Health from 1,017 tumor samples from patients with postmenopausal HR+ early stage breast cancer during the 2008 study. Because both the *Oncotype DX* results and the outcomes of the patients associated with each RNA sample were known, the study provided an opportunity to measure how the prognostic information provided by Prosigna compares to that provided by *Oncotype DX* in this study population.

In order to compare how the two tests separated patients according to risk in this study, risk groups were defined based on each test's estimate of the risk of distant recurrence at 10 years within the TransATAC population. Risk score thresholds to define the risk groups were chosen for each test based on the results of our TransATAC study in order to define risk groups that contain patients with the same risk. In order to achieve these comparable risk groups, the cut points used for *Oncotype DX* were different than those used by Genomic Health.

For each test, the low risk group was prospectively defined as patients with less than a 10% estimated risk of recurrence. For each test, the intermediate risk group was prospectively defined as patients with between a 10% and 20% estimated risk of recurrence. For each test, the high risk group was prospectively defined as patients with greater than a 20% estimated risk of recurrence. The figure below summarizes the sizes and outcomes of the risk groups defined by each test in patients with node-negative disease.

Prosigna's ROR score identified more high risk patients and fewer intermediate risk patients than

Oncotype DX's RS score in this study in patients with node-negative disease

This figure illustrates the result that, in patients with node-negative disease, Prosigna assigned 26% fewer patients to the intermediate risk group than did *Oncotype DX* (180 patients vs. 243 patients) in this study. In addition, in patients with node-negative disease, Prosigna assigned more patients to the high risk group than did *Oncotype DX*; however, the low risk and high risk groups defined by each test have similar outcomes as illustrated by the overlapping Kaplan-Meier curves. This observation led the independent investigators of our TransATAC study to conclude that, in patients with node-negative disease, Prosigna assigned fewer patients to the intermediate risk group than *Oncotype DX* RS, with equivalent or higher separation between the low and high risk groups.

Clinical validation of Prosigna ability to help identify node-positive early-stage breast cancer patients at low risk of recurrence

In June 2013, we presented results from the combined data analysis of the ATAC and ABCSG8 studies at the Annual American Society of Clinical Oncology, or ASCO, meeting. These results were derived from the analysis of the combined data set and long term follow-up from 2,485 patients in the ABCSG8 and ATAC studies. Node-positive patients in the combined data set were grouped into one of three categories based on the number of positive nodes.

According to current treatment guidelines by the National Comprehensive Cancer Network, or NCCN, postmenopausal women with node-positive, HR+ early-stage breast cancer should be considered high risk and should receive adjuvant chemotherapy in addition to five years of endocrine therapy. The results of both randomized clinical studies and meta-analyses suggest that a substantial portion of women with node-positive

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disease may be adequately treated with adjuvant endocrine therapy alone. However, identifying these low risk node-positive patients has been challenging due to the heterogeneity of the node-positive patient population, which includes patients with different numbers of positive lymph nodes and diverse tumor genomics.

The objective of the new study was to determine whether the risk score provided by Prosigna provides additional prognostic information for risk of metastasis over and above standard clinical variables alone in patients with either one positive lymph node, or two to three positive lymph nodes. Of all the patients in the study with one positive node, 40% were categorized as low-risk based on their risk score and experienced an absolute 10-year risk of distant recurrence rate of 6.6%, while 71% were categorized as Luminal A subtype and experienced an absolute 10-year risk of distant recurrence of 8.4%. Separately, the analysis also demonstrated that patients with the Luminal A subtype have statistically significant different risk of metastasis than Luminal B.

The investigators in this study concluded that Prosigna helped identify a subset of postmenopausal women with node-positive HR+ early stage breast cancer, including patients with one positive node, as well as some with two positive nodes that had a low risk of recurrence. The authors concluded that identifying this subset of patients may help physicians assess treatment options, including whether the patients might be adequately treated with adjuvant endocrine therapy alone.

Clinical Validation of Prosigna for Indicating Risk of Late Recurrence in Postmenopausal HR+ Early Stage Breast Cancer

Despite recent improvements in breast cancer treatment, some women with HR+ early-stage breast cancer remain at risk of disease recurrence after remaining recurrence-free for the first five years following diagnosis. Identifying newly diagnosed women with HR+ breast cancer who are at highest risk of having their cancer recur between five and 10 years after diagnosis is a priority for oncologists seeking to help breast cancer patients make more informed treatment decisions. These patients may benefit by extending the duration of their adjuvant endocrine therapy beyond five years.

The ability of Prosigna to estimate risk of recurrence between five and 10 years after diagnosis in postmenopausal women with HR+, node-positive and node-negative early-stage breast cancer has been demonstrated in two independent studies. Results from both of these studies were presented at the IMPAKT Breast Cancer Conference in May 2013.

In one study, the investigators of our TransATAC study assessed and compared the value of five different prognostic scores for indicating risk of distant recurrence in the first five years after diagnosis, and between five and 10 years after diagnosis, for all patients in the ATAC trial. In a multivariate analysis, the ROR score was one of only two genomic prognostic scores that provided additional prognostic information regarding risk of distant recurrence between five and 10 years.

In a second study, the investigators of our ABCSG8 study found that the ROR score provided by Prosigna added prognostic information about the risk of late recurrence of breast cancer to the standard pathological variables in a study population including 1,478 postmenopausal women with hormone receptor positive, node-positive and node-negative early-stage breast cancer who participated in the ABCSG8 trial ($p < 0.0001$). Patients with no recurrence by year five and categorized as low risk based on the ROR score had Distant Recurrence Free Survival, or DRFS, of 98.7% at year 10, while patients with no recurrence by five years and categorized as high risk based on the ROR score had DRFS of 91.5% at year 10. These investigators concluded that, in combination with the late recurrence results from the TransATAC study, Prosigna's ability to indicate risk of late recurrence in postmenopausal HR+ early stage breast cancer has achieved Level 1 clinical evidence, the standard generally required for inclusion in clinical practice guidelines.

Multi-site analytical validation of Prosigna.

Regulatory clearance or approval for *in vitro* diagnostic kits generally requires studies that demonstrate that a diagnostic test can be reliably run in multiple qualified laboratories with adequate precision and reproducibility. In 2012, we performed a series of multi-site analytical validation studies intended to show that Prosigna provides consistent and reliable results, independent of the specific instrument, laboratory or operator performing the

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testing. The results of these studies were presented publicly at the United States & Canadian Academy of Pathology annual meeting in March 2013. These results support the ability of the Prosigna assay to generate consistent results when used in qualified clinical labs in different cities and countries.

The objective of these studies was to assess the analytical robustness of Prosigna when used in qualified clinical laboratories. Prosigna assays were run independently at three different testing sites by a total of six different operators using three different reagent lots. Reproducibility was assessed by testing multiple tissue sections from each of 43 FFPE breast tumor blocks across the three sites following review of hematoxylin and eosin stained slides by an independent pathologist at each site. The magnitude of different sources of analytical variation in the assay were further characterized by testing five pooled breast tumor RNA samples more than 100 times each.

When starting with FFPE tissue blocks, these studies showed that Prosigna's reproducibility, including all analytical and pre-analytical variables, was characterized by a total standard deviation of just 2.9 ROR units on a zero-to-100 scale. In addition, there was an average site-to-site concordance of 97% in reporting of intrinsic subtype. When starting from pooled RNA, Prosigna's precision was characterized by a total standard deviation of less than 1 ROR unit. There was no statistically significant bias in results between sites or operators.

Prosigna in the European Union and Other Countries that Recognize the CE Mark.

In September 2012, we obtained CE mark designation for Prosigna for use as a semi-quantitative *in vitro* diagnostic assay using the gene expression profile of cells found in FFPE breast tumor tissue to assess the 10 year risk of distant recurrence in postmenopausal women with HR+ early stage breast cancer treated with endocrine therapy alone. This CE-marked product is indicated for use in patients with either node-negative or node-positive disease, and provides physicians and their patients with the intrinsic subtype of a patient's breast cancer tumor, ROR score, and risk category (high/intermediate/low). In February 2013, we began marketing this test in Europe, including in France, Germany, Italy, Spain and the United Kingdom, and Israel. In April 2013, we installed the first diagnostic systems in Europe, which will initially be used for clinical studies of Prosigna's impact on adjuvant treatment decisions in early stage breast cancer called decision impact studies. The list price of Prosigna kits in Europe is the equivalent of \$1,550 per patient.

Prosigna in the United States.

In December 2012, we submitted an application, known as a 510(k), to the FDA seeking clearance in the United States for a version of Prosigna providing an assessment of a patient's risk of recurrence for breast cancer. In March 2013, we received a written response from the FDA requesting additional information for its review of our 510(k) submission. A request for additional information is common following an initial 510(k) submission. In May 2013, we submitted an initial response to the FDA's request for additional information and met with the FDA to discuss our response. If the FDA clears Prosigna, we intend to launch Prosigna in the United States promptly following receipt of such clearance. We are currently planning for this commercial launch in the first quarter of 2014. For this clearance, we are pursuing an intended use as a prognostic indicator for distant recurrence free survival at 10 years in postmenopausal women with HR+ early stage breast cancer treated with adjuvant endocrine therapy alone, when used in conjunction with other clinicopathological factors. We are seeking an intended use in patients with node-negative disease and patients with node-positive (between one and three affected nodes) disease. To obtain 510(k) clearance, a manufacturer must submit a premarket notification demonstrating to the FDA's satisfaction that the proposed device is substantially equivalent in intended use and in safety and effectiveness to a previously 510(k) cleared device or a device that was in commercial distribution before May 28, 1976 for which the FDA has not yet called for submission of PMA applications. The previously cleared device is known as a predicate. For additional information about the FDA's 510(k) clearance process, please see the section of this prospectus captioned "Business - Government Regulation." Based on pre-submission interactions with the FDA and the FDA's written response to our 510(k) submission, we expect Agendia's MammaPrint to serve as the legally marketed predicate that would enable us to market a version of Prosigna in the United States that, if cleared, would provide an assessment of a patient's risk of recurrence for breast cancer, but not the patient's intrinsic subtype. In the FDA's written response to our 510(k) submission, the

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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 a risk score and three distinct risk groups in patient reports for all patients tested. In our recent meeting with the FDA, we discussed, among other issues raised by the FDA, the specific elements and format of a potential report generated by Prosigna, including the appropriate name for the risk score, the appropriate graphic presentation of the risk score, and, specifically for the potential report for node-positive patients, the numerical range of the risk score and the appropriate number of risk groups. If we obtain clearance from the FDA, we expect Prosigna to be competitive with other products that are currently available in the United States given the advantages demonstrated by our TransATAC and ABCSG8 clinical studies. In the future, we plan to submit a separate application for approval to report intrinsic subtype. If we obtain approval to report intrinsic subtyping from the FDA, we expect our competitive position in the United States will be enhanced. We expect that this future application will require a PMA supported by additional clinical studies.

Intellectual Property

We must develop and maintain protection on the proprietary aspects of our technologies in order to remain competitive. We rely on a combination of patents, copyrights, trademarks, trade secret and other intellectual property laws and confidentiality, material transfer agreements, licenses, invention assignment agreements and other contracts to protect our intellectual property rights.

As of May 31, 2013, we owned or exclusively licensed five issued U.S. patents and approximately 24 pending U.S. patent applications, including provisional and non-provisional filings. We also owned or licensed approximately 64 pending and granted counterpart applications worldwide, including 22 country-specific validations of three European patents. The issued U.S. patents that we own or exclusively license are expected to expire between July 3, 2021 and March 28, 2029. We have either sole or joint ownership positions in all of our pending U.S. patent applications. Where we jointly own cases, we have negotiated license or assignment provisions for exclusive rights. For our material nCounter Analysis System and Prosigna product rights, we are the exclusive licensee. We also generally protect our newly developed intellectual property by entering into confidentiality agreements that include intellectual property assignment clauses with our employees, consultants and collaborators.

Our patent applications relate to the following three main areas:

our nCounter Analysis System biology, chemistry, software and hardware;

specific applications for our nCounter Analysis System technology; and

our gene expression markers, methods and algorithms for recurrence and drug response in certain forms of cancer.

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The following patents and patent applications (including expected 20 year expiration dates) relate to our nCounter Analysis System:

Patent and Patent Application Numbers	Form of Ownership	Expected Expiration Date	Description
US 7,473,767, US 7,919,237, US 8,148,512, EP Patent No. 1448581, AU Patent No. 2002327202, CA Patent No. 2452712, JP Patent No. 4343682, USSN 13/794,299, USSN 13/027,493 and foreign applications in certain jurisdictions claiming priority to PCT/US2002/021278	In-licensed from the Institute for Systems Biology	7/3/2021	Directed to compositions and methods of immobilization and detection
EP Patent No. 1963531, AU Patent No. 2006330830, USSN 12/158,953, USSN 13/794,424 and foreign applications in certain jurisdictions claiming priority to PCT/US2006/049274	Co-owned with the Institute for Systems Biology	12/22/2026	Directed to compositions and methods of immobilization and detection
EP Patent No. 1963500, USSN 11/645,270 and foreign applications in certain jurisdictions claiming priority to PCT/US2006/049279	Owned	12/22/2026	Directed to methods of immobilization and detection
US 7,941,279, AU Patent No. 2007268027, JP Patent No. 5081232 and foreign applications in certain jurisdictions claiming priority to PCT/US2007/012130	Owned	5/21/2027	Directed to compositions
US 8,415,102, USSN 13/788,133 and foreign applications in certain jurisdictions claiming priority to PCT/US2008/059959	Owned	4/10/2028	Directed to methods of manufacture
USSN 12/541,131 and foreign applications in certain jurisdictions claiming priority to PCT/US2009/053790	Owned	8/13/2029	Directed to compositions and methods of detection

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The following patent applications (including expected 20 year expiration dates) relate to specific applications for our nCounter Analysis System:

Patent Application Numbers	Form of Ownership	Expected Expiration Date	Description
USSN 12/904,078 and foreign applications in certain jurisdictions claiming priority to PCT/US2010/052556	Owned	10/13/2030	Directed to compositions and methods of detection
USSN 13/025,458 and foreign applications in certain jurisdictions claiming priority to PCT/US2011/024519	Owned	2/11/2031	Directed to compositions and methods of detection
USSN 13/049,682 and foreign applications in certain jurisdictions claiming priority to PCT/US2011/028657	Owned	3/16/2031	Directed to methods of detection
PCT/US2012/030940	Owned	3/28/2032	Directed to compositions and methods of diagnosis
USSN 13/530,848 and PCT/US2012/043799	Owned	6/22/2032	Directed to compositions and methods of detection
Additional pending provisional patent applications	Owned	2033	Directed to nCounter Analysis System methods of use

The following patent applications (including expected 20 year expiration dates) relate to our gene expression markers:

Patent Application Numbers	Form of Ownership	Expected Expiration Date	Description
USSN 12/094,898 and foreign applications in certain jurisdictions claiming priority to PCT/US2006/044737	In-licensed from Bioclassifier, LLC	11/17/2026	Directed to methods of prognosis
USSN 12/995,450 and foreign applications in certain jurisdictions claiming priority to PCT/US2009/045820	In-licensed from Bioclassifier, LLC	6/1/2029	Directed to methods of prognosis
USSN 13/421,367 and PCT/US2012/029226	In-licensed from Bioclassifier, LLC	3/15/2032	Directed to methods of treatment and determining drug response
USSN 13/690,891 and PCT/US2012/067317	In-licensed from Bioclassifier, LLC	11/30/2032	Directed to methods of treatment and determining drug response
USSN 13/899,656 and PCT/US2013/042157	Owned	5/22/2033	Directed to compositions and methods of using gene expression markers
Additional pending provisional patent applications	Owned or In-licensed from Bioclassifier, LLC	2033	Directed to compositions and methods of using gene expression markers, some of which are owned by NanoString Technologies, Inc. and some of which are encompassed by our license agreement with Bioclassifier, LLC

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We intend to file additional patent applications in the United States and abroad to strengthen our intellectual property rights; however, our patent applications (including the patent applications listed above) may not result in issued patents, and we cannot assure investors that any patents that have issued or might issue will protect our technology. We have received notices of claims of potential infringement from third parties and may receive additional notices in the future. When appropriate, we have taken a license to the intellectual property rights from such third parties. For additional information, see the section of this prospectus captioned **Risk Factors** **Risks Related to Intellectual Property**.

We own a number of trademarks and develop names for our new products and as appropriate secure trademark protection for them, including domain name registration, in relevant jurisdictions.

Collaborations; License Agreements

We have relied, and expect to continue to rely, on strategic collaborations and licensing agreements with third parties. For example, our base molecular barcoding technology is in-licensed from the Institute for Systems Biology and the intellectual property that forms the basis of Prosigna is in-licensed from Bioclassifier, LLC. In addition to the licenses with the Institute for Systems Biology and Bioclassifier, we rely on other license and supply arrangements for proprietary components which require us to pay royalties on the sale of our products. Other life sciences research customers are using our nCounter Analysis System to discover gene expression signatures that we believe could form the basis of future diagnostic products. Currently, we are considering several of these gene signatures for in-licensing. For example, in February 2013 we secured an option from a customer to acquire an exclusive worldwide license for a gene signature that could be used, after appropriate regulatory authorization, to identify patients with cirrhosis who are at highest risk of developing HCC and to determine whether a patient who has been diagnosed with HCC is likely to have a recurrence. Our licensing arrangements with the Institute for Systems Biology and Bioclassifier are discussed below in greater detail.

Institute for Systems Biology

In 2004, we entered into an agreement with the Institute for Systems Biology pursuant to which the Institute granted to us an exclusive, subject to certain government rights, worldwide license, including the right to sublicense, to the digital molecular barcoding technology on which our nCounter Analysis System is based, including 13 patents and patent applications. We issued 15,625 shares of our common stock to the Institute for Systems Biology as partial consideration for entry into the license agreement. Pursuant to the terms of the amended license agreement, we are required to pay the Institute for Systems Biology royalties on net sales of products sold by us, or our sublicensees, at a low single digit percentage rate. Royalties owed to the Institute for Systems Biology had been subject to annual minimums, which have expired. Through May 31, 2013, we have paid aggregate royalties of \$1.6 million to the Institute for Systems Biology. Unless earlier terminated in accordance with the terms of the amended license agreement, the agreement will terminate upon the expiration of the last to expire patent licensed to us. The Institute for Systems Biology has the right to terminate the agreement under certain situations, including our failure to meet certain diligence requirements or our uncured material breach of the agreement.

Bioclassifier, LLC

In July 2010, we entered into an exclusive license agreement with Bioclassifier, LLC, pursuant to which Bioclassifier granted to us an exclusive, subject to certain government rights, worldwide license, with the right to sublicense, to certain intellectual property rights and technology, including intellectual property rights that comprise eight non-provisional patent applications as of March 31, 2013, in the field of research products and prognostic and/or diagnostic tests for cancer, including Prosigna. Bioclassifier has licensed these rights from the academic institutions that employed the cancer researchers that discovered or were involved in the initial development of PAM50. This license agreement was amended and restated in February 2012, with the changes retroactively effective to the July 2010 date of the original agreement. Pursuant to the terms of the amended and restated license agreement, we are required to pay Bioclassifier the greater of certain minimum royalty amounts

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and mid-single digit to low double digit percentage royalties on net sales of products and/or methods sold by us that are covered by patent rights or include, use or are technology licensed to us. Our obligation to pay royalties to Bioclassifier expires on a country-by-country basis upon the expiration of the last patent licensed or, if a product or method includes, uses or is technology licensed to us but is not covered by a patent licensed to us, ten years after the first commercial sale of the product or method in such country. We are also required to pay Bioclassifier low to mid double digit percentage of any income received by us from the grant of a sublicense by use to the patents or technology licensed us under the agreement. We are also required to meet certain development and commercialization milestones extending to 2015. Through May 31, 2013, we have paid Bioclassifier \$335,000 of which \$175,000 will be credited against future royalties owed.

Additionally, we are obligated to pay certain fees to Bioclassifier if we do not meet certain milestones within predetermined time periods. The agreement specifies that we will control and be responsible for the costs of prosecuting and enforcing the intellectual property licensed in certain major market countries. The agreement also includes customary rights of termination for Bioclassifier, including for our uncured material breach or our bankruptcy.

Research and Development

We have committed, and expect to continue to commit, significant resources to developing new technologies and products, improving product performance and reliability and reducing costs. We have assembled experienced research and development teams at our Seattle, Washington location with the scientific, engineering, software and process talent that we believe is required to successfully grow our business. As of May 31, 2013, we had approximately 38 employees in research and development, of which 15 hold a Ph.D. degree and seven hold a M.S. degree. We are currently focused on several products and enhancements in both our future diagnostic products and current life sciences research offerings. Our research and development expenses for the years ended December 31, 2010, 2011 and 2012 and the three months ended March 31, 2013 were \$7.5 million, \$9.0 million, \$11.6 million and \$3.1 million, respectively.

nCounter Technology

We are continuously seeking to improve the nCounter Analysis System, including improvements to the technology and accessibility. As we make improvements, we anticipate that we will make available new and improved generations of the nCounter Analysis System to be used in both our current life sciences research and future diagnostics businesses.

Our technology development efforts are focused on:

Applications. We plan to develop additional application areas to enable researchers to apply the nCounter Analysis System to new experimental paradigms. Currently, we are focused on expanding our single cell gene expression application, which we introduced in September 2012 to enable researchers to measure the expression of up to 800 genes using as little as 10 picograms of input total RNA (i.e., total RNA content of a single cell). Additional developments in this area may include single-cell-specific CodeSet panels and data analysis software designed to simplify the analysis and interpretation of single cell expression data. In the future, we also intend to add applications designed to probe additional non-coding regions of the genome which serve important regulatory functions.

Chemistry. We are developing new chemistry and associated consumables that are designed to increase the flexibility of the nCounter Analysis System by allowing customers to customize and configure their own CodeSets. Customers would select a set of genes and then assemble a CodeSet by combining generalized detection agents purchased from us with reagents purchased from other manufacturers. Our generalized detection reagents would not require any knowledge of the exact genomic target that is being evaluated, and could be shipped to a customer immediately upon their request, freeing the customer to explore unique genomic targets independent of interaction with us. Over time, we intend to develop advanced chemistries that may increase the number of targets that the nCounter Analysis System can profile in a single sample beyond the current maximum of 800 targets.

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Instruments. We are developing a new generation of the nCounter Analysis System that we believe will increase our addressable market and simplify the procurement processes of our potential customers. The new generation system will be a single instrument with a reduced footprint that combines the prep station and the digital analyzer. We plan to reduce the cost of the new generation system through the adoption of new, less expensive technologies. We are targeting release of the new generation system in 2014.

Expanding Clinical Utility of the Prosigna Breast Cancer Assay

We plan to extend the clinical utility of Prosigna to inform other major treatment decisions in breast cancer, after appropriate regulatory authorization. The decisions about receiving adjuvant chemotherapy or radiation therapy have significant objective quality of life implications because of the acute and long term risk of side effects, some of them severe (including death), that are caused by these treatments. In addition, there are significant health economic consequences to decisions regarding these therapies based both on the cost of the treatments themselves and of treating their side effects. Therefore, a pressing issue is to identify the individual patients who need or are likely to benefit from adjuvant radiation therapy and chemotherapy so that the rest of the patients can be spared these treatments without affecting their long term outcome.

Our efforts to expand the clinical utility of Prosigna are focused on:

Chemotherapy Selection. The first-generation genomic tests for breast cancer have improved physicians' ability to determine which individual patients can be safely spared adjuvant chemotherapy. However, for those patients who will go on to receive adjuvant chemotherapy, physicians may select from several commonly used adjuvant chemotherapy regimens, including CMF (cyclophosphamide/methotrexate/5-fluoracil), anthracycline-containing regimens or taxane-containing regimens. The first-generation genomic breast cancer tests do not inform the selection of specific adjuvant chemotherapy regimen. Over the past several years, studies have been presented and published that suggest that the PAM50 gene signature, which is the basis of Prosigna, can inform the selection of adjuvant chemotherapy regimen. In 2012, U.S.-based researchers published a study indicating that a qPCR-based version of PAM50 predicted which breast cancer patients benefit from anthracycline-based chemotherapy regimens. In 2013, Danish researchers presented a study indicating that Prosigna predicted which breast cancer patients benefit from gemcitabine. In 2013, Spanish researchers published a study demonstrating that the proliferation score of a qPCR-based version of PAM50 predicted which breast cancer patients benefit from weekly paclitaxel. In the future, we intend to perform clinical studies designed to demonstrate that Prosigna can aid in the selection of chemotherapy regimen in breast cancer patients. We have secured access to tissue samples and outcomes from two randomized, controlled clinical studies that may be used in an effort to clinically validate this intended use.

Radiation Therapy in Early Stage Breast Cancer. Recently presented research suggests that by determining a patient's intrinsic subtype, physicians could identify those patients who do not benefit from adjuvant radiation therapy. In a previously conducted clinical trial that enrolled postmenopausal women with T1/T2, node-negative early stage breast cancer, patients with Luminal A tumors (approximately 50% of the patients enrolled in the trial) received little or no benefit from adjuvant radiation therapy, whereas patients with tumors of other subtypes received significant benefit. We intend to conduct clinical studies to validate the ability of intrinsic subtype as determined by Prosigna to identify postmenopausal women with early stage breast cancer who are likely to receive little or no benefit from treatment with adjuvant radiation therapy. We have secured access to tissue samples and outcomes from one randomized, controlled clinical study that may be used for clinically validating this intended use.

Ductal Carcinoma in situ Treatment. Ductal Carcinoma in situ, or DCIS, Treatment, is characterized by a clonal proliferation of epithelial cells confined within the lumen of the mammary duct. DCIS is usually asymptomatic; however, screening mammography programs have led to a substantial increase in the incidence of DCIS in the past two decades so that it represented 20% of breast cancers diagnosed in the United States in 2004, according to the National Cancer Institute's Surveillance, Epidemiology

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and End Results Program. The major clinical risk in DCIS is its progression to invasive carcinoma. Since DCIS has a variable natural history, the major treatment decision relates to how aggressively to treat DCIS when it is diagnosed. Mastectomy is a highly effective, although radical, treatment for DCIS as it is curative in 98 to 99% of patients with either gross or mammographically detected DCIS. A recent study has demonstrated that a multi-gene assay containing a subset of the genes used in the *Oncotype DX* test could identify a group of patients with such a low risk of recurrent DCIS that they are unlikely to benefit from treatment beyond limited surgical resection. These data suggest other genomic tests, including Prosigna, may also be able to identify low risk patients who may be spared aggressive treatment. We intend to conduct clinical studies to validate the ability of Prosigna to identify DCIS patients who may be spared aggressive treatment. We have applied for access to a cohort of DCIS tissue samples from patients entered into a randomized, controlled clinical trial with long-term follow-up, and have received approval from the relevant committee within the institution controlling these samples.

Our clinical studies to date have employed a retrospective / prospective design, which means that we use samples that were previously collected from patients and for which the treatment regimen and ultimate outcome of each patient are known. Such studies are capital efficient as they do not require recruiting new patients and running prospective trials and they can be completed much more quickly than typical prospective clinical trials. We intend to use a similar approach whenever possible for the additional clinical studies we intend to conduct in support of our future regulatory submissions seeking to expand the indications for Prosigna and for future diagnostic products.

In the future, we do intend to participate in prospective clinical studies that require recruiting new patients. Thus far, we have accepted invitations to participate in two such prospective studies that are being organized and sponsored by cooperative groups. We are not and do not expect to be financially responsible for conducting either trial; however, we may provide in-kind support through the contribution of Prosigna in vitro diagnostic kits or sale of kits at a discounted price. These studies are:

RxSPONDER trial (SWOG 1007). The RxSPONDER trial is a Phase III clinical trial organized by the Southwest Oncology Group and sponsored by the National Cancer Institute. The primary objective of this trial is to determine the effect of endocrine therapy with versus without chemotherapy in patients with node-positive breast cancer who do not have high Recurrence Scores (RS) by *Oncotype DX*. The trial also has several secondary objectives related to other breast cancer assays, including PAM50. One secondary objective is to perform other assays or tests (in particular the ROR score) as they are developed and validated that measure potential benefit of chemotherapy, and to compare them to *Oncotype DX*. Another secondary objective is to determine the role of other assays, including PAM50, as indicators of Disease Free Survival, Distant Disease Free Survival, and Local Disease Free Interval of patients randomized to chemotherapy versus no chemotherapy.

Optimal Personalised Treatment of early breast cancer using Multi-parameter Analysis (OPTIMA) trial. The OPTIMA trial is a multi-center partially blind randomized clinical trial of early stage breast cancer patients in the United Kingdom. The OPTIMA trial seeks to advance the development of personalized medicine in breast cancer by using multi-parameter tests to help identify those women who are likely to benefit from chemotherapy and helping spare those who are unlikely to benefit from an unnecessary and unpleasant treatment. In the United Kingdom, the OPTIMA study population would ordinarily be treated with a combination of chemotherapy and endocrine therapy. The OPTIMA trial compares the management of patients using test-directed assignment to chemotherapy with standard management (i.e., chemotherapy) in a non-inferiority design. OPTIMA prelim is the preliminary phase of the study sponsored by the U.K. Health Technology Assessment of the National Institute of Health Research which will evaluate the performance and health-economics of alternative multi-parameter tests to determine which technology should be evaluated in the main trial. This decision will be informed by a combined primary outcome measure including concordance of test results, cost-effectiveness and deliverability of pathology services. All patients in the OPTIMA prelim trial will be tested with the *Oncotype DX* test as well as additional biomarkers and tests, including Prosigna.

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In addition, we are exploring potential clinical studies with the goal of investigating Prosigna's ability to provide other clinically useful information to physicians treating women with HR+ early stage breast cancer, including identifying which patients are likely to benefit from adjuvant chemotherapy or extending adjuvant endocrine therapy beyond five years.

Future Molecular Diagnostic Kits

In addition to the development of Prosigna, we are currently evaluating several molecular signatures which have the potential to create additional diagnostic products. We intend to license rights to molecular diagnostic intellectual property as part of our strategy to develop additional diagnostic products, with a particular focus on licensing rights from our life sciences research customers who are seeking to translate their research into clinical products after the necessary regulatory authorizations are secured. We intend to target intellectual property rights that are well understood, have the potential to facilitate changes in treatment with a major impact on outcome and cost, have the potential to support value-based pricing and with respect to which tissue samples for clinical validation are readily available.

In February 2013, we secured an option to acquire an exclusive worldwide license for a 186 gene signature that could be used, after appropriate regulatory authorization, to determine the prognosis of patients diagnosed with the most common type of liver cancer, HCC, or with hepatitis C-related early-stage cirrhosis. We secured the option from The Broad Institute acting on behalf of the inventors' institutions. During the period in which the option can be exercised, we plan to assess the feasibility of developing an *in vitro* diagnostic assay based on the HCC gene signature for use on the nCounter Analysis System.

HCC, a form of liver cancer, is an increasingly prevalent clinical diagnosis and is the third most common cause of cancer-related death globally. While incidence rates of HCC have been lower in the United States than in many countries historically, domestic age-adjusted HCC incidence rates have doubled in recent decades. In fact, primary liver cancer mortality rates have increased faster than mortality rates for any other leading cause of cancer in the United States. HCC develops from advanced fibrosis of the liver, or cirrhosis, which is estimated to affect one to two percent of the world's population. The prognosis for patients with advanced HCC is poor, with a reported five-year survival rate of approximately 10%, thus it is important that patients be diagnosed with HCC when it is at an early stage and treatable with surgery. Since there is a high rate of recurrence of HCC after the treatment of the primary tumor, it is important to identify those patients with a high risk of recurrence so that these recurrences can be treated before advanced disease develops.

A paper in the New England Journal of Medicine in 2008 by Hoshida, et al, described the HCC gene signature in connection with a method for conducting gene expression analysis on RNA extracted from liver tissue adjacent to HCC tumors. Using this method, the authors discovered a 186-gene signature which identifies those HCC patients who have a poor prognosis because of a high rate of recurrence after primary treatment. This gene signature was highly correlated with survival in a training set of 82 Japanese patients and was validated in an independent set of 225 patients from the United States and Europe. A paper published online in January 2013 in the journal Gastroenterology demonstrated that this same 186-gene signature also identifies those patients with hepatitis C-related early-stage cirrhosis who have a poor prognosis because of their high rate of developing HCC.

Sales and Marketing

We began selling nCounter Analysis Systems to life sciences researchers in 2008 and began sales efforts in the diagnostics market in Europe, including in France, Germany, Italy, Spain and the United Kingdom, and Israel in connection with the February 2013 commercial launch of Prosigna in those markets. We sell our life sciences research products primarily through our own sales force in North America and through a combination of direct and distributor channels in Europe, the Middle East, Asia Pacific and South America. We have agreements with 11 distributors, each of which is exclusive within a certain territory for our life sciences research business only. In the event the distributor does not meet minimum performance requirements, we may terminate the distribution agreement or convert from an exclusive to non-exclusive arrangement within the territory, allowing us to enter into arrangements with other distributors for the territory. None of our customers represented more than 10% of our revenue for the years ended December 31, 2010, 2011 or 2012 or the three months ended March 31, 2013.

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Life Sciences Research

Our sales and marketing efforts in the life sciences market are targeted at department heads, research laboratory directors, principal investigators, core facility directors, and research scientists at leading academic institutions, biopharmaceutical companies, publicly and privately-funded research institutions and contract research organizations. We seek to increase awareness of our products among our target customers through direct sales calls, trade shows, seminars, academic conferences, web presence and other forms of internet marketing.

Our nCounter Analysis Systems are relatively new to the life sciences market place and our instruments require a significant capital investment. Our sales process involves numerous interactions with multiple people within an organization, and often includes in-depth analysis by potential customers of our products, proof-of-principle studies, preparation of extensive documentation and a lengthy review process. As a result of these factors, the large capital investment required in purchasing our instruments and the budget cycles of our customers, the time from initial contact with a customer to our receipt of a purchase order can vary significantly and be up to 12 months or longer. Given the length and uncertainty of our sales cycle, we have in the past experienced, and likely will in the future experience, fluctuations in our instrument sales on a period-to-period basis. We are developing an nCounter Analysis System that we intend to offer at a lower price, which we believe will simplify the procurement processes of our potential customers as well as increase our addressable market. We also continue to develop enhancements to both the chemistries and assays that are run on the nCounter Analysis System, which may drive further adoption.

Molecular Diagnostics

We intend to sell instruments and consumables for use in diagnostic testing, beginning with Prosigna, via a three-pronged effort. First, we will seek to establish third-party reimbursement and patient access for clinical testing services that our diagnostics customers will provide based upon our products by educating third-party payors regarding the clinical utility and health economic value of the clinical tests enabled by our technology. Second, we will seek to establish an installed base of nCounter Analysis Systems by selling or leasing instruments to select clinical laboratories, with initial sales efforts directed at large commercial laboratories and academic medical centers that treat a high volume of breast cancer patients. Third, we will drive physician demand for clinical testing services enabled by our diagnostic products, and direct test orders toward those laboratories which have adopted our technology.

We intend to have a direct sales model in the United States and most of Europe. In other countries, we intend to have a mix of direct sales and distributor relationships. We recently executed an agreement with a distributor, which is exclusive for a territory in which we do not intend to market directly. Because oncology and pathology are relatively concentrated medical specialties, we believe that a focused marketing organization and specialized sales force with regional and local experience can effectively build an installed base of instruments in clinical laboratories and generate physician demand for Prosigna. Where appropriate, we intend to coordinate commercial efforts with the sales and marketing personnel of the clinical laboratories offering clinical testing services based on our diagnostic products. We believe that these clinical laboratories will be motivated to coordinate commercial efforts by the potential to improve patient care, broaden patient access and profit from testing services based on Prosigna and other potential nCounter-based diagnostics. We believe this direct sales approach coupled with our plans to conduct multiple clinical studies, the results of which we intend to publish in peer-reviewed journals, provides the best opportunity to increase patient and physician demand.

Manufacturing; Suppliers

We use third-party contract manufacturers to produce our instruments and raw materials for our consumables and we build the CodeSets and reagent packages at our Seattle, Washington facility.

Instruments

We outsource manufacturing of our nCounter Prep Stations and nCounter Digital Analyzers. Precision System Science, Co., Ltd. of Chiba, Japan, or PSS, is our sole source supplier for the nCounter Prep Station.

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Korvis Automation Inc., or Korvis, is our sole source supplier for our nCounter Digital Analyzers at its facility in Corvallis, Oregon. The facilities at which our instruments are built have been certified to ISO 13485:2003 standards. Our contracts with these instrument suppliers do not commit them to carry inventory or make available any particular quantities. Under the terms of the two instrument supply agreements, we are required to place binding purchase orders for instruments that will be delivered to us by the supplier three to six months from the date of placement of the purchase order. Although qualifying alternative third-party manufacturers could be time consuming and expensive, our instruments' design is similar to other instruments and we believe that alternatives would be available if necessary. However, if our instrument suppliers terminate our relationship with them or if they give other customers' needs higher priority than ours, then we may not be able to obtain adequate supplies in a timely manner or on commercially reasonable terms.

Consumables

We manufacture our consumables in our Seattle, Washington facility which has been certified to ISO 13485:2003 standards. We expect that our existing manufacturing capacity is sufficient to meet our needs at least through 2014. Should additional space become necessary, we believe that there will be space available near our existing facility that we believe we can secure; however, we cannot predict that this space will be available if and when it is needed.

We rely on a limited number of suppliers for certain components and materials used in the manufacture of our consumables. While some of these components are sourced from a single supplier, we have qualified second sources for several of our critical reagents, including oligonucleotides, adhesives and dyes. We believe that having dual sources for our components helps reduce the risk of a production delay caused by a disruption in the supply of a critical component. We continue to pursue qualifying additional suppliers, but cannot predict how expensive, time-consuming or successful these efforts will be. If we were to lose one or more of our suppliers, it may take significant time and effort to qualify alternative suppliers.

Competition

In the life sciences research market, we compete with companies such as Affymetrix, Agilent Technologies, Bio-Rad, Exiqon, Fluidigm, High Throughput Genomics, Illumina, Life Technologies, Luminex, Perkin Elmer, Qiagen and Roche Applied Science. These competitors and others have products for gene expression analysis that compete in certain segments of the market in which we sell our products. In addition, there are a number of new market entrants in the process of developing novel technologies for the life sciences market, including companies, such as RainDance Technologies and Wafergen Bio-Systems.

In the diagnostics market, we anticipate our principal competition will come from Genomic Health's *Oncotype DX*, a service for gene expression analysis performed in its central laboratory in Redwood City, California. We will also face competition from companies such as Agendia, Clariant (a GE Healthcare company), Genoptix (a division of Novartis), and bioMérieux, which also offer centralized laboratories that profile gene or protein expression in breast cancer. In Europe, we also face regional competition from smaller companies such as Sividon Diagnostics, maker of EndoPredict, a distributed test for breast cancer recurrence, and other independent laboratories.

We believe that the principal competitive factors in all of our target markets include:

cost of capital equipment;

cost of consumables and supplies;

reputation among customers;

innovation in product offerings;

flexibility and ease-of-use;

accuracy and reproducibility of results; and

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compatibility with existing laboratory processes, tools and methods.

We believe that additional competitive factors specific to the diagnostics market include:

breadth of clinical decisions that can be influenced by information generated by diagnostic products;

volume, quality, and strength of clinical and analytical validation data;

availability of reimbursement for testing services; and

economic benefit accrued to customers based on testing services enabled by products.

We believe that the automated nature of our nCounter Analysis System with its simple, rapid and efficient workflow that requires very limited human intervention or labor; the multiplexing capability of our technology to analyze significantly more target molecules in a single tube without amplification, representing multiple biological pathways; compatibility with many sample types, including difficult samples such as FFPE; and the ability to analyze small sample inputs, in some cases down to a single cell, from a wide variety of sample types gives us numerous competitive advantages in the life sciences market. In the diagnostics market, we believe the compelling evidence of Prosigna's ability to inform major medical treatment decisions, including results from our studies; the quality of our nCounter Analysis System, which enables consistent and reproducible results in decentralized laboratories; and the improved convenience for physicians and patients, including more rapid test result turnaround time gives us numerous competitive advantages in the diagnostic market.

While we believe that we compete favorably based on the factors described above, many of our competitors are either publicly traded, or are divisions of publicly-traded companies, and enjoy several competitive advantages over us, including:

greater name and brand recognition, financial and human resources;

broader product lines;

larger sales forces and more established distributor networks;

substantial intellectual property portfolios;

larger and more established customer bases and relationships; and

better established, larger scale and lower cost manufacturing capabilities.

For additional information, see the section of this prospectus captioned "Risk Factors". The life sciences research and diagnostics markets are highly competitive. If we fail to compete effectively, our business and operating results will suffer.

Government Regulation

Medical Device Regulation

United States

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In the United States, medical devices, including *in vitro* diagnostics, are subject to extensive regulation by the U.S. Food and Drug Administration, or FDA, under the Federal Food, Drug, and Cosmetic Act, or FDC Act, and its implementing regulations, and other federal and state statutes and regulations. The laws and regulations govern, among other things, medical device development, testing, labeling, storage, premarket clearance or approval, advertising and promotion and product sales and distribution.

A medical device is an instrument, apparatus, implement, machine, contrivance, implant, *in vitro* reagent, or other similar or related article, including any component part or accessory which is (1) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals, or (2) intended to affect the structure or any function of the body of man or other animals, and which does not achieve any of its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes.

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Since the definition of a medical device depends on the intended use of the product, a single product can potentially be regulated multiple ways by the FDA, including no FDA oversight, depending on the intended use of the product. Intended use is governed by the objective intent of the manufacturer, which includes all words and images communicated by a company and its employees.

Medical devices to be commercially distributed in the United States must receive from the FDA either clearance of a premarket notification, or 510(k), or premarket approval, or PMA, pursuant to the FDC Act prior to marketing, unless subject to an exemption. Devices deemed to pose relatively less risk are placed in either Class I or II, which requires the manufacturer to submit to the FDA a 510(k) requesting permission for commercial distribution; this is known as the 510(k) clearance process. Some low risk devices are exempted from this premarket requirement. Devices deemed by the FDA to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices, or devices deemed not substantially equivalent to a previously 510(k) cleared device or a preamendment Class III device for which PMA applications have not been called, are placed in Class III requiring PMA approval. A clinical trial is almost always required to support a PMA application and is sometimes required for a 510(k) application. All clinical studies of investigational devices must be conducted in compliance with any applicable FDA or Institutional Review Board, or IRB, requirements.

510(k) Clearance Pathway. To obtain 510(k) clearance, a manufacturer must submit a premarket notification demonstrating to the FDA's satisfaction that the proposed device is substantially equivalent in intended use and in safety and effectiveness to a previously 510(k) cleared device or a device that was in commercial distribution before May 28, 1976 for which the FDA has not yet called for submission of PMA applications. The previously cleared device is known as a predicate. The FDA's 510(k) clearance pathway usually takes from four to 12 months, but it can last longer, particularly for a novel type of product.

After a device receives 510(k) clearance, any modification that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, requires a new 510(k) clearance or could require a PMA approval. The FDA requires each manufacturer to make this determination in the first instance, but the FDA can review any such decision. If the FDA disagrees with a manufacturer's decision not to seek a new 510(k) clearance, the agency may retroactively require the manufacturer to seek 510(k) clearance or PMA approval. The FDA also can require the manufacturer to cease marketing and/or recall the modified device until 510(k) clearance or PMA approval is obtained.

PMA Approval Pathway. The PMA approval pathway requires proof of the safety and effectiveness of the device to the FDA's satisfaction. The PMA approval pathway is costly, lengthy and uncertain.

A PMA application must provide extensive preclinical and clinical trial data and also information about the device and its components regarding, among other things, device design, manufacturing and labeling. As part of the PMA review, the FDA will typically inspect the manufacturer's facilities for compliance with Quality System Regulation, or QSR, requirements, which impose elaborate testing, control, documentation and other quality assurance procedures.

Upon submission, the FDA determines if the PMA application is sufficiently complete to permit a substantive review, and, if so, the application is accepted for filing. The FDA then commences an in-depth review of the PMA application, which typically takes one to three years, but may last longer. The review time is often significantly extended as a result of the FDA asking for more information or clarification of information already provided. The FDA also may respond with a not approvable determination based on deficiencies in the application and require additional clinical studies that are often expensive and time consuming and can delay approval for months or even years. During the review period, an FDA advisory committee, typically a panel of clinicians, likely will be convened to review the application and recommend to the FDA whether, or upon what conditions, the device should be approved. Although the FDA is not bound by the advisory panel decision, the panel's recommendation is important to the FDA's overall decision making process.

If the FDA's evaluation of the PMA application is favorable, the FDA typically issues an approvable letter requiring the applicant's agreement to specific conditions, such as changes in labeling, or specific additional information such as submission of final labeling, in order to secure final approval of the PMA application. Once the approvable letter is satisfied, the FDA will issue a PMA for the approved indications,

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which can be more limited than those originally sought by the manufacturer. The PMA can include post-approval conditions that the FDA believes necessary to ensure the safety and effectiveness of the device including, among other things, restrictions on labeling, promotion, sale and distribution. Failure to comply with the conditions of approval can result in material adverse enforcement action, including the loss or withdrawal of the approval.

Even after approval of a PMA, a new PMA or PMA supplement may be required in the event of a modification to the device, its labeling or its manufacturing process. Supplements to a PMA may require the submission of the same type of information required for an original PMA, except that the supplement is generally limited to that information needed to support the proposed change from the product covered by the original PMA.

De Novo Pathway. If no predicate can be identified, the product is automatically classified as Class III, requiring a PMA. However, the FDA can reclassify, or use *de novo* classification for, a device for which there was no predicate device if the device is low or moderate risk. The FDA will identify special controls that the manufacturer must implement, which often includes labeling restrictions. Subsequent applicants can rely upon the *de novo* product as a predicate for a 510(k) clearance. The *de novo* route is less burdensome than the PMA process; it is essentially the same as a 510(k).

Until recently, a device company would have to go through the process of submitting a 510(k) premarket notification submission, receive a not substantially equivalent, or NSE, determination, and only then could it invoke the *de novo* route. However, under the Food and Drug Administration Safety and Innovation Act, or FDASIA, Pub. L. No. 112-144, 126 Stat. 993 (2012), a device company can ask FDA at the outset if the *de novo* route is available, rather than have to wait to receive the NSE determination. The *de novo* route has been used by many *in vitro* diagnostic products.

Postmarket. After a device is placed on the market, numerous regulatory requirements apply. These include: the QSR, labeling regulations, the FDA's general prohibition against promoting products for unapproved or off label uses, registration and listing, the Medical Device Reporting regulation (which requires that manufacturers report to the FDA if their device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if it were to recur), and the Reports of Corrections and Removals regulation (which requires manufacturers to report recalls and field actions to the FDA if initiated to reduce a risk to health posed by the device or to remedy a violation of the FDC Act).

The FDA enforces these requirements by inspection and market surveillance. If the FDA finds a violation, it can institute a wide variety of enforcement actions, ranging from a public warning letter to more severe sanctions such as fines, injunctions, and civil penalties; recall or seizure of products; operating restrictions, partial suspension or total shutdown of production; refusing requests for 510(k) clearance or PMA approval of new products; withdrawing 510(k) clearance or PMA approvals already granted; and criminal prosecution. For additional information, see the section of this prospectus captioned *Risk Factors* Risks Related to Government Regulation and Diagnostic Product Reimbursement.

Research Use Only. Research Use Only, or RUO, products belong to a separate regulatory classification under long-standing FDA regulation. In essence, RUO products are not regulated as medical devices. The products must bear the statement: For Research Use Only. Not for Use in Diagnostic Procedures. The labeling cannot make clinical or diagnostic claims. In June 2011, the FDA issued a draft guidance on RUO products. Among other things, the draft guidance reaffirmed that a company may not make clinical or diagnostic claims about an RUO product. Several of the provisions of the draft guidance received adverse feedback, and it is unclear whether the FDA will issue any final guidance and, if so, what the contents of the guidance will be.

International

International sales of medical devices are subject to foreign government regulations, which vary substantially from country to country. The European Commission is the legislative body responsible for directives under which manufacturers selling medical products in the EU, and the European Economic Area, or EEA, must comply. The EU includes most of the major countries in Europe, while other countries, such as Switzerland, are part of the EEA and have voluntarily adopted laws and regulations that mirror those of the EU

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with respect to medical devices. The EU has adopted directives that address regulation of the design, manufacture, labeling, clinical studies and post-market vigilance for medical devices. Devices that comply with the requirements of a relevant directive will be entitled to bear the CE conformity marking, indicating that the device conforms to the essential requirements of the applicable directives and, accordingly, can be marketed throughout the EU and EEA.

In September 2012, Prosigna was CE-marked to IVDD 98/79/EC for use in conjunction with a diagnostic version of our nCounter Analysis System in the EU to assess a patient's risk and or distant recurrence.

Outside of the EU, regulatory approval needs to be sought on a country-by-country basis in order to market medical devices. Although there is a trend towards harmonization of quality system standards, regulations in each country may vary substantially, which can affect timelines of introduction.

Reimbursement

Our molecular diagnostic instruments will be purchased or leased by clinical laboratories, which will use our diagnostic products as the basis for testing patients' samples. These diagnostic customers can use our products to enable commercial testing services, and generate revenue for their laboratories for this service. In order to collect payment for testing services based upon our diagnostic products, our diagnostics customers may bill third parties, including public and private payors. The demand for our diagnostic products will depend indirectly upon the ability for our customers to successfully bill for and receive reimbursement from third-party payors for the clinical testing services based on our products. Therefore, we intend to work with third-party payors in markets where we intend to sell our diagnostic products to ensure that testing services based on our products are covered and paid.

The decision of payors to cover and pay for a specific testing service is driven by many factors, including:

strong clinical validation data;

acceptance into major clinical guidelines, including NCCN, ASCO, and the St. Gallen Consensus guidelines;

health economic studies that may indicate that the test improves quality-adjusted survival and leads to reduced costs; and

decision impact studies that show the test leads to better treatment decisions.

We are generating and intend to generate dossiers that will be submitted to payors in support of reimbursement for testing services based upon our diagnostic products, beginning with Prosigna. In March 2013, we submitted the first of these dossiers to a government health ministry. The dossiers typically will contain data from studies supporting the analytical and clinical validity of Prosigna, as well as health economic analyses that examine whether the clinical information supplied by Prosigna changes medical practice in a way that leads to benefit for both the patients and the payors. In some cases, these health economic analyses will be supported by the results of clinical studies of Prosigna's impact on adjuvant treatment decisions in early stage breast cancer called decision impact studies. We have developed a clinical protocol for Prosigna decision impact studies in collaboration with two European cooperative groups, and have entered into agreements with those groups to initiate two decision impact studies during 2013. These studies will be conducted by performing Prosigna testing using nCounter Analysis Systems placed at several European medical centers, including at the Vall d'Hebron Institute of Oncology in Barcelona, Spain and at the Ludwig Maximilians University of Munich in Munich, Germany.

United States

In the United States, clinical laboratory revenue is derived from various third-party payors, including insurance companies, health maintenance organizations, or HMOs, and government healthcare programs, such as Medicare and Medicaid. Clinical laboratory testing services are paid through various methodologies when

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covered by third-party payors, such as prospective payment systems and fee schedules. For any new clinical test, payment for the clinical laboratory service requires a decision by the third-party payor to cover the particular test, the establishment of a reimbursement rate for the test and the identification of one or more Current Procedural Terminology, or CPT, codes that accurately describes the test methodology and the analyte to be used in claims processing.

The most commonly used first-generation genomic test for breast cancer, Genomic Health's *Oncotype DX*, is covered and reimbursed by most national and regional third-party payors in the United States, along with the local Medicare Administrative Contractor, or MAC, for California with jurisdiction for claims submitted by Genomic Health for Medicare patients. We believe that U.S. payors on average reimburse *Oncotype DX* testing services at approximately \$3,000 or more per test. The *Oncotype DX* breast cancer test is usually billed and reimbursed using a miscellaneous chemistry CPT code (84999).

Based on market research that we have conducted with U.S. private payors, we believe that the combination of clinical data that we have generated to date and FDA clearance would lead multiple private payors to cover Prosigna testing services. We believe that the reimbursement rate for Prosigna testing services will be similar to that provided for *Oncotype DX* testing services.

Assignment of unique reimbursement codes to a particular test may facilitate claims processing by payors. The American Medical Association, or AMA, has issued a new set of CPT codes for billing and reimbursement of complex genomic tests that are based on information from multiple analytes or genes. These new MAAA, or Multianalyte Assays with Algorithmic Analyses, codes are intended to capture tests such as Prosigna and are divided into two categories of unique codes. Category 1 MAAA codes are intended for tests that AMA's CPT Editorial Panel has vetted and found to meet a certain set of criteria, such as demonstrated clinical validity and utility, as well as national utilization thresholds. MAAs that the AMA has not reviewed or that have not met coding criteria under Category 1 are referred to as administrative MAAA codes.

We believe that testing services enabled by Prosigna will be classified as MAAA, and ultimately will be reimbursed using MAAA codes. We intend to apply for a Category 1 MAAA code for use in reimbursement of testing services based on Prosigna. During the period following commercial launch and prior to the receipt of a Category 1 MAAA code, we intend to have our clinical laboratory customers seek reimbursement for Prosigna using the CPT code designated for Unlisted Multianalyte Assay with Algorithmic Analysis (81599).

Centers for Medicare & Medicaid Services, or CMS, administers the Medicare and Medicaid programs, which provide health care to almost one in every three Americans. For any particular geographic region, Medicare claims are processed on behalf of CMS by private companies called Medicare Administrative Contractors, or MACs. New diagnostic tests typically follow one of two routes to coverage via CMS: National Coverage Determinations, or NCDs, or Local Coverage Determinations, or LCDs. The NCD applies to Medicare beneficiaries living throughout the United States. The LCD process applies to only beneficiaries in the coverage area of a single MAC, requiring multiple LCDs to cover the testing throughout the United States. There is also a subset of both LCDs and NCDs known as Coverage with Evidence Development which allows a technology (service or procedure) to be covered while evidence is collected through a registry or a study to answer outstanding questions on outcomes.

We plan to pursue Medicare coverage for Prosigna using a series of LCDs. This approach will require us to engage the MAC for each jurisdiction in which Prosigna testing services are provided. We believe that the LCD approach has potential advantages, including more rapid establishment of Medicare reimbursement and mitigation of the risk of an adverse national decision.

For Medicare, the reimbursement rates for individual tests are established under the Clinical Laboratory Fee Schedule (local fee schedules for outpatient clinical laboratory services) or the Physician Fee Schedule, depending on the amount of physician work involved in the test. Molecular diagnostic tests that require little physician work are generally paid under the Clinical Laboratory Fee Schedule. We believe that CMS will reimburse Prosigna testing services under the Clinical Laboratory Fee Schedule.

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Outside the United States

In Europe, governments are primarily responsible for reimbursing diagnostic testing services. A relatively small portion of the market is made up of private payors and cash-pay patients.

The primary barrier of adoption of a new *in vitro* diagnostic test is often reimbursement, and public reimbursement can take several years to achieve, depending on the country. Public reimbursement for genomic testing for breast cancer is available in Canada, Ireland, Greece and the United Kingdom. Selected private coverage for testing is available in the United Kingdom, Germany, Spain, France, the UAE and Hungary. The public reimbursement pathway may be more favorable in Germany and France given their willingness to accept additional costs in return for improved outcomes, their centralized review process, and the role of key opinion leaders. Reimbursement approval in some countries, such as Spain and Italy, is managed at the regional level. Israel is a market in which genomic testing for breast cancer is widely reimbursed by all four major Sick Funds, the third-party payors that cover a substantial majority of the population.

Our market preparation in Europe will be similar to that in the United States and involve data driving clinical and economic publications to support guideline inclusion. Initially, we will target the private and cash pay market in Europe. In parallel, we will seek to establish public reimbursement of Prosigna by national and regional governments in Europe.

Other Regulations

If we obtain FDA approval for any of our product candidates and begin commercializing those products in the United States, our operations may be directly, or indirectly through our customers, subject to various federal and state fraud and abuse laws, including, without limitation, the federal anti-kickback statute and state and federal marketing compliance laws. These laws may impact, among other things, our proposed sales, marketing and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include the following federal laws and their counterparts at the state level:

the Federal Anti-kickback Law and state anti-kickback prohibitions;

the Federal physician self-referral prohibition, commonly known as the Stark Law, and state equivalents;

the Federal Health Insurance Portability and Accountability Act of 1996, as amended;

the Medicare civil money penalty and exclusion requirements;

the Federal False Claims Act civil and criminal penalties and state equivalents;

the Foreign Corrupt Practices Act, which applies to our international activities; and

the Physician Payment Sunshine Act.

Employees

As of May 31, 2013, we had 144 employees, of which 46 work in manufacturing, 35 in sales, marketing and business development, 38 in research and development, 16 in general and administrative, and 9 in medical and regulatory affairs. 27 of our employees hold Ph.D. degrees. None of our United States employees is represented by a labor union or is the subject of a collective bargaining agreement. As of May 31, 2013, of our 144 employees, 138 were employed in the United States and 6 were employed outside the United States.

Facilities

We lease approximately 33,000 square feet of office and laboratory space at our headquarters in Seattle, Washington, under a lease that expires in August 2016, subject to a five-year option to renew. We currently pay

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approximately \$144,000 per month in base rent, and the landlord holds a security deposit equal to approximately \$143,000. We believe that our existing facilities are adequate to meet our business requirements for the near-term and that additional space will be available on commercially reasonable terms, if required.

Environmental Matters

Our operations require the use of hazardous materials (including biological materials) which subject us to a variety of federal, state and local environmental and safety laws and regulations. Some of the regulations under the current regulatory structure provide for strict liability, holding a party potentially liable without regard to fault or negligence. We could be held liable for damages and fines as a result of our, or others', business operations should contamination of the environment or individual exposure to hazardous substances occur. We cannot predict how changes in laws or development of new regulations will affect our business operations or the cost of compliance.

Legal Proceedings

On November 6, 2012, Fluidigm Corporation filed a complaint against us in the U.S. District Court for the Northern District of California, Civil Action No. C-12-5712. The complaint alleges false advertising in violation of the Lanham Act, unfair competition, and unlawful trade practices, and seeks injunctive relief and damages in relation to a marketing campaign based on a comparative study of our nCounter Single Cell Assay with Fluidigm's BioMark system. We filed our answer on January 4, 2013. On April 22, 2013, Fluidigm filed an amended complaint referencing additional NanoString marketing materials that Fluidigm alleges to contain false comparative statements. Our answer to the amended complaint was filed on May 9, 2013. Trial is scheduled to commence on March 24, 2014. We believe that Fluidigm's amended complaint is without merit and intend to vigorously defend ourselves.

On April 5, 2013, Fluidigm Corporation and its subsidiary Fluidigm Singapore Pte Ltd, filed a complaint against us in the High Court of Singapore, Case No. S 282/2013, alleging substantially the same advertising claims as were asserted in the U.S. case in addition to a separate claim for trademark infringement. Although, as of June 11, 2013, we have not been served with the complaint in this case, we may be served at any time.

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Our executive officers and directors, and their ages and positions as of May 31, 2013 are as set forth below:

Name	Age	Position
R. Bradley Gray	36	President, Chief Executive Officer and Director
Mary Tedd Allen, Ph.D.	50	Vice President of Manufacturing
Joseph M. Beechem, Ph.D.	55	Senior Vice President of Research and Development
Wayne Burns	57	Senior Vice President, Operations and Administration
J. Wayne Cowens, M.D.	65	Chief Medical Officer
James A. Johnson	56	Chief Financial Officer
Gary S. Riordan	54	Vice President, Quality and Regulatory Affairs
Barney Saunders, Ph.D.	50	Senior Vice President & General Manager, Life Sciences
Bruce J. Seeley	49	Senior Vice President & General Manager, Diagnostics
Kathryn Surace-Smith	54	Vice President, General Counsel
William D. Young ⁽¹⁾	68	Chairman of the Board
Bradford Crutchfield	51	Director
Jennifer Scott Fonstad ⁽²⁾	47	Director
Nicholas Galakatos, Ph.D. ⁽²⁾⁽³⁾	55	Director
Finny Kuruvilla, M.D., Ph.D.	38	Director
Gregory Norden ⁽¹⁾	55	Director
Charles P. Waite ⁽¹⁾⁽²⁾⁽³⁾	58	Director

(1) Member of the Audit Committee.

(2) Member of the Compensation Committee.

(3) Member of the Nominating and Corporate Governance Committee.

Executive Officers

R. Bradley Gray has served as a member of the board of directors and as President and Chief Executive Officer since June 2010. Prior to joining our company, Mr. Gray held various positions at Genzyme, a biotechnology company acquired by Sanofi in 2011. He served as Vice President of Product & Business Development for Genzyme Genetics, the diagnostic services division of Genzyme, from June 2008 to May 2010, leading the development of molecular diagnostics and partnering activities. From September 2006 to June 2008, he served as Vice President of Business & Strategic Development for Genzyme Genetics, leading growth efforts through partnerships and licensing. Mr. Gray joined Genzyme in October 2004 as Director of Corporate Development, supporting business development and leading Genzyme Ventures, the corporate venture capital fund of Genzyme. Prior to joining Genzyme, Mr. Gray was a management consultant in the healthcare practice of McKinsey & Company, a global management consulting firm, from September 2000 to October 2004, where he worked with senior healthcare executives in the United States and Europe on a broad range of issues including pharmaceutical and diagnostic product strategy, post-merger integration, organization design, and operational turnarounds. Mr. Gray received a B.A. in Economics and Management from Oxford University, where he studied as a British Marshall Scholar, and an S.B. in Chemical Engineering from the Massachusetts Institute of Technology. We believe that Mr. Gray possesses specific attributes that qualify him to serve as a director, including the perspective and experience he brings as Chief Executive Officer and his knowledge of molecular diagnostic development and commercialization.

Mary Tedd Allen, Ph.D. has served as Vice President of Manufacturing since March 2007. Prior to joining our company, Dr. Allen served as the Director of Research and Programs at the Washington Technology Center, Washington state's non-profit technology-based economic development enterprise, from February 2006 to February 2007. Before joining the Washington Technology Center, Dr. Allen was Vice President of the Advanced Manufacturing and Development group at Applied Biosystems, a publicly-traded biotechnology

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company acquired by Invitrogen in November 2008 to form Life Technologies, from February 2002 to August 2005. Dr. Allen has more than 20 years of experience managing product development and manufacturing groups for both semiconductor and biotech applications. She received a B.A. in Chemistry from Mount Holyoke College and a Ph.D. in Chemistry from the University of Rochester.

Joseph M. Beechem, Ph.D. has served as Senior Vice President of Research and Development, since April 2012. Prior to joining our company, Dr. Beechem held various positions at Life Technologies, a publicly-traded biotechnology tools company, most recently as Vice President, Head of Advanced Sequencing and Head of Global Sequencing Chemistry, Biochemistry and Biophysics from January 2010 to April 2012. From December 2007 to December 2012, he served as Chief Technology Officer of Life Technologies. During his career at Life Technologies, he led the design and development of multiple genetic analysis technologies, the latest advanced SOLiD sequencing technology and the single molecule nano-DNA sequencing technology. Prior to joining Life Technologies, Dr. Beechem was Chief Scientific Officer at Invitrogen, a publicly-traded biotechnology company that acquired Applied Biosystems in November 2008 to form Life Technologies, from August 2003 to December 2007 and Director of Biosciences at Molecular Probes, a biotechnology company acquired by Invitrogen in 2003, from August 2000 to August 2003. Prior to his industry experience, Dr. Beechem led an NIH-funded research laboratory for 11 years as a tenured associate professor at Vanderbilt University. He has authored or co-authored more than 100 peer-reviewed papers in diverse fields such as biomathematics, physics, chemistry, physiology, spectroscopy, diagnostics and biology. Dr. Beechem is also named on nearly 30 U.S. patents or patent applications and has served on a number of editorial and scientific advisory boards. He received a B.S. in Chemistry and Biology from Northern Kentucky University and a Ph.D. in Biophysics from The Johns Hopkins University.

Wayne Burns has served as Senior Vice President, Operations and Administration since October 2012 and served as Chief Financial Officer from April 2007 to September 2012. During the period from March 2009 through June 2010, Mr. Burns served as Acting Chief Executive Officer as well as Chief Financial Officer. Prior to joining our company, Mr. Burns served as Chief Operating Officer and Chief Financial Officer at Action Engine, a developer of a mobile application platform, from 2001 to 2006. From 2000 to 2001, Mr. Burns was a founder and the Chief Executive Officer of SafariDog, a developer of a search engine optimization platform. Mr. Burns also served as Vice President Operations and Chief Financial Officer of NetPodium during 1999 prior to its acquisition by InterVU, where from 1999 to 2000 Mr. Burns served as Vice President of Business Development. During the period from 1990 to 1996, Mr. Burns served as Chief Financial Officer and Vice President of Finance for three venture-backed companies, all of which were acquired by public companies. Mr. Burns spent five years with PricewaterhouseCoopers in the United States and Italy. Mr. Burns received a B.A. in Business Administration with a concentration in Accounting from the University of Washington.

J. Wayne Cowens, M.D. has served as Chief Medical Officer since February 2011. Prior to joining our company, Dr. Cowens served in a series of senior medical positions at Genomic Health, a publicly-traded global health company, beginning in 2004. From April 2004 to March 2010, he served as Genomic Health's Vice President, Clinical Oncology. In this position, he was responsible for the development of the *Oncotype DX* product pipeline for gene expression profiling tests, initiated the programs in colon, prostate, and renal cell cancer and designed both development and validation clinical studies. In addition, he developed Genomic Health's program in health economics and focused on studies designed to support reimbursement of the *Oncotype DX* Breast Cancer Assay both in the United States and the European Union. From April 2010 to January 2011, he served as Genomic Health's Senior Director of Health Economics, where he was responsible for preparing health technology assessments and dossiers for submission to government payors. Prior to joining Genomic Health, Dr. Cowens held senior product development positions at several pharmaceutical and biotechnology companies, including Chiron (now Novartis Vaccines & Diagnostics) and Ribozyme Pharmaceuticals, and also worked as an oncology consultant for pharmaceutical and biotechnology companies, including IDEC Pharmaceuticals, Scios, and Ligand Pharmaceuticals. Dr. Cowens is a licensed medical oncologist and author of 70 scientific abstracts and papers. He received a H.A.B. in Classical Languages and Mathematics from Xavier University, a M.S. in Mathematics from Northwestern University and an M.D. from Johns Hopkins University.

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James A. Johnson has served as Chief Financial Officer since October 2012. Prior to joining our company, Mr. Johnson was Chief Financial Officer of Relypsa, Inc., a privately-held clinical-stage biopharmaceutical company, from May 2011 to September 2012. From September 2009 to October 2010, Mr. Johnson served as Executive Vice President, Chief Financial Officer, Treasurer and Secretary of ZymoGenetics, Inc., a biopharmaceutical company acquired by Bristol-Myers Squibb in October 2010. Mr. Johnson served as ZymoGenetics Executive Vice President, Chief Financial Officer and Treasurer from July 2007 to September 2009 and as ZymoGenetics Senior Vice President, Chief Financial Officer and Treasurer from February 2001 to July 2007. Mr. Johnson served as Chief Financial Officer, Treasurer and Secretary of Targeted Genetics Corporation, a biotechnology company, from 1994 to February 2001, as its Senior Vice President, Finance and Administration, from January 1999 to February 2001, and as its Vice President, Finance, from 1994 to January 1999. From 1990 to 1994, Mr. Johnson served as Vice President, Finance, and, from 1988 to 1990, as Director of Finance, at Immunex Corporation, a biopharmaceutical company. Mr. Johnson received a B.A. in Business Administration from the University of Washington.

Gary S. Riordan has served as our Vice President of Quality and Regulatory Affairs since January 2013. Prior to joining our company, Mr. Riordan served as Vice President of Quality and Regulatory Affairs at Accumetrics, Inc., a platelet testing medical device company, from January 2012 to January 2013. Before joining Accumetrics, Inc., Mr. Riordan served as a consultant, specializing in medical device global regulatory compliance, from January to December 2011. From June to December 2010, Mr. Riordan served as Vice President for Quality and Regulatory Affairs and a member of the senior management team at PrimeraDx, Inc., a molecular diagnostics company. From September 2008 to June 2010, he served as Vice President of Quality and Regulatory Affairs and a member of the senior management team at Sequenom, Inc., a publicly traded life sciences and molecular diagnostics company. From November 2004 to August 2008, he served as Director of Regulatory Affairs at Ventana Medical Systems, Inc., a medical diagnostics company now a part of Roche Diagnostics. Earlier in his career, Mr. Riordan served as a Biologist at the FDA for six years, where he served as a primary reviewer of premarket approval and product license applications. Mr. Riordan received a B.A. in Molecular Biology from San Jose State University.

Barney Saunders, Ph.D. has served as Senior Vice President & General Manager, Life Sciences, since September 2012 and served as our Chief Commercial Officer since September 2010. Prior to joining our company, Dr. Saunders served as Chief Commercial Officer of Microchip Biotechnologies (now IntegenX), a manufacturer of automation systems enabling microsample preparation and analysis for the life sciences, from September 2005 to June 2010. Prior to joining Microchip Biotechnologies, Dr. Saunders served as General Manager at Agilent Technologies, a publicly-traded measurement company providing core bio-analytical and electronic measurement solutions, from 2000 to 2004, where he led the team that launched the first commercially-available, complete genome arrays for human, rat and mouse and also entered the array CGH (comparative genomic hybridization) market. Dr. Saunders began his career with Amersham International, a pharmaceutical company specializing in Diagnostics and Life Sciences which was acquired by General Electric in 2004, where he held a variety of commercial positions, of increasing responsibility, in the United States and Europe from 1988 to 2000. Dr. Saunders received a B.Sc. Hons in Biological Sciences and Ph.D. in Rice Resistance Gene Expression from Birmingham University, England.

Bruce J. Seeley has served as Senior Vice President & General Manager, Diagnostics, since May 2012. Prior to joining our company, Mr. Seeley was Executive Vice President, Commercial, at Seattle Genetics, a publicly-traded biotechnology company, from October 2009 to March 2012. While at Seattle Genetics, Mr. Seeley built and led the commercial organization and successfully launched Seattle Genetics first product: ADCETRIS, a targeted therapy for lymphoma. Prior to Seattle Genetics, Mr. Seeley served in various commercial roles at Genentech, Inc., a biotechnology company acquired by Roche in March 2009, from August 2004 to October 2009. From 2006 to 2009, he served as Genentech's Senior Director, Marketing, HER2 Brands, where he led the launch of HERCEPTIN in adjuvant breast cancer. From 2004 to 2006, he served as Genentech's Senior Director of Pipeline Brand Management and BioOncology Business Unit Operations, leading strategy and cross franchise commercial activities. From 2000 to 2004, Mr. Seeley worked for Aventis Pharmaceuticals, a publicly-traded global pharmaceutical company, in increasing roles of responsibility, including Senior Director of New Product

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sales positions at Rhone-Poulenc Rorer, a publicly-traded global pharmaceutical company, and Bristol-Myers Squibb, a publicly-traded biopharmaceutical company. Mr. Seeley received a Bachelor of Arts in Sociology from the University of California at Los Angeles.

Kathryn Surace-Smith has served as Vice President and General Counsel since February 2013. From April 2011 to February 2013, she was a legal consultant to medical technology and global health companies in Seattle, including NanoString from August 2012 to February 2013. From October 2002 to January 2011, she was Vice President, General Counsel and Corporate Secretary of SonoSite Inc., a NASDAQ-listed medical device company specializing in hand carried ultrasound systems, where she managed matters relating to intellectual property, litigation (including patent litigation), compliance, contracts, licensing, acquisitions, securities, board governance, investor relations and reimbursement. From December 1996 to August 2002, she was Vice President, General Counsel and Corporate Secretary at Metawave Communications, a NASDAQ-listed telecommunications equipment provider, where she was part of the management team that took the company public. Prior to that, Ms. Surace-Smith served as International Counsel for Alcatel Telecom in Paris and as Counsel at the European Bank for Reconstruction and Development in London, where she advised on a variety of cross border transactions. Ms. Surace-Smith began her career in private practice with Gibson, Dunn & Crutcher. She received an A.B. in politics from Princeton University and a J.D. from Columbia University School of Law.

Board of Directors

William D. Young has served as the chairman of the board of directors since January 2010 and as a member of the audit committee since November 2011. Mr. Young is a Venture Partner at Clarus Ventures, a health care and life sciences venture capital firm, which he joined in March 2010. Prior to joining Clarus Ventures, Mr. Young served from 1999 until June 2009 as Chairman of the board of directors and Chief Executive Officer of Monogram Biosciences, a biotechnology company acquired by Laboratory Corporation of America in June 2009. From 1980 to 1999 Mr. Young was employed at Genentech, a biotechnology company acquired by Roche in March 2009, most recently as Chief Operating Officer from 1997 to 1999, where he was responsible for all Product Development, Manufacturing and Commercial functions. Mr. Young joined Genentech in 1980 as Director of Manufacturing and Process Sciences and became Vice President in 1983. Prior to joining Genentech, Mr. Young worked at Eli Lilly & Co. for 14 years and held various positions in production and process engineering, antibiotic process development and production management. Mr. Young is Chairman of the board of directors of Biogen IDEC and a member of the boards of directors of BioMarin and Theravance. Mr. Young received his M.B.A. from Indiana University and his B.S. in chemical engineering from Purdue University, and an honorary doctorate of engineering from Purdue University. Mr. Young was elected to The National Academy of Engineering in 1993 for his contributions to biotechnology. We believe that Mr. Young's demonstrated leadership in his field, his understanding of the industry and his senior management experience in several companies in our industry qualify him to serve as the chairman of the board of directors.

Bradford Crutchfield has served as a member of our board of directors since June 2013. Since January 2002, Mr. Crutchfield has led the Life Sciences Group at Bio-Rad Laboratories, Inc., a publicly-traded life sciences and clinical diagnostics company, serving as Executive Vice President and President of the Life Sciences Group since 2012, and as Vice President Life Science Group Manager from 2002 to 2012. Since joining Bio-Rad in 1985, Mr. Crutchfield has held various other positions at the company including Managing Director, Bio-Rad Microscience Ltd.; Manager of the U.S. Sales and Service Division; and Manager of the BioMaterials Division. Mr. Crutchfield received a B.S. in Physiology & Biochemistry from the University of California Davis. We believe Mr. Crutchfield is qualified to serve on the board of directors because of his extensive senior management experience in our industry.

Jennifer Scott Fonstad has served as a member of the board of directors since July 2004 and as a member of the compensation committee since June 2009. Ms. Fonstad is a Managing Director at Draper Fisher Jurvetson, a venture capital firm, which she joined in 1997, becoming a partner in 1998. Ms. Fonstad began her career with Bain & Company, a business consulting firm. She is the chairman of the Somaly Mam Foundation. Ms. Fonstad graduated *cum laude* from Georgetown University with a B.S. in International Economics and received her

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M.B.A., with distinction, from the Harvard Business School. We believe that Ms. Fonstad is qualified to serve on the board of directors because of her extensive experience as a venture capital investor.

Nicholas Galakatos, Ph.D. has served as a member of the board of directors, as the chairman of the compensation committee and as a member of the nominating and corporate governance committee since June 2009. Dr. Galakatos is a Managing Director of Clarus Ventures, a health care and life sciences venture capital firm, which he co-founded in 2005. Dr. Galakatos has been a venture capital investor since 1992, initially at Venrock Associates from 1992 to 1997 and then at MPM Capital since 2000 where he was General Partner of the Bioventures II and Bioventures III funds. From 1997 to 2000, he was Vice President, New Business, and a member of the management team at Millennium Pharmaceuticals, a biopharmaceutical company acquired by Takeda Pharmaceutical in May 2008. He was a founder of Millennium Predictive Medicine and TransForm Pharmaceuticals, where he also was the Chairman and founding Chief Executive Officer. Dr. Galakatos has been the Lead Director at Affymax Inc., and a Director of Critical Therapeutics Inc., and Aveo Pharmaceuticals, Inc. Dr. Galakatos received a B.A. degree in Chemistry from Reed College, a Ph.D. degree in Organic Chemistry from the Massachusetts Institute of Technology, and performed postdoctoral studies in molecular biology at Harvard Medical School. We believe that Dr. Galakatos is qualified to serve as a director of NanoString because of his operating experience in the biopharmaceutical industry and his extensive experience as a venture capital investor and a director of several public companies. Dr. Galakatos' investment focus on life sciences companies also provides substantial expertise in our industry.

Gregory Norden has served as a member of the board of directors and as chairman of the audit committee since July 2012. From 1989 to 2010, Mr. Norden held various senior positions with Wyeth/American Home Products, most recently as Wyeth's Senior Vice President and Chief Financial Officer. Prior to this role, Mr. Norden was Executive Vice President and Chief Financial Officer of Wyeth Pharmaceuticals. Prior to his affiliation with Wyeth, Mr. Norden served as Audit Manager at Arthur Andersen & Company. Mr. Norden also serves on the boards of directors of WelchAllyn, a leading global provider of medical diagnostic equipment, and Zoetis Inc., a global leader in discovering, developing, manufacturing and commercializing animal health medicines and vaccines, and is a former director of Human Genome Sciences (acquired by GlaxoSmithKline in August 2012). Mr. Norden received a M.S. in Accounting from Long Island University - C.W. Post and a B.S. in Management/Economics from the State University of New York - Plattsburgh. We believe that Mr. Norden's qualifications to serve on the board of directors include his extensive financial and accounting expertise and experience at Wyeth and at Arthur Andersen & Company and his significant experience in the biopharmaceutical industry.

Finny Kuruvilla, M.D., Ph.D., has served as a member of the board of directors since November 2011 and as a member of the Scientific Advisory Board since 2009. Dr. Kuruvilla is a Principal of Clarus Ventures, a health care and life sciences venture capital firm, which he joined in 2008. Prior to joining Clarus Ventures, Dr. Kuruvilla worked as a research fellow at the Broad Institute of Harvard and MIT from 2004 to 2008, where he led a collaborative effort with Affymetrix, a publicly-traded bioinformatics company, in medical and population genetics. From 2003 to 2007, he completed his residency and fellowship at the Brigham & Women's Hospital and Children's Hospital Boston. Dr. Kuruvilla received a B.S. in Chemistry from the California Institute of Technology, a M.S. in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology, a M.D. from Harvard Medical School and a Ph.D. in Chemistry and Chemical Biology from Harvard University. We believe that Dr. Kuruvilla is qualified to serve as a director of NanoString because of his experience as a venture capital investor and experience in the genomics field.

Charles P. Waite has served as a member of the board of directors since July 2004 and as a member of the audit committee, compensation committee, and nominating and corporate governance committee since June 2009. He has been a General Partner of OVP Venture Partners II and a Vice President of Northwest Venture Services Corp. since 1987, a General Partner of OVP Venture Partners III since 1994, a General Partner of OVP Venture Partners IV since 1997, a General Partner of OVP Venture Partners V since 2000, a General Partner of OVP Venture Partners VI since 2001, and a General Partner of OVP Venture Partners VII since 2007, all of which are venture capital firms. Prior to joining OVP, Mr. Waite was a General Partner at Hambrecht & Quist Venture Partners from 1984 to 1988, where he focused on investments in information technology and life sciences. He is a former director of Complete Genomics, a publicly-traded DNA sequencing platform developer

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(acquired by BGI-Shenzhen in March 2013), and currently serves on the board of directors of eight private companies. Mr. Waite received an A.B. in history from Kenyon College and an M.B.A. from Harvard University. We believe that Mr. Waite's significant operational and leadership experience as a venture capital investor who sits on a number of boards qualify him to serve as a director. Mr. Waite's investment focus on life sciences companies also provides substantial expertise in our industry.

Board Composition and Risk Oversight

The board of directors is currently composed of eight members. Five of our directors are independent within the meaning of the independent director guidelines of The NASDAQ Global Market. All of the directors other than Messrs. Young, Crutchfield, Norden and Gray were initially elected to the board of directors pursuant to a voting agreement that will terminate by its terms upon the completion of this offering. The certificate of incorporation and bylaws to be in effect upon the completion of this offering provide that the number of directors shall be at least one and will be fixed from time to time by resolution of the board of directors. There are no family relationships among any of the directors or executive officers.

During 2012, the board of directors met 16 times.

Immediately prior to this offering, the board of directors will be divided into three classes of directors. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2014 for the Class I directors, 2015 for the Class II directors and 2016 for the Class III directors.

The Class I directors will be Mr. Gray, Dr. Kuruvilla and Ms. Fonstad.

The Class II directors will be Mr. Norden, Mr. Waite and Mr. Crutchfield.

The Class III directors will be Dr. Galakatos and Mr. Young.

The division of the board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control. See the section of this prospectus captioned "Description of Capital Stock - Anti-Takeover Effects of Delaware and Washington Law and Our Certificate of Incorporation and Bylaws" for a discussion of these and other anti-takeover provisions found in the certificate of incorporation.

The board of directors has an active role, as a whole and also at the committee level, in overseeing the management of our risks. The board of directors is responsible for general oversight of risks and regular review of information regarding our risks, including credit risks, liquidity risks and operational risks. The compensation committee is responsible for overseeing the management of risks relating to our executive compensation plans and arrangements. The audit committee is responsible for overseeing the management of risks relating to accounting matters and financial reporting. The nominating and corporate governance committee is responsible for overseeing the management of risks associated with the independence of the board of directors and potential conflicts of interest. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, the entire board of directors is regularly informed through discussions from committee members about such risks. The board of directors believes its administration of its risk oversight function has not affected the board of directors leadership structure.

Director Independence

Upon the completion of this offering, we anticipate that our common stock will be listed on The NASDAQ Global Market. Under the rules of The NASDAQ Global Market, independent directors must comprise a majority of a listed company's board of directors within a specified period of the completion of this offering. In addition, the rules of The NASDAQ Global Market require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent. Audit

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committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended. Under the rules of The NASDAQ Global Market, a director will only qualify as an independent director if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

To be considered to be independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries.

In October and November 2012, the board of directors undertook a review of its composition, the composition of its committees and the independence of directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. The board of directors undertook a similar review of independence in connection with Mr. Crutchfield's appointment in June 2013. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, the board of directors has determined that none of Messrs. Young, Waite, Crutchfield and Norden and Ms. Fonstad, representing five of our eight directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is independent as that term is defined under the rules of The NASDAQ Global Market. The board of directors also determined that Messrs. Norden (chairman), Waite and Young, who comprise our audit committee, Mr. Waite and Ms. Fonstad who comprise a majority of our compensation committee, and Mr. Waite, one of the two members of our nominating and corporate governance committee, satisfy the independence standards for those committees established by applicable SEC rules and the rules of The NASDAQ Global Market.

In making this determination, the board of directors considered the relationships that each non-employee director has with us and all other facts and circumstances the board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

Board Committees

The board of directors has an audit committee, a compensation committee and a nominating and corporate governance committee, each of which has the composition and the responsibilities described below.

Audit Committee

The members of our audit committee are Messrs. Norden, Waite and Young. Our audit committee chairman, Mr. Norden, is our audit committee financial expert, as that term is defined under the SEC rules implementing Section 407 of the Sarbanes-Oxley Act of 2002, and possesses financial sophistication, as defined under the rules of The NASDAQ Global Market. Our audit committee oversees our corporate accounting and financial reporting process and assists the board of directors in monitoring our financial systems. Our audit committee will also:

approve the hiring, discharging and compensation of our independent auditors;

oversee the work of our independent auditors;

approve engagements of the independent auditors to render any audit or permissible non-audit services;

review the qualifications, independence and performance of the independent auditors;

review financial statements, critical accounting policies and estimates;

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review the adequacy and effectiveness of our internal controls; and

review and discuss with management and the independent auditors the results of our annual audit, our quarterly financial statements and our publicly filed reports.

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During 2012, our audit committee met two times.

Compensation Committee

The members of our compensation committee are Dr. Galakatos, Mr. Waite and Ms. Fonstad. Dr. Galakatos is the chairman of our compensation committee. Our compensation committee oversees our compensation policies, plans and benefits programs. The compensation committee will also:

review and recommend policies relating to compensation and benefits of our officers and employees;

review and approve corporate goals and objectives relevant to compensation of our chief executive officer and other senior officers;

evaluate the performance of our officers in light of established goals and objectives;

recommend compensation of our officers based on its evaluations; and

administer the issuance of stock options and other awards under our stock plans.

During 2012, our compensation committee met three times.

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are Dr. Galakatos and Mr. Waite. Our nominating and corporate governance committee oversees and assists the board of directors in reviewing and recommending nominees for election as directors. The nominating and corporate governance committee will also:

evaluate and make recommendations regarding the organization and governance of the board of directors and its committees;

assess the performance of members of the board of directors and make recommendations regarding committee and chair assignments;

recommend desired qualifications for board of directors membership and conduct searches for potential members of the board of directors; and

review and make recommendations with regard to our corporate governance guidelines.

During 2012, our nominating and corporate governance committee did not meet.

The board of directors may from time to time establish other committees.

Director Compensation

Pre-IPO Director Compensation Policy

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In July 2012, the board of directors established a policy with respect to the compensation of directors. For the purposes of the director compensation policy, the board of directors classified each director into one of the three following categories: (1) an employee director, is a director who is employed by us; (2) a significant stockholder director is a director who (a) is not an employee director and (b) is an employee, officer, director, manager, managing member or general partner of a stockholder of our company that holds five percent or more of our outstanding capital stock (determined on an as-converted to common stock basis) or an employee, officer, director, manager, managing member or general partner of an entity that is an affiliate of such stockholder (excluding our company); and (3) an unaffiliated director is a director who (a) is not an employee director and (b) is not a significant stockholder director.

Our director compensation policy provides that: (1) we shall pay no compensation to our employee directors in connection with their roles as a directors (other than the compensation paid to such employee directors in their

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capacity as our employee); (2) we shall pay no compensation to our significant stockholder directors; (3) we shall pay a combination of cash compensation and equity compensation to our unaffiliated director; (4) all directors shall be reimbursed for expenses incurred in their capacities as directors in accordance with our standard expense reimbursement policies and procedures; and (5) all equity grants shall be made at fair market value.

Our director compensation policy further provides that each of our unaffiliated directors receives (1) cash of \$30,000 per year, payable in four equal installments at the end of each calendar quarter during which such individual served as a director (such payments to be prorated for service during a portion of such quarter) and (2) upon commencement of service as a director, an option to purchase a number of shares of our common stock determined by the board of directors up to 333,000 shares, which vests pursuant to a vesting schedule determined by the board of directors.

In addition, an unaffiliated director serving as the chairperson of the board of directors shall also receive (1) an additional \$40,000 per year cash compensation, payable in the same manner as described above and (2) options to purchase additional shares of our common stock as determined by the board of directors.

The following table sets forth information concerning the compensation paid or accrued for services rendered to us by members of the board of directors for the year ended December 31, 2012. Compensation paid or accrued for services rendered to us by Mr. Gray in his role as chief executive officer is included in our disclosures related to executive compensation in the section of this prospectus captioned Executive Compensation. Mr. Crutchfield joined the board in June 2013. It is anticipated he will receive an option to purchase 0.08% of our outstanding shares, including the shares to be issued in this offering, upon the effective date of the registration statement of which this prospectus forms a part, at an exercise price equal to the the initial public offering price.

Director Compensation

Name	Fees Earned or paid in Cash (\$)	Option Awards (\$)⁽¹⁾	Total (\$)
William D. Young ⁽²⁾	70,000	33,083	103,083
Jennifer Scott Fonstad ⁽³⁾			
Nicholas Galakatos ⁽³⁾			
Gregory Norden ⁽²⁾⁽⁴⁾	13,750	22,444	36,194
Finny Kuruvilla ⁽³⁾			
Charles P. Waite ⁽³⁾			

(1) Represents the aggregate grant date fair value of stock option awards granted in 2012. These amounts have been computed in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718, using the Black-Scholes option pricing model without regard to estimated forfeitures. For a discussion of valuation assumptions, see the notes to our financial statements included elsewhere in this prospectus.

(2) Unaffiliated Director.

(3) Significant Stockholder Director.

(4) Mr. Norden was elected to the board of directors in July 2012.

The compensation committee has retained Arnosti Consulting, Inc., a compensation advisory firm, to provide recommendations on director compensation following this offering based on an analysis of market data compiled from certain public technology companies. Based on the recommendation of Arnosti Consulting, Inc., our board of directors adopted a director compensation policy that will become applicable to all of our non-employee directors effective upon the completion of this offering, as described below.

For further information regarding the equity compensation of our non-employee directors, see the section titled Executive Compensation Employee Benefit and Stock Plans 2004 Stock Option Plan.

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Post-IPO Director Compensation Policy

In June 2013, the board of directors approved a compensation policy for our non-employee directors that will become effective following our initial public offering. For purposes of the policy, or the Post-IPO Director Compensation Policy, the board of directors classified each director into one of the two following categories: (1) an employee director, is a director who is employed by us; and (2) a non-employee director, who is not an employee director. Only non-employee directors will receive compensation under the Post-IPO Director Compensation Policy. All directors will be reimbursed for expenses in their capacities as directors in accordance with our standard expense reimbursement policy. Non-employee directors will receive compensation in the form of equity and cash under the Post-IPO Director Compensation Policy, as described below. Certain of our non-employee directors are employees, officers, directors, managers, managing members or general partners of a stockholder of our company or an entity that is an affiliate of such stockholder (excluding our company), and as a result of the internal policies of such stockholder or its affiliates, these directors may be required to hold any compensation received for their service on our board of directors for the benefit of such stockholder or its affiliates.

Equity Compensation

Upon joining our board of directors, each non-employee director will receive an option to purchase 0.08% of our outstanding shares on the date of grant. The exercise price of the initial grant will be the fair market value, as determined in accordance with our 2013 Equity Incentive Plan, on the date of the grant. The shares underlying the initial grant will vest as to 50% of the total shares subject to such award on the one year anniversary of the date the director commenced services, and the remaining 50% of the total shares will vest in twelve equal monthly installments thereafter, in each case, subject to continued service as a director through each vesting date. As an exception to the foregoing policy, the initial grant to Bradford Crutchfield did not occur on the date Mr. Crutchfield joined our board of directors, but instead will occur on the effective date of the registration statement of which this prospectus forms a part and will be calculated based on the number of shares outstanding on the effective date, including the shares to be issued in this offering.

At the beginning of each fiscal year starting with 2014, each non-employee director will be granted an option to purchase 0.04% of our outstanding shares on the date of grant. The exercise price of this annual grant will be the fair market value, as determined in accordance with our 2013 Equity Incentive Plan, on the date of the grant. All of the shares underlying the annual grant will vest on the one year anniversary of the date of grant, subject to continued service as a director through the vesting date.

In addition, following the date that is 10 trading days after the effectiveness of the registration statement of which this prospectus forms a part, each non-employee director, with the exception of Bradford Crutchfield, will receive an option to purchase 0.06% of our outstanding shares on the date of grant. As an exception to the terms of our 2013 Equity Incentive Plan, the exercise price of this post-offering grant will be the average closing price of our stock for the 10 trading day period following the effectiveness of the registration statement. The shares underlying the post-offering grant will vest as to 50% of the total shares subject to such award on the one year anniversary of the date the registration statement becomes effective, and the remaining 50% of the total shares will vest in twelve equal monthly installments thereafter, in each case, subject to continued service as a director through each vesting date.

Also, the chairperson of the board of directors will receive, in addition to the post-offering grant, an additional option to purchase 0.05% of our outstanding shares. This additional grant will be granted at the same time as and have the same terms and conditions as the post-offering grant.

The vesting of each grant described above will accelerate in full upon a change in control as defined in the 2013 Equity Incentive Plan.

Cash Compensation

For each fiscal year, each non-employee director will receive an annual cash retainer of \$35,000 for serving on the board of directors. In addition to the annual retainer, the chairperson of the board of directors will be entitled to an additional cash retainer of \$40,000 per year.

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The chairpersons of the board's three standing committees will be entitled to the following cash retainers for each fiscal year as follows:

Board Committee	Chairperson Retainer
Audit Committee	\$ 10,000
Compensation Committee	10,000
Nominating and Corporate Governance Committee	10,000

All cash payments will be payable in four equal installments at the end of each calendar quarter during which such individual served as a director (such payments to be prorated for service during a portion of such quarter).

Code of Business Conduct and Ethics

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions prior to the completion of this offering. Following this offering, a current copy of the code will be posted on the investor section of our website, www.nanostring.com.

Compensation Committee Interlocks and Insider Participation

The members of our compensation committee are Dr. Galakatos, Mr. Waite and Ms. Fonstad. None of the members of our compensation committee is an officer or employee of us. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee (or other board committee performing equivalent functions or, in the absence of any such committee, the entire board of directors) of any entity that has one or more executive officers serving on the board of directors or compensation committee.

Limitation of Liability and Indemnification

Our certificate of incorporation and bylaws provide the indemnification of our directors and officers to the fullest extent permitted under the Delaware General Corporation Law. In addition, the certificate of incorporation provides that our directors shall not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director and that if the Delaware General Corporation Law is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of our directors shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

As permitted by the Delaware General Corporation Law, we have entered into separate indemnification agreements with each of our directors and certain of our officers that require us, among other things, to indemnify them against certain liabilities which may arise by reason of their status as directors, officers or certain other employees. We expect to obtain and maintain insurance policies under which our directors and officers are insured, within the limits and subject to the limitations of those policies, against certain expenses in connection with the defense of, and certain liabilities that might be imposed as a result of, actions, suits or proceedings to which they are parties by reason of being or having been directors or officers. The coverage provided by these policies may apply whether or not we would have the power to indemnify such person against such liability under the provisions of the Delaware General Corporation Law.

We believe that these provisions and agreements are necessary to attract and retain qualified persons as our officers and directors. At present, there is no pending litigation or proceeding involving our directors or officers for whom indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

Table of Contents**EXECUTIVE COMPENSATION****Summary Compensation Table**

The following table provides information regarding the compensation of our named executive officers during 2012 and 2011.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Option Awards (\$) ⁽²⁾	Non-Equity Incentive Plan Compensation (\$) ⁽³⁾	All Other Compensation (\$)	Total (\$)
R. Bradley Gray	2012	333,802	104,000 ⁽¹⁾	242,246	120,802		800,850
President and Chief Executive Officer	2011	325,000	77,000 ⁽¹⁾		122,200		524,200
J. Wayne Cowens, M.D.	2012	262,500	120,000 ⁽¹⁾	41,168	59,625	9,720 ⁽⁴⁾	493,013
Chief Medical Officer	2011	229,167	40,000 ⁽¹⁾	115,086	53,742	14,068 ⁽⁴⁾	452,063
Bruce J. Seeley ⁽⁶⁾	2012	185,385	28,000 ⁽⁵⁾	158,150	64,050		435,585
Senior Vice President & General Manager, Diagnostics							

- (1) The amounts reported in the Bonus column for 2012 refer to special bonuses accelerated and paid in 2012. The amounts reported for 2011 refer to special bonuses paid in 2012 related to 2011 services.
- (2) The dollar amounts in this column represent the aggregate grant date fair value of stock option awards granted in 2012 and 2011, respectively. These amounts have been computed in accordance with FASB ASC Topic 718, using the Black-Scholes option pricing model. Pursuant to SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. For a discussion of valuation assumptions, see the notes to our financial statements included elsewhere in this prospectus.
- (3) The amounts reported in the Non-Equity Incentive Plan Compensation column for 2012 represent the amounts earned and payable under the 2012 bonus plan, all of which will be paid in 2013. The amounts reported for 2011 represent the amounts earned and payable under the 2011 bonus plan, all of which were paid in 2012.
- (4) This amount represents reimbursements for certain travel and related expenses.
- (5) This amount represents a signing bonus.
- (6) Mr. Seeley was hired in May 2012.

Non-Equity Incentive Plan Compensation & Bonus**2012 Bonus Payments**

Mr. Gray and Dr. Cowens received payments during 2012 of \$104,000 and \$120,000, respectively, as a result of the acceleration of the unpaid portion of their special bonuses by the compensation committee. For greater detail on these special bonus arrangements see the description in the section titled **Executive Employment Agreements** below.

In addition for 2012, Mr. Seeley was provided a one-time signing bonus of \$28,000.

2011 Bonus Payments

Mr. Gray and Dr. Cowens received a special bonus during 2011 of \$52,000 and \$40,000, respectively, as a result of their continued employment with us on January 1, 2012. For greater detail on these special bonus arrangements see the description in the section titled Executive Employment Agreements below.

In addition for 2011, the board of directors approved a discretionary one-time bonus for Mr. Gray of \$25,000.

Table of Contents**2012 Non-Equity Incentive Plan Payments**

For 2012, the target incentive amounts and the aggregate annual payments earned by our named executive officers were the following:

Named Executive Officer	Target Award Opportunity	Actual Award Amount
R. Bradley Gray	\$ 134,225	\$ 120,802
J. Wayne Cowens, M.D.	66,250	59,625
Bruce J. Seeley	73,200	64,050

Our 2012 incentive compensation plan provides our named executive officers with an annual incentive compensation payment, subject to our achievement of our corporate performance goals and individual achievement. For 2012, our corporate-level goals included delivering certain life sciences revenue, managing towards profitability of our life sciences business, meeting certain goals for our diagnostics business, improving performance of certain technologies, meeting a cash position goal and additional stretch targets. For 2012, we achieved corporate attainment of our goals at 90%. The following was our determination of individual goal attainment in 2012: Mr. Gray, N/A; Dr. Cowens, 90%; and Mr. Seeley, 85%. The Actual Award Amounts are calculated by weighing corporate goal attainment and individual goal attainment for each named executive officer as follows: Mr. Gray, 100% corporate goal; Dr. Cowens, 75% corporate goal/25% individual goal and Mr. Seeley, 50% corporate goal/50% individual goal.

2011 Non-Equity Incentive Plan Payments

For 2011, the target incentive amounts and the aggregate annual payments earned by our named executive officers were the following:

Named Executive Officer	Target Award Opportunity	Actual Award Amount
R. Bradley Gray	\$ 130,000	\$ 122,200
J. Wayne Cowens, M.D.	62,500	53,742

Our 2011 incentive compensation plan provided our named executive officers with an annual incentive compensation payment, subject to our achievement of our corporate performance goals and individual achievement. For 2011, our corporate-level goals included profitability of our life sciences tools business, development, efficiency goals and additional stretch targets for our accelerated growth. For 2011, we achieved corporate attainment of our goals at 94%. The following was our determination of individual goal attainment in 2011: Mr. Gray, 94% and Dr. Cowens, 95%. Mr. Seeley did not join our company until May 2012 and was ineligible to receive a 2011 non-equity incentive plan payment. The Actual Award Amounts are calculated by weighing corporate goal attainment and individual goal attainment at 75% corporate goal/25% individual goal for each named executive officer.

Executive Employment Arrangements**R. Bradley Gray**

We entered into an employment agreement on May 24, 2010 with Mr. Gray, our President and Chief Executive Officer. The employment agreement has no specific term and constitutes at-will employment. Mr. Gray's current annual base salary is \$375,000, and he is eligible for an annual incentive payment equal to 60% of his base salary, subject to achievement of performance metrics. Effective immediately following this offering, our compensation committee has approved that Mr. Gray's annual base salary be \$400,000 and his target annual incentive payment equal to 60% of his base salary, subject to achievement of performance metrics.

Previously, Mr. Gray was eligible for a special annual retention bonus equal to \$52,000 per year, subject to continued employment with us on January 1 of each year through 2014. In 2012, the compensation committee approved a payment of \$104,000 for the acceleration of the unpaid portion of Mr. Gray's annual retention bonus.

In connection with Mr. Gray's commencement of employment, we granted him stock options, or sign-on stock options, covering an aggregate of (1) 241,905 shares subject to time-based vesting and (2) 15,125 shares

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subject to performance-based vesting. The stock options were granted pursuant to our 2004 Stock Option Plan with an exercise price equal to the per share fair market value of our common stock on the date of grant. All of Mr. Gray's sign-on stock options (other than 89,285 shares subject to time-based vesting) were early-exercisable as to unvested shares, subject to our right to repurchase any unvested shares upon termination of employment for any reason at a repurchase price per share equal to the original purchase price per share. Mr. Gray's time-based sign-on stock options are scheduled to vest, subject to his continued service, as to 25% of the total time-based shares on the first anniversary of the vesting commencement date, with the remaining 75% vesting in equal monthly installments over the following three years. Mr. Gray's performance-based sign-on stock options are scheduled to vest as to 50% upon the tools portion of our business achieving profitability and the remaining 50% upon the FDA's final approval of Prosigna, in each case, subject to Mr. Gray's continuing service through each vesting date.

If Mr. Gray's employment is terminated other than for cause (as defined in his employment agreement and summarized below), death or disability or he resigns for good reason (as defined in his employment agreement and summarized below), in each case, upon or within 12 months following such change in control, then 100% of the then-unvested portion of the sign-on stock options will vest.

Also, if we terminate his employment other than for cause, death or disability or he resigns for good reason, then subject to his execution of a release of claims and his continued adherence to certain restrictive covenants, he will receive continuing base salary payments for a period of 12-months.

As an incentive to induce Mr. Gray to join us, we provided him an allowance for relocation expenses of up to \$100,000. To the extent that any of the relocation expenses were deemed taxable, we provided a gross-up benefit.

Additionally, in connection with his hiring, we extended to Mr. Gray a full recourse loan of \$115,000 at an annual interest rate equal to 2.72%. The loan was repaid in 2012.

J. Wayne Cowens, M.D.

We entered into an employment agreement on January 31, 2011 with Dr. Cowens, our Chief Medical Officer. The employment agreement has no specific term and constitutes at-will employment. Dr. Cowens's current annual base salary is \$299,450, and he is eligible for an annual incentive payment equal to 30% of his base salary, subject to achievement of performance metrics. Effective immediately following this offering, our compensation committee has approved that Dr. Cowens's annual base salary be \$325,000 and his target annual incentive payment equal to 40% of his base salary, subject to achievement of performance metrics.

Previously, Dr. Cowens was eligible for a special annual retention bonus equal to \$40,000 per year, subject to continued employment with us on January 1 of each year through 2015. In 2012, the compensation committee approved a payment of \$120,000 for the acceleration of the unpaid portion of Dr. Cowens's annual retention bonus.

In connection with Dr. Cowens's commencement of employment, we granted him stock options, or sign-on stock options, covering an aggregate of 62,874 shares. The stock options were granted pursuant to our 2004 Stock Option Plan with an exercise price equal to the per share fair market value of our common stock on the date of grant. All of Dr. Cowens's sign-on stock options were early-exercisable as to unvested shares, subject to our right to repurchase any unvested shares upon termination of employment for any reason at a repurchase price per share equal to the original purchase price per share. Dr. Cowens's sign-on stock options are scheduled to vest, subject to his continued service, as to 25% of the total shares on the first anniversary of the vesting commencement date, with the remaining 75% vesting in equal monthly installments over the following three years.

In addition and supplementing the vesting schedule described above, in the event that Dr. Cowens's employment is terminated other than for cause (as defined in his employment agreement and summarized below), death or disability or Dr. Cowens resigns for good reason (as defined in his employment agreement and summarized below), in each case, upon or within 12 months following such change in control, then 100% of the then-unvested portion of the sign-on stock options will vest.

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Also, if we terminate his employment other than for cause, death or disability or he resigns for good reason, then subject to his execution of a release of claims and his continued adherence to certain restrictive covenants, he will receive continuing base salary payments for a period of six months.

Additionally, in connection with his hiring, we extended Dr. Cowens a full recourse loan of \$100,000 at an annual interest rate equal to 2.44%. The loan was repaid in 2012.

Bruce J. Seeley

We entered into an employment agreement on May 18, 2012 with Mr. Seeley, our Senior Vice President and General Manager, Diagnostics. The employment agreement was amended in December 2012. The employment agreement has no specific term and constitutes at-will employment. Mr. Seeley's current annual base salary is \$320,000 and he is eligible for an annual incentive payment equal to 40% of his base salary, subject to achievement of performance metrics. Effective immediately following this offering, our compensation committee has approved that Mr. Seeley's target annual incentive payment be equal to 50% of his base salary, subject to achievement of performance metrics.

In connection with Mr. Seeley's commencement of employment, we granted him stock options, or sign-on stock options, covering an aggregate of 82,967 shares. The stock options were granted pursuant to our 2004 Stock Option Plan with an exercise price equal to the per share fair market value of our common stock on the date of grant. All of Mr. Seeley's sign-on stock options were early-exercisable as to unvested shares, subject to our right to repurchase any unvested shares upon termination of employment for any reason at a repurchase price per share equal to the original purchase price per share. Mr. Seeley's sign-on stock options are scheduled to vest, subject to his continued service, as to 25% of the total shares on the first anniversary of the vesting commencement date, with the remaining 75% vesting in equal monthly installments over the following three years.

In addition and supplementing the vesting schedule described above, in the event that Mr. Seeley's employment is terminated without cause (as defined in his stock option agreement and summarized below) or Mr. Seeley resigns for good reason (as defined in his stock option agreement and summarized below), in each case, following a change in control, then 100% of the then-unvested portion of the sign-on stock options will vest.

Also, if we terminate his employment other than for cause (as defined in his employment agreement and summarized below), death or disability or he resigns for good reason (as defined in his employment agreement and summarized below), then subject to his execution of a release of claims and his continued adherence to certain restrictive covenants, he will receive continuing base salary payments for a period of six months.

Additionally, in connection with his hiring, we provided Mr. Seeley with a signing bonus of \$28,000. The signing bonus is subject to repayment if Mr. Seeley terminates his employment for any reason other than good reason during the first year of his employment.

Definition of Terms

For purposes of the 2004 Stock Option Plan, "change in control" means generally a:

sale of all or substantially all of our assets;

our merger, consolidation or other business combination transaction with or into another corporation, entity or person, other than certain transactions in which a majority of the voting power of our stock continues to hold a majority of the voting power of our stock; or

the direct or indirect acquisition (including by way of a tender or exchange offer) by any person, or persons acting as a group, of beneficial ownership or a right to acquire beneficial ownership of shares representing a majority of the voting power of the then outstanding shares of our capital stock.

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For purposes of each of the named executive officers' employment agreements, "cause" means generally:

a violation of one of our material written policies that continues uncured for 30 days;

an act of dishonesty in connection with an executive's responsibilities as our employee;

such executive's conviction of, or plea of nolo contendere to, a felony;

such executive's gross misconduct;

such executive's failure or refusal to follow the lawful and proper directives of the board of directors which are within his duties; or

such executive's material breach of his proprietary information agreement or the non-disparagement provision of his employment agreement.

For purposes of the named executive officers' employment agreements, "good reason" means generally any of the following without such executive's written consent:

a material and permanent diminution in such executive's duties, authority or responsibilities;

a reduction in base salary then in effect by more than 10% (or for Mr. Seeley, by more than 5%);

for Mr. Seeley only, a material reduction in the kind or level of employee benefits;

our material breach of such executive's employment agreement; or

a refusal by such executive to relocate to a facility or location more than 50 miles (or for Mr. Seeley, by more than 40 miles) from our current location.

To qualify as a resignation for good reason, an executive must provide notice to us within 90 days of the initial existence of the condition or event described above and allow us to cure the condition or event within 30 days following our receipt of the notice.

For purposes of Mr. Seeley's stock option agreements and the other named executive officers' stock option agreements (other than Mr. Gray's and Dr. Cowens' sign-on stock options), "cause" means generally:

an executive's failure to substantially perform his duties or responsibilities (other than a failure resulting from his disability) after receiving notice of failure and 10 days to cure;

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an executive's commission of any act of fraud, embezzlement, dishonesty or misrepresentation;

an executive's violation of any federal or state law or regulation applicable to our business;

an executive's breach of any confidentiality or invention assignment agreement with us; or

an executive being convicted of, or entering a plea of nolo contendere to, a felony or committing any act of moral turpitude, dishonesty or fraud against us, or the misappropriation of our material property.

The cause determination is made by the board of directors in good faith.

For purposes of Mr. Seeley's stock option agreements and the other named executive officers' stock option agreements (other than Mr. Gray's and Dr. Cowens' sign-on stock options), "good reason" means generally:

the material diminution of an executive's duties; provided that diminution following a change in control solely by virtue of duties occurring at a subsidiary or division level rather than at the parent will not be deemed good reason;

a material reduction in base salary;

a material change in geographic location of where an executive must perform services; or

our material breach of the option agreement.

To qualify as a resignation for good reason, an executive must provide notice to us within 90 days of the initial existence of the condition or event described above and allow us to cure the condition or event within 30 days following our receipt of notice.

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The following table presents information concerning equity awards held by our named executive officers at the end of 2012.

Name	Vesting Commencement Date	Option Awards Number of Securities Underlying Unexercised Options (#)		Option Exercise Price (\$)	Option Expiration Date
		Exercisable	Unexercisable		
R. Bradley Gray.	6/25/2010	130,299 ⁽¹⁾⁽²⁾		2.24	6/29/2020
	6/25/2010	55,803 ⁽²⁾	33,482 ⁽²⁾	2.24	6/29/2020
	6/25/2010	22,321 ⁽¹⁾⁽²⁾		2.24	6/29/2020
	6/25/2010	15,125 ⁽¹⁾⁽³⁾		2.24	6/29/2020
	3/01/2012	52,082 ⁽¹⁾⁽⁶⁾		1.92	2/28/2022
	3/01/2012	100,541 ⁽¹⁾⁽⁶⁾		1.92	2/28/2022
J. Wayne Cowens, M.D.	2/01/2011	18,444 ⁽¹⁾⁽²⁾		2.24	2/15/2021
	2/01/2011	18,232 ⁽¹⁾⁽²⁾		2.24	2/15/2021
	3/01/2012	19,939 ⁽¹⁾⁽⁵⁾		1.92	2/28/2022
Bruce J. Seeley	5/21/2012	52,083 ⁽¹⁾⁽⁴⁾		1.92	5/24/2022
	5/21/2012	29,322 ⁽¹⁾⁽⁴⁾		1.92	5/24/2022
	5/21/2012	1,562 ⁽¹⁾⁽⁴⁾		1.92	9/16/2022

- (1) The options listed are subject to an early exercise right and may be exercised in full prior to vesting of the shares underlying the option. Vesting of all options is subject to continued service on the applicable vesting date.
- (2) Options vest over four years as follows: 25% of the shares vest one year following the vesting commencement date, with the remaining 75% vesting in equal monthly installments over the following years. Notwithstanding the foregoing, if the named executive officer's employment is terminated other than for cause, death or disability or such named executive officer resigns for good reason, in each case, during the period on, and 12 months after, a change in control, then 100% of the then-unvested shares vest.
- (3) The option vests as to 50% upon the tools portion of our business becoming profitable, and the remaining 50% upon the FDA's final approval of Prosigna. Notwithstanding the foregoing, if Mr. Gray's employment is terminated other than for cause, death or disability or he resigns for good reason, in each case, during the period on, and 12 months after, a change in control, then 100% of the then-unvested shares vest.
- (4) Options vest over four years as follows: 25% of the shares vest one year following the vesting commencement date, with the remaining 75% vesting in equal monthly installments over the following years. Notwithstanding the foregoing, if the named executive officer is terminated without cause or resigns for good reason, in each case following a change in control, then 100% of the then-unvested shares vest.
- (5) Option vests over four years as follows: 10% of the shares vest on the vesting commencement date, with the remaining 90% vesting in equal monthly installments over the following four years. Notwithstanding the foregoing, if the named executive officer is terminated without cause or resigns for good reason, in each case, following a change in control, then 100% of the then-unvested shares vest.
- (6) Options vest over four years as follows: 15% of the shares vest on the vesting commencement date, with the remaining 85% vesting in equal monthly installments over the following four years. Notwithstanding the foregoing, if the named executive officer is terminated

without cause or resigns for good reason, in each case, following a change in control, then 100% of the then-unvested shares vest.

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Employee Benefit and Stock Plans

2013 Equity Incentive Plan

In June 2013, the board of directors adopted a 2013 Equity Incentive Plan, which was approved by our stockholders. The 2013 Equity Incentive Plan will be effective one business day prior to the effective date of the registration statement of which this prospectus forms a part. We do not expect to use the 2013 Equity Incentive Plan until after the completion of this offering. Our 2013 Equity Incentive Plan will provide for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to our employees and any parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares to our employees, directors and consultants and our parent and subsidiary corporations' employees and consultants.

Authorized Shares

We reserved a total of 1,562,500 shares of our common stock for issuance pursuant to the 2013 Equity Incentive Plan, of which no awards are issued and outstanding. In addition, the shares reserved for issuance under our 2013 Equity Incentive Plan will also include (1) those shares reserved but unissued under our 2004 Stock Option Plan and (2) shares returned to the 2004 Stock Option Plan as the result of expiration or termination of awards (provided that the maximum number of shares that may be added to the 2013 Equity Incentive Plan pursuant to (1) and (2) is 1,939,074 shares). The number of shares available for issuance under the 2013 Equity Incentive Plan will also include an annual increase on the first day of each fiscal year beginning in 2014, equal to the least of:

1,406,250 shares;

5% of the outstanding shares of common stock as of the last day of our immediately preceding fiscal year; and

such other amount as the board of directors may determine.

Plan Administration

The board of directors or one or more committees appointed by the board of directors will administer the 2013 Equity Incentive Plan. The compensation committee of the board of directors will administer our 2013 Equity Incentive Plan. In the case of awards intended to qualify as performance-based compensation within the meaning of Section 162(m) of the Internal Revenue Code, the committee will consist of two or more outside directors within the meaning of Section 162(m). In addition, if we determine it is desirable to qualify transactions under the 2013 Equity Incentive Plan as exempt under Rule 16b-3 of the Exchange Act, such transactions will be structured to satisfy the requirements for exemption under Rule 16b-3. Subject to the provisions of our 2013 Equity Incentive Plan, the administrator has the power to administer the plan, including but not limited to, the power to interpret the terms of the 2013 Equity Incentive Plan and awards granted under it, to create, amend and revoke rules relating to the 2013 Equity Incentive Plan, including creating sub-plans, and to determine the terms of the awards, including the exercise price, the number of shares subject to each such award, the exercisability of the awards, and the form of consideration, if any, payable upon exercise. The administrator also has the authority to amend existing awards to reduce or increase their exercise price, to allow participants the opportunity to transfer outstanding awards to a financial institution or other person or entity selected by the administrator, and to institute an exchange program by which outstanding awards may be surrendered in exchange for awards of the same type which may have a higher or lower exercise price or different terms, awards of a different type and/or cash.

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Stock Options

We may grant stock options under the 2013 Equity Incentive Plan. The exercise price of options granted under our 2013 Equity Incentive Plan must at least be equal to the fair market value of our common stock on the date of grant. The term of an incentive stock option may not exceed 10 years, except that with respect to any participant who owns more than 10% of the voting power of all classes of our outstanding stock, the term must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. The administrator will determine the methods of payment of the exercise price of an option, which may include cash, shares or other property acceptable to the administrator, as well as other types of consideration permitted by applicable law. After the termination of service of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. Generally, if termination is due to death or disability, the option will remain exercisable for 12 months. In all other cases, the option will generally remain exercisable for three months following the termination of service. However, in no event may an option be exercised later than the expiration of its term. Subject to the provisions of our 2013 Equity Incentive Plan, the administrator determines the other terms of options.

Stock Appreciation Rights

We may grant stock appreciation rights under our 2013 Equity Incentive Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. Stock appreciation rights may not have a term exceeding 10 years. After the termination of service of an employee, director or consultant, he or she may exercise his or her stock appreciation right for the period of time stated in his or her agreement. However, in no event may a stock appreciation right be exercised later than the expiration of its term. Subject to the provisions of our 2013 Equity Incentive Plan, the administrator determines the other terms of stock appreciation rights, including when such rights become exercisable and whether to pay any increased appreciation in cash or with shares of our common stock, or a combination thereof, except that the per share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right will be no less than 100% of the fair market value per share on the date of grant.

Restricted Stock

We may grant restricted stock under our 2013 Equity Incentive Plan. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the administrator. The administrator will determine the number of shares of restricted stock granted to any employee, director or consultant and, subject to the provisions of our 2013 Equity Incentive Plan, will determine the terms and conditions of such awards. The administrator may impose whatever conditions to vesting it determines to be appropriate (for example, the administrator may set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of restricted stock awards generally will have voting and dividend rights with respect to such shares upon grant without regard to vesting, unless the administrator provides otherwise. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

Restricted Stock Units

We may grant restricted stock units under our 2013 Equity Incentive Plan. Restricted stock units are bookkeeping entries representing an amount equal to the fair market value of one share of our common stock. Subject to the provisions of our 2013 Equity Incentive Plan, the administrator determines the terms and conditions of restricted stock units, including the vesting criteria (which may include accomplishing specified performance criteria or continued service to us) and the form and timing of payment. Notwithstanding the foregoing, the administrator, in its sole discretion may accelerate the time at which any restrictions will lapse or be removed.

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Performance Units and Performance Shares

We may grant performance units and performance shares under our 2013 Equity Incentive Plan. Performance units and performance shares are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. The administrator will establish organizational or individual performance goals or other vesting criteria in its discretion, which, depending on the extent to which they are met, will determine the number and/or the value of performance units and performance shares to be paid out to participants. After the grant of a performance unit or performance share, the administrator, in its sole discretion, may reduce or waive any performance criteria or other vesting provisions for such performance units or performance shares. Performance units shall have an initial dollar value established by the administrator prior to the grant date. Performance shares shall have an initial value equal to the fair market value of our common stock on the grant date. The administrator, in its sole discretion, may pay earned performance units or performance shares in the form of cash, in shares or in some combination thereof.

Outside Directors

Our 2013 Equity Incentive Plan provides that all non-employee directors will be eligible to receive all types of awards (except for incentive stock options) under the 2013 Equity Incentive Plan. In connection with this offering, we adopted a formal policy pursuant to which our non-employee directors will be eligible to receive equity awards under the 2013 Equity Incentive Plan.

Our 2013 Equity Incentive Plan provides that in any given year a non-employee director will not receive (i) cash-settled awards having a grant date fair value greater than \$175,000, increased to \$350,000 in connection with his or her initial service; and (ii) stock-settled awards having a grant date fair value greater than \$500,000, increased to \$1,000,000 in connection with his or her initial service, in each case, as determined under generally accepted accounting principles.

Non-Transferability of Awards

Unless the administrator provides otherwise, our 2013 Equity Incentive Plan generally will not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime.

Certain Adjustments

In the event of certain changes in our capitalization, to prevent diminution or enlargement of the benefits or potential benefits available under the 2013 Equity Incentive Plan, the administrator will adjust the number and class of shares that may be delivered under the 2013 Equity Incentive Plan and/or the number, class, and price of shares covered by each outstanding award, and the numerical share limits set forth in the 2013 Equity Incentive Plan. In the event of our proposed liquidation or dissolution, the administrator will notify participants as soon as practicable and all awards will terminate immediately prior to the consummation of such proposed transaction.

Merger or Change in Control

Our 2013 Equity Incentive Plan provides that in the event of a merger or change in control, as defined under the 2013 Equity Incentive Plan, each outstanding award will be treated as the administrator determines, except that if a successor corporation or its parent or subsidiary does not assume or substitute an equivalent award for any outstanding award, then such award will fully vest, all restrictions on such award will lapse, all performance goals or other vesting criteria applicable to such award will be deemed achieved at 100% of target levels and such award will become fully exercisable, if applicable, for a specified period prior to the transaction. The award will then terminate upon the expiration of the specified period of time. If the service of an outside director is terminated on or following a change of control, other than pursuant to a voluntary resignation, his or her options, restricted stock units and stock appreciation rights, if any, will vest fully and become immediately exercisable, all restrictions on his or her restricted stock will lapse, and all performance goals or other vesting requirements for his or her performance shares and units will be deemed achieved at 100% of target levels, and all other terms and conditions met.

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Amendment, Termination

The administrator has the authority to amend, suspend or terminate the 2013 Equity Incentive Plan provided such action does not impair the existing rights of any participant. Our 2013 Equity Incentive Plan will automatically terminate in 2023, unless we terminate it sooner.

2004 Stock Option Plan

The board of directors adopted and approved, and our stockholders approved, our 2004 Stock Option Plan in July 2004.

Authorized Shares

Our 2004 Stock Option Plan will be terminated in connection with this offering and, accordingly, no shares will be available for issuance under this plan after that time. The 2004 Stock Option Plan will continue to govern outstanding awards granted thereunder. As of March 31, 2013, an aggregate of 2,386,033 shares of our common stock was reserved for issuance under the 2004 Stock Option Plan. The 2004 Stock Option Plan provided for the grant of incentive stock options and nonstatutory stock options. As of March 31, 2013, options to purchase 1,806,273 shares of our common stock remained outstanding under the 2004 Stock Option Plan.

Plan Administration

The board of directors or one or more committees appointed by the board of directors administers the 2004 Stock Option Plan. Following this offering, our compensation committee will administer the 2004 Stock Option Plan. Subject to the provisions of our 2004 Stock Option Plan, the administrator has the power to administer the plan, including but not limited to, the power to: (1) determine the fair market value of our common stock; (2) select recipients of stock options; (3) determine whether and to what extent options are granted; (4) determine shares covered by each option award; (5) approve form agreements under the 2004 Stock Option Plan; (6) determine the terms and conditions of awards; (7) determine when an option may be settled in cash; (8) implement an option exchange program; (9) adjust the vesting of an option; (10) construe and interpret the 2004 Stock Option Plan; and (11) modify terms of grants to non-U.S. recipients in accordance with applicable laws. The administrator may also at any time offer to buy out any option for a payment in cash or shares.

Options

The administrator may grant options. The exercise price per share of all options must equal at least 100% of the fair market value per share of our common stock on the date of grant. The term of an option may not exceed 10 years. An incentive stock option held by a participant who owns more than 10% of the total combined voting power of all classes of our stock, or any parent or subsidiary corporations, may not have a term in excess of five years and must have an exercise price of at least 110% of the fair market value per share of our common stock on the date of grant. After the termination of service, the participant may generally exercise his or her option, to the extent vested as of such date of termination, for 90 days following termination (or such other time period set forth in the option agreement). If termination is due to disability or death, the option will remain exercisable, to the extent vested as of such date of termination, for six months in the case of disability, or 12 months in the case of death (or such other time period set forth in the option agreement). However, in no event may an option be exercised later than the expiration of its term.

Transferability of Awards

Our 2004 Stock Option Plan generally does not allow for the transfer of stock options and only the recipient of an option may exercise such an award during his or her lifetime.

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Certain Adjustments

In the event of certain changes in our capitalization without our receipt of consideration, the number of shares of our common stock covered by each outstanding option under the 2004 Stock Option Plan and the number of shares available for issuance under the 2004 Stock Option Plan and the exercise price per share of each outstanding option will be appropriately adjusted. In the event of our proposed liquidation or dissolution, all outstanding awards terminate immediately prior to such event.

Change in Control

Our 2004 Stock Option Plan provides that in the event of a corporate transaction (as defined in the 2004 Stock Option Plan), which generally includes a merger, consolidation or sale of all or substantially all of our assets, each outstanding option will be assumed or substituted for an equivalent award. In the event that awards are not assumed or substituted for, the vesting of such awards will be accelerated in full, and the awards will be terminated if not exercised prior to such event.

Amendment, Termination

The board of directors may amend the 2004 Stock Option Plan at any time, provided that such amendment generally may not materially and adversely affect the rights of any holder of outstanding awards without the award holder's consent. As noted above, in connection with this offering, the 2004 Stock Option Plan will be terminated and no further awards will be granted thereunder. All outstanding awards will continue to be governed by their existing terms.

2013 Employee Stock Purchase Plan

In June 2013, the board of directors adopted a 2013 Employee Stock Purchase Plan, or the ESPP, which was approved by our stockholders. The ESPP will become effective the effective date of the registration statement of which this prospectus forms a part. The first offering period of the ESPP will commence on a date to be determined by the compensation committee.

Authorized Shares

We reserved a total of 281,250 shares of our common stock available for sale under the ESPP. In addition, our ESPP provides for annual increases in the number of shares available for issuance under the ESPP on the first day of each year beginning in 2014, equal to the least of:

1% of the outstanding shares of our common stock on the first day of such fiscal year;

281,250 shares; and

such other amount as may be determined by the board of directors.

Plan Administration

The board of directors or a committee appointed by the board of directors will administer the ESPP. Our compensation committee will administer the ESPP. The administrator will have authority to administer the plan, including but not limited to, full and exclusive authority to interpret the terms of the ESPP, determine eligibility to participate subject to the conditions of our ESPP as described below, and to establish procedures for plan administration necessary for the administration of the ESPP, including creating sub-plans.

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Eligibility

Generally, all of our employees will be eligible to participate if they are employed by us, or any participating subsidiary, for at least 20 hours per week and more than five months in any calendar year. However, an employee may not be granted an option to purchase stock under the ESPP if such employee:

immediately after the grant would own stock possessing 5% or more of the total combined voting power or value of all classes of our capital stock; or

hold rights to purchase stock under all of our employee stock purchase plans that accrue at a rate that exceeds \$25,000 worth of stock for each calendar year in which the option is outstanding.

Offering Periods

Our ESPP is intended to qualify under Section 423 of the Code, and provides for overlapping 12-month offering periods. The offering periods generally start on the first trading day on or after March 1 and September 1 of each year. The administrator may, in its discretion, modify the terms of future offering periods. The administrator will determine when the first offering period will commence.

Payroll Deductions

Our ESPP will permit participants to purchase common stock through payroll deductions of up to 10% of their eligible compensation. A participant may purchase a maximum of 2,500 shares during a six-month purchase period.

Exercise of Option

Amounts deducted and accumulated by the participant are used to purchase shares of our common stock at the end of each six-month purchase period. The purchase price of the shares will be 85% of the lower of the fair market value of our common stock on the first trading day of each offering period or on the exercise date. Participants may end their participation at any time during an offering period, and will be paid their accrued payroll deductions that have not yet been used to purchase shares of common stock. Participation ends automatically upon termination of employment with us.

Non-Transferability

A participant may not transfer rights granted under the ESPP other than by will, the laws of descent and distribution, or as otherwise provided under the ESPP.

Merger or Change in Control

In the event of our merger or change in control, as defined under the ESPP, a successor corporation may assume or substitute for each outstanding option. If the successor corporation refuses to assume or substitute for the option, the offering period then in progress will be shortened, and a new exercise date will be set. The administrator will notify each participant that the exercise date has been changed and that the participant's option will be exercised automatically on the new exercise date unless prior to such date the participant has withdrawn from the offering period.

Amendment, Termination

Our ESPP will automatically terminate in 2033, unless we terminate it sooner. The administrator has the authority to amend, suspend or terminate our ESPP, except that, subject to certain exceptions described in the ESPP, no such action may adversely affect any outstanding rights to purchase stock under our ESPP.

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Employee Retention Plan

In March 2012, we adopted an Employee Retention Plan that provides for bonuses to select participants upon certain change in control transactions. Participants in the Employee Retention Plan are selected by the board of directors. A participant must continue to be employed by us through a change in control transaction in order to receive a bonus. A bonus under the Employee Retention Plan will equal a lump sum cash payment equal to either a full year or six-months of base salary, depending on the applicable participant's designation. The Employee Retention Plan terminates by its own terms upon the earlier of the closing of this offering and December 31, 2013.

401(k) Plan

We maintain a tax-qualified retirement plan that provides eligible employees with an opportunity to save for retirement on a tax advantaged basis. All participants' interests in their deferrals are 100% vested when contributed. In 2011 and 2012, we made no matching contributions into the 401(k) plan. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. The 401(k) plan is intended to qualify under Sections 401(a) and 501(a) of the Internal Revenue Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan, and all contributions are deductible by us when made.

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CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a summary of transactions since January 1, 2010 to which we have been a party in which the amount involved exceeded \$120,000 and in which any of our executive officers, directors, promoters or beneficial holders of more than 5% of our capital stock had or will have a direct or indirect material interest, other than compensation arrangements which are described under the sections of this prospectus captioned Management Director Compensation and Executive Compensation.

Related Party Transaction Policy

We adopted a formal, written policy, which will become effective on the date of this prospectus, that our executive officers, directors (including director nominees), holders of more than 5% of any class of our voting securities, and any member of the immediate family of or any entities affiliated with any of the foregoing persons, are not permitted to enter into a related party transaction with us without the prior approval or, in the case of pending or ongoing related party transactions, ratification of our audit committee. For purposes of our policy, a related party transaction is a transaction, arrangement or relationship where we were, are or will be involved and in which a related party had, has or will have a direct or indirect material interest, other than transactions available to all of our United States employees.

Certain transactions with related parties, however, are excluded from the definition of a related party transaction including, but not limited to: (1) transaction with another company at which a related party's only relationship is as an employee (excluding as an executive officer or a director) or beneficial owner of less than 5% of that company's shares; (2) transaction where the related party's interest arises solely from the ownership of our equity securities and all holders of our common stock received the same benefit on a pro rata basis (e.g. dividends); (3) transactions available to all employees generally; (4) transactions involving the purchase or sale of products or services in the ordinary course of business, not exceeding \$20,000; and (5) transactions in which the related party's interest derives solely from his or her service as a director, trustee or officer (or similar position) of a not-for-profit organization or charity that receives donations from the Company.

No member of the audit committee may participate in any review, consideration or approval of any related party transaction where such member or any of his or her immediate family members is the related party. In approving or rejecting the proposed agreement, our audit committee shall consider the relevant facts and circumstances available and deemed relevant to the audit committee, including, but not limited to: (1) the benefits and perceived benefits, or lack thereof, to our company; (2) the impact on a director's independence in the event the related party is a director, an immediate family member of a director or an entity in which a director is a partner, stockholder or executive officer; (3) the materiality and character of the related party's direct and indirect interest; (4) the actual or apparent conflict of interest of the related party; (5) the availability of other sources for comparable products or services; (6) the opportunity costs of alternative transactions; (7) the terms of the transaction; (8) the commercial reasonableness of the terms of the proposed transaction; and (9) terms available to unrelated third parties or to employees under the same or similar circumstances. In reviewing proposed related party transactions, the audit committee will only approve or ratify related party transactions that are in, or not inconsistent with, the best interests of our company and stockholders, as the audit committee determines in good faith.

The transactions described below were consummated prior to our adoption of the formal, written policy described above and therefore the foregoing policies and procedures were not followed with respect to the transactions. However, we believe that the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described were comparable to terms available or the amounts that would be paid or received, as applicable, in arm's-length transactions.

Sales of Securities

The following table sets forth a summary of the sale and issuance of our securities to related persons since January 1, 2010, other than compensation arrangements which are described under the sections of this prospectus

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captioned Management Director Compensation and Executive Compensation. For a description of beneficial ownership see the section of this prospectus captioned Principal Stockholders.

Purchaser	Common Stock	Series C Convertible Preferred Stock	Subordinated Convertible Promissory Notes	Warrants to Purchase Series D Convertible Preferred Stock	Series D Convertible Preferred Stock	Series E Convertible Preferred Stock
Executive Officers, Directors and Promoters:						
Mary Tedd Allen, Ph.D. ⁽¹⁾				437	2,188	
Wayne Burns ⁽²⁾	31,250					
J. Wayne Cowens, M.D. ⁽³⁾	32,196					
R. Bradley Gray ⁽⁴⁾	86,790					
Nalini Murdter, Ph.D. ⁽⁵⁾	31,250					
H. Perry Fell ⁽⁶⁾		11,837				
5% Stockholders:						
Entities affiliated with Clarus Ventures ⁽⁷⁾		1,124,527	\$ 2,286,716	162,408	812,045	148,342
Entities affiliated with OVP Venture Partners ⁽⁸⁾		355,114	1,455,933	103,404	517,022	94,449
Entities affiliated with Draper Fisher Jurvetson ⁽⁹⁾		257,459	1,257,350	89,296	446,504	81,566

- (1) Consists of 2,188 shares of Series D convertible preferred stock and a warrant to purchase up to 437 shares of Series D convertible preferred stock, issued in December 2011 in exchange for a cash purchase price of approximately \$18,480.
- (2) Consists of 31,250 shares of common stock upon exercise of stock options in January 2013 at a price of \$2.24 per share.
- (3) Consists of: (a) 5,026 shares of common stock upon exercise of stock options in August 2012 at a price of \$1.92 per share; (b) 23,578 shares of common stock upon exercise of stock options in August 2012 at a price of \$2.24 per share; (c) 486 shares of common stock upon exercise of stock options in September 2012 at a price of \$1.92 per share; (d) 1,310 shares of common stock upon exercise of stock options in September 2012 at a price of \$2.24 per share; (e) 486 shares of common stock upon exercise of stock options in October 2012 at a price of \$1.92 per share; and (f) 1,310 shares of common stock upon exercise of stock options in October 2012 at a price of \$2.24 per share.
- (4) Consists of (a) 17,036 shares of common stock upon exercise of stock options in January 2013 at a price of \$1.92 per share; and (b) 69,754 shares of common stock upon exercise of stock options in January 2013 at a price of \$2.24 per share.
- (5) Nalini Murdter, Ph.D., served as our chief business officer from April 2010 to February 2013. Consists of (a) 856 shares of common stock upon exercise of stock options in October 2012 at a price of \$1.92 per share; (b) 27,903 shares of common stock upon exercise of stock options in October 2012 at a price of \$2.24 per share; (c) 221 shares of common stock upon exercise of stock options in May 2013 at a price of \$1.92 per share; and (d) 2,270 shares of common stock upon exercise of stock options in May 2013 at a price of \$2.24 per share.
- (6) H. Perry Fell served as a director from July 2004 to November 2011 and as our chief executive officer from July 2004 to April 2009. Consists of 11,837 shares of Series C convertible preferred stock issued to H. Perry Fell in February 2010, at a price of \$8.45 per share in exchange for an aggregate cash purchase price of approximately \$99,999.

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- (7) Consists of: (a) 1,124,527 shares of Series C convertible preferred stock issued to Clarus Lifesciences II, L.P. in February 2010, at a price of \$8.45 per share in exchange for an aggregate cash purchase price of approximately \$9,499,999; (b) a subordinated convertible promissory note having a principal amount of \$1,143,358.25 and a warrant to purchase up to 27,068 shares of Series D convertible preferred stock, in each case issued in June 2011 for an aggregate purchase price of approximately \$228,671; (c) a subordinated convertible promissory note having a principal amount of \$1,143,358.25 and a warrant to purchase up to 27,068 shares of Series D convertible preferred stock, in each case issued in September 2011 for an aggregate purchase price of approximately \$228,671; (d) 812,045 shares of Series D convertible preferred stock and a warrant to purchase up to 108,272 shares of Series D convertible preferred stock, issued in November 2011, in exchange for a cash purchase price of approximately \$4,533,587 and conversion of indebtedness of \$2,326,561, representing the outstanding obligations with respect to the aggregate principal and accrued and interest on the subordinated convertible promissory notes described in items (b) and (c) above; and (e) 148,342 shares of Series E convertible preferred stock issued in November 2012 for an aggregate purchase price of approximately \$2,135,638. Each of Mr. William D. Young, a Venture Partner at Clarus Ventures, Dr. Nicholas Galakatos, a Managing Director at Clarus Ventures, and Dr. Finny Kuruvilla, a Principal at Clarus Ventures, is a member of the board of directors.
- (8) Consists of: (a) 352,628 shares of Series C convertible preferred stock issued to OVP Venture Partners VI, L.P. in February 2010, at a price of \$8.45 per share in exchange for an aggregate cash purchase price of approximately \$2,979,000; (b) 2,486 shares of Series C convertible preferred stock issued to OVP VI Entrepreneurs Fund, L.P. in February 2010, at a price of \$8.45 per share in exchange for an aggregate cash purchase price of approximately \$20,999; (c) a subordinated convertible promissory note having a principal amount \$727,966.75 and a warrant to purchase up to 17,234 shares of Series D convertible preferred stock issued to OVP Venture Partners VII, L.P., in each case issued in June 2011, for an aggregate purchase price of approximately \$145,593; (d) a subordinated convertible promissory note having a principal amount of \$727,966.75 and a warrant to purchase up to 17,234 shares of Series D convertible preferred stock issued to OVP Venture Partners VII, L.P., in each case issued in September 2011, for an aggregate purchase price of approximately \$145,593; (e) 517,022 shares of Series D convertible preferred stock and a warrant to purchase up to 68,936 shares of Series D convertible preferred stock, issued in November 2011 in exchange for a cash purchase price of approximately \$2,866,497 and conversion of indebtedness of \$1,481,302, representing the outstanding obligations with respect to the aggregate principal and accrued and interest on the subordinated convertible promissory notes described in items (c) and (d) above; (f) 93,504 shares of Series E convertible preferred stock issued to OVP Venture Partners VII, L.P. in November 2012, at a price of \$14.40 per share in exchange for an aggregate cash purchase price of approximately \$1,346,146; and (g) 945 shares of Series E convertible preferred stock issued to OVP VII Entrepreneurs Fund, L.P. in November 2012, at a price of \$14.40 per share in exchange for an aggregate cash purchase price of approximately \$13,597. Mr. Charles P. Waite, a General Partner at OVP Venture Partners, is a member of the board of directors.
- (9) Consists of: (a) 247,160 shares of Series C convertible preferred stock issued to Draper Fisher Jurvetson Fund VII, L.P. in February 2010, at a price of \$8.45 per share in exchange for an aggregate cash purchase price of approximately \$2,088,000; (b) 6,694 shares of Series C convertible preferred stock issued to Draper Associates, L.P. in February 2010, at a price of \$8.45 per share in exchange for an aggregate cash purchase price of approximately \$56,549; (c) 3,605 shares of Series C convertible preferred stock issued to Draper Fisher Jurvetson Partners VII, LLC in February 2010, at a price of \$8.45 per share in exchange for an aggregate cash purchase price of approximately \$30,449; (d) a subordinated convertible promissory note having a principal amount \$603,528.00 and a warrant to purchase up to 14,288 shares of Series D convertible preferred stock issued, in each case issued to Draper Fisher Jurvetson Fund VII, L.P. in June 2011 for an aggregate purchase price of approximately \$120,705; (e) a subordinated convertible promissory note having a principal amount \$603,528.00 and a warrant to purchase up to 14,288 shares of Series D convertible preferred stock issued, in each case issued to Draper Fisher Jurvetson Fund VII, L.P. in September 2011 for an aggregate purchase price of approximately \$120,705; (f) a subordinated convertible promissory note having a principal amount of \$8,801.50 and a warrant to purchase up to 208 shares of

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Series D convertible preferred stock, in each case issued to Draper Jurvetson Partners VII, LLC in June 2011 for an aggregate purchase price of approximately \$1,760; (g) a subordinated convertible promissory note having a principal amount of \$8,801.50 and a warrant to purchase up to 208 shares of Series D convertible preferred stock, in each case issued to Draper Jurvetson Partners VII, LLC in September 2011 for an aggregate purchase price of approximately \$1,760; (h) a subordinated convertible promissory note having a principal amount \$16,345.50 and a warrant to purchase up to 386 shares of Series D convertible preferred stock, in each case issued to Draper Associates Riskmasters Fund, LLC in June 2011 for an aggregate purchase price of approximately \$3,269; (i) a subordinated convertible promissory note having a principal amount \$16,345.50 and a warrant to purchase up to 386 shares of Series D convertible preferred stock issued, in each case to Draper Associates Riskmasters Fund II, LLC in September 2011 for an aggregate purchase price of approximately \$3,269; (j) 428,643 shares of Series D convertible preferred stock and a warrant to purchase up to 57,152 shares of Series D convertible preferred stock issued to Draper Fisher Jurvetson Fund VII, L.P. in November 2011 in exchange for a cash purchase price of approximately \$2,393,079 and conversion of indebtedness of approximately \$1,228,088, representing the outstanding obligations with respect to the aggregate principal and accrued and interest on the subordinated convertible promissory notes described in items (d) and (e) above; (k) 6,251 shares of Series D convertible preferred stock and a warrant to purchase up to 833 shares of Series D convertible preferred stock issued to Draper Fisher Jurvetson Partners VII, LLC in November 2011 in exchange for a cash purchase price of approximately \$34,898 and conversion of indebtedness of approximately \$17,909, representing the outstanding obligations with respect to the aggregate principal and accrued and interest on the subordinated convertible promissory notes described in items (f) and (g) above; (l) 1,989 shares of Series D convertible preferred stock and a warrant to purchase up to 10 shares of Series D convertible preferred stock issued to Draper Associates Riskmasters Fund, L.P. in November 2011 in exchange for conversion of indebtedness of \$16,800, representing the outstanding obligation with respect to the aggregate principal and accrued and interest on the subordinated convertible promissory note described in item (h) above; (m) 9,621 shares of Series D convertible preferred stock and a warrant to purchase up to 1,537 shares of Series D convertible preferred stock issued to Draper Associates Riskmasters Fund II, LLC in November 2011 in exchange for a cash purchase price of approximately \$64,812 and conversion of indebtedness of approximately \$16,460, representing the outstanding obligations with respect to the aggregate principal and accrued and interest on the subordinated convertible promissory note described in item (i) above; (n) 78,303 shares of Series E convertible preferred stock issued to Draper Fisher Jurvetson Fund VII, L.P. in November 2012, at a price of \$14.40 per share in exchange for an aggregate cash purchase price of approximately \$1,127,309; (o) 1,142 shares of Series E convertible preferred stock issued to Draper Fisher Jurvetson Partners VII, LLC in November 2012, at a price of \$14.40 per share in exchange for an aggregate cash purchase price of approximately \$16,439; and (p) 2,121 shares of Series E convertible preferred stock to Draper Associates Riskmasters Fund II, LLC in November 2012, at a price of \$14.40 per share in exchange for an aggregate cash purchase price of approximately \$30,531. Ms. Jennifer Scott Fonstad, a Managing Director at Draper Fisher Jurvetson, is a member of the board of directors.

Common Stock

From January 1, 2010 through the date of this prospectus, we issued and sold an aggregate of 260,170 shares of our common stock upon the exercise of options issued to certain employees (including Dr. Cowens and Messrs. Burns and Gray), directors and consultants under the registrant's 2004 Stock Option Plan at exercise prices ranging from \$0.32 to \$6.72, for aggregate consideration of \$564,036.

Investment entities affiliated with Clarus Ventures, OVP Venture Partners and Draper Fisher Jurvetson and certain of our other existing stockholders (including Jennifer Scott Fonstad, one of our directors) have expressed interest in acquiring shares of our common stock in this offering. We have requested the representatives of the underwriters to allocate shares in this offering to these investors. It is not currently anticipated that the allocation of shares to these investors will exceed 673,972 shares of the common stock being offered by this prospectus in the aggregate (assuming a purchase price of \$14.00 per share, the midpoint of the range set forth on the cover of this prospectus). Any purchase by such investors would be part of this offering and, consequently, would be

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made at the initial public offering price. There is no agreement for purchase or sale of these shares, and we do not know if such investors will place an order to purchase or purchase all or any portion of these shares. However, the number of shares available for sale to the general public will be reduced to the extent that such investors purchase any such shares. As of May 31, 2013, investment entities affiliated with Clarus Ventures, OVP Venture Partners and Draper Fisher Jurvetson are beneficial owners of an aggregate of 3,209,440, 2,043,429 and 1,764,714 shares of our common stock, respectively.

Series C Convertible Preferred Stock

In February 2010, we issued and sold an aggregate of 1,775,533 shares of Series C convertible preferred stock at \$8.45 per share, for aggregate proceeds of \$14,999,651, to a total of 15 accredited investors, including entities affiliated with Clarus Ventures, entities affiliated with OVP Venture Partners, entities affiliated with Draper Fisher Jurvetson and H. Perry Fell.

Series D Convertible Preferred Stock and Warrants

In November 2011, we issued 2,367,433 shares of our Series D convertible preferred stock and warrants to purchase an aggregate of 355,110 shares of our Series D convertible preferred stock at an issuance price of \$8.45 per share for aggregate monetary consideration of \$19,999,998, of which (1) \$5,087,122 was paid by conversion of outstanding subordinated convertible promissory notes and interest accrued thereon, and (2) \$14,912,876 was paid in cash, to a total of ten accredited investors, including entities affiliated with Clarus Ventures, entities affiliated with OVP Venture Partners and entities affiliated with Draper Fisher Jurvetson. In December 2011, we issued 62,624 shares of our Series D convertible preferred stock and warrants to purchase an aggregate of 12,524 shares of our Series D convertible preferred stock at an issuance price of \$8.45 per share for aggregate monetary consideration of \$529,040, which was paid by cash, to a total of three accredited investors, including Dr. Allen.

Series E Convertible Preferred Stock

In November 2012, we issued and sold an aggregate of 1,063,951 shares of Series E convertible preferred stock at \$14.40 per share, for aggregate proceeds of approximately \$15.3 million, to a total of 15 accredited investors, including entities affiliated with Clarus Ventures, entities affiliated with OVP Venture Partners and entities affiliated with Draper Fisher Jurvetson.

Subordinated Convertible Promissory Notes and Warrants

In June 2011, we issued and sold subordinated convertible promissory notes with an aggregate principal amount of \$2,500,000 and warrants to purchase an aggregate of 59,184 shares of our Series D convertible preferred stock at an exercise price of \$8.45 per share to a total of five accredited investors, including entities affiliated with Clarus Ventures, entities affiliated with OVP Venture Partners and entities affiliated with Draper Fisher Jurvetson. In September 2011, we issued and sold subordinated convertible promissory notes with an aggregate principal amount of \$2,500,000 and warrants to purchase an aggregate of 59,184 shares of our Series D convertible preferred stock at an exercise price of \$8.45 per share to a total of five accredited investors, including entities affiliated with Clarus Ventures, entities affiliated with OVP Venture Partners and entities affiliated with Draper Fisher Jurvetson. Interest on the subordinated convertible promissory notes accrued on the unpaid principal balance at 8.0% per year. The principal amount of and accrued interest on the subordinated convertible notes converted into an aggregate of 602,172 shares of our Series D convertible preferred stock in November 2011.

Investors Rights Agreement

We have entered into an investors rights agreement with certain holders of our common stock, convertible preferred stock and warrants to purchase our common stock and convertible preferred stock, including entities

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affiliated with Clarus Ventures, entities affiliated with OVP Venture Partners, entities affiliated with Draper Fisher Jurvetson, H. Perry Fell and Dr. Allen. As of May 31, 2013, the holders of 9,535,713 shares of our common stock, including the shares of common stock issuable upon the conversion of our convertible preferred stock and exercise of outstanding warrants, are entitled to rights with respect to the registration of their shares under the Securities Act. For a description of these registration rights, see the section of this prospectus captioned "Description of Capital Stock - Registration Rights."

Voting Agreement

The election of the members of the board of directors is governed by a voting agreement with certain of the holders of our outstanding common stock, convertible preferred stock and warrants to purchase our capital stock, including the entities affiliated with Clarus Ventures, entities affiliated with OVP Venture Partners, entities affiliated with Draper Fisher Jurvetson, H. Perry Fell, Dr. Allen and Messrs. Gray, Johnson and Burns. The parties to the voting agreement have agreed, subject to certain conditions, to vote their shares so as to elect as directors (1) two nominees designated by entities affiliated with Clarus Ventures, currently Nicholas Galakatos and Finny Kuruvilla; (2) one nominee designated by entities affiliated with OVP Venture Partners, currently Charles P. Waite; and (3) one nominee designated by entities affiliated with Draper Fisher Jurvetson, currently Jennifer Scott Fonstad. In addition, so long as Mr. Gray is employed by us as our chief executive officer, the parties to the voting agreement have agreed to vote their shares so as to elect Mr. Gray to the board of directors. The parties further agreed to vote their shares so as to elect up to two persons who are designated by our Chief Executive Officer and all of the directors designated by entities affiliated with Clarus Ventures, entities affiliated with OVP Venture Partners and entities affiliated with Draper Fisher Jurvetson. Upon the consummation of this offering, the obligations of the parties to the voting agreement to vote their shares so as to elect as these nominees will terminate and none of our stockholders will have any special rights regarding the nomination, election or designation of members of the board of directors. Our existing certificate of incorporation contains provisions that correspond to the voting agreement; however, such provisions will be removed in the certificate of incorporation that will be effective at the closing of the offering.

Loans to Executive Officers

In connection with the hiring of Mr. Gray, on July 1, 2010, we extended to Mr. Gray a full recourse loan in the principal amount of \$115,000 at an annual interest rate equal to 2.72%. As of December 31, 2012, the loan and related accrued interest was paid in full.

In connection with the hiring of Dr. Cowens, on March 10, 2011, we extended to Dr. Cowens a full recourse loan in the principal amount of \$100,000 at an annual interest rate equal to 2.44%. As of December 31, 2012, the loan and related accrued interest was paid in full.

Other Transactions

We have entered into separate indemnification agreements with each of our directors and certain of our officers. For a description of these agreements, see the section of this prospectus captioned "Management - Limitation of Liability and Indemnification."

We have entered into employment agreements with our named executive officers that, among other things, provide for certain severance and change of control benefits. For a description of these agreements, see the section of this prospectus captioned "Executive Compensation - Executive Employment Arrangements."

We have granted stock options to our named executive officers, other executive officers and certain of our directors. See the section of this prospectus captioned "Executive Compensation - Executive Employment Arrangements."

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PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our common stock at May 31, 2013, as adjusted to reflect the sale of common stock offered by us in this offering, for:

each person who we know beneficially owns more than 5% of our common stock;

each of our directors;

each of our named executive officers; and

all of our directors and executive officers as a group.

The percentage of beneficial ownership prior to the offering shown in the table is based upon 9,201,766 shares outstanding as of May 31, 2013. The percentage of beneficial ownership after this offering shown in the table is based on 14,601,766 shares of common stock outstanding after the closing of this offering, assuming no exercise of the underwriters' overallotment option and no purchase of shares in this offering by investment entities affiliated with Clarus Ventures, OVP Venture Partners and Draper Fisher Jurvetson and certain other individuals and entities that are currently holders of our capital stock that have expressed interest in acquiring shares.

Information with respect to beneficial ownership has been furnished by each director, officer or beneficial owner of more than 5% of our common stock. We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules take into account shares of common stock issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable or exercisable on or before the 60th day after May 31, 2013. Certain of the options granted to our named executive officers may be exercised prior to the vesting of the underlying shares. We refer to such options as being early exercisable. Shares of common stock issued upon early exercise are subject to our right to repurchase such shares until such shares have vested. These shares are deemed to be outstanding and beneficially owned by the person holding those options or a warrant for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

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Except as otherwise noted below, the address for each person or entity listed in the table is c/o NanoString Technologies, Inc., 530 Fairview Avenue, N., Suite 2000, Seattle, Washington 98109.

Name of Beneficial Owner	Beneficial Ownership Prior to the Offering		Beneficial Ownership After the Offering	
	Shares	Percentage	Shares	Percentage
5% Stockholders:				
Entities affiliated with Clarus Funds ⁽¹⁾	3,371,848	36.01	3,371,848	22.84
Entities affiliated with DFJ Funds ⁽²⁾	1,854,010	19.95	1,854,010	12.62
Entities affiliated with OVP Funds ⁽³⁾	2,146,833	23.07	2,146,833	14.60
Directors and Named Executive Officers:				
R. Bradley Gray ⁽⁴⁾	457,941	4.78	457,941	3.06
Mary Tedd Allen, Ph.D. ⁽⁵⁾	68,875	*	68,875	*
Joseph M. Beechem, Ph.D. ⁽⁶⁾	107,967	1.16	107,967	*
Wayne Burns ⁽⁷⁾	122,968	1.33	122,968	*
J. Wayne Cowens, M.D. ⁽⁸⁾	103,810	1.12	103,810	*
James A. Johnson ⁽⁹⁾	114,217	1.23	114,217	*
Gary S. Riordan ⁽¹⁰⁾	23,436	*	23,436	*
Barney Saunders, Ph.D. ⁽¹¹⁾	76,113	*	76,113	*
Bruce J. Seeley ⁽¹²⁾	87,967	*	87,967	*
Kathryn Surace-Smith ⁽¹³⁾	34,374	*	34,374	*
William D. Young ⁽¹⁴⁾	50,245	*	50,245	*
Bradford Crutchfield ⁽¹⁵⁾				
Jennifer Scott Fonstad ⁽¹⁶⁾	1,854,010	19.95	1,854,010	12.62
Nicholas Galakatos, Ph.D. ⁽¹⁷⁾	3,371,848	36.01	3,371,848	22.84
Finny Kuruvilla, M.D., Ph.D. ⁽¹⁸⁾	3,371,848	36.01	3,371,848	22.84
Gregory Norden ⁽¹⁹⁾	2,601	*	2,601	*
Charles P. Waite ⁽²⁰⁾	2,146,833	23.07	2,146,833	14.60
All directors and executive officers as a group (17 persons) ⁽²¹⁾	8,623,205	81.13	8,623,205	53.80

(*) Less than one percent.

(1) Includes 3,209,440 shares held and 162,408 shares that may be acquired pursuant to the exercise of warrants held of record by Clarus Lifesciences II, L.P. (Clarus). If the investment entities affiliated with Clarus purchase a number of shares in this offering equal to that for which they have expressed interest, we anticipate that, upon completion of this offering, they collectively would beneficially own shares representing approximately 26.47% of our common stock (or 25.09% if the underwriters exercise their overallotment option in full) in the aggregate (assuming a purchase price of \$14.00 per share, the midpoint of the range set forth on the cover of this prospectus). Clarus Ventures II GP, L.P. (the GPLP), as the sole general partner of Clarus, may be deemed to beneficially own certain of the shares held of record by Clarus. The GPLP disclaims beneficial ownership of all shares held of record by Clarus in which the GPLP does not have an actual pecuniary interest. Clarus Ventures II, LLC (the GPLLC), as the sole general partner of the GPLP, may be deemed to beneficially own certain of the shares held of record by Clarus. The GPLLC disclaims beneficial ownership of all shares held of record by Clarus in which it does not have an actual pecuniary interest. Each of Nicholas Galakatos, a member of the board of directors, and Messrs. Henner, Liptak, Simon, Steinmetz and Wheeler, as individual Managing Directors of the GPLLC, may be deemed to beneficially own certain of the shares held of record by Clarus. Each of Messrs. Galakatos, Henner, Liptak, Simon, Steinmetz and Wheeler disclaims beneficial ownership of all shares held of record by Clarus in which he does not have an actual pecuniary interest. The address of Clarus Lifesciences is 101 Main Street, Suite 1210, Cambridge, Massachusetts 02142.

(2) Includes (a) 1,694,122 shares held and 85,728 shares that may be acquired pursuant to the exercise of warrants held of record by Draper Fisher Jurvetson Fund VII, L.P., (b) 32,154 shares held of record by Draper Associates, L.P., (c) 24,707 shares held and 1,249 shares that may be acquired pursuant to the

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exercise of warrants held of record by Draper Fisher Jurvetson Partners VII, LLC, (d) 11,742 shares held and 1,923 shares that may be acquired pursuant to the exercise of warrants held of record by Draper Associates Riskmasters Fund II, LLC and (e) 1,989 shares held and 396 shares that may be acquired pursuant to the exercise of warrants held of record by Draper Associates Riskmasters Fund, LLC. If the investment entities affiliated with the foregoing DFJ Funds purchase a number of shares in this offering equal to that for which they have expressed interest, we anticipate that, upon completion of this offering, they collectively would beneficially own shares representing approximately 12.67% of our common stock (or 12.01% if the underwriters exercise their overallocation option in full) in the aggregate (assuming a purchase price of \$14.00 per share, the midpoint of the range set forth on the cover of this prospectus). Timothy C. Draper, John H.N. Fisher and Steven T. Jurvetson are Managing Directors of the general partner entities of Draper Fisher Jurvetson Fund VII, L.P. (Fund VII) that directly hold shares and as such, they may be deemed to have voting and investment power with respect to such shares. Draper Fisher Jurvetson Partners VII, LLC (Partners VII) invests lockstep alongside Fund VII. The Managing Partners of Partners VII are Timothy C. Draper, John H.N. Fisher and Steven T. Jurvetson. Draper Associates, L.P. (DALP) invests lockstep alongside Fund VII. The General Partners of DALP is Draper Associates, Inc. which is controlled by its President and majority shareholder, Timothy C. Draper. Draper Associates Riskmasters Fund, LLC (DARF) and Draper Associates Riskmasters Fund II, LLC (DARF II) invest lockstep alongside Fund VII, instead and in place of DALP beginning June 2010. The Managing Member of DARF and DARF II is Timothy C. Draper. These individuals disclaim beneficial ownership with respect to such shares except to the extent of their pecuniary interest therein. The address of each of the entities affiliated with Draper Fisher Jurvetson is 2882 Sand Hill Road, Suite 150, Menlo Park, California 94025.

- (3) Includes: (a) 1,412,550 shares held by OVP Venture Partners VI, L.P. (OVP VI), (b) 610,526 shares held and 103,404 shares that may be acquired pursuant to the exercise of warrants held of record by OVP Venture Partners VII, L.P., (c) 19,408 shares held by OVP VI Entrepreneurs Fund, L.P. (OVP Entrepreneurs Fund) and (d) 945 shares held by OVP VII Entrepreneurs Fund, L.P. (OVP VII Entrepreneurs Fund). If the investment entities affiliated with the foregoing OVP Funds purchase a number of shares in this offering equal to that for which they have expressed interest, we anticipate that, upon completion of this offering, they collectively would beneficially own shares representing approximately 14.93% of our common stock (or 14.15% if the underwriters exercise their overallocation option in full) in the aggregate (assuming a purchase price of \$14.00 per share, the midpoint of the range set forth on the cover of this prospectus). Charles P. Waite, a member of the board of directors, is a managing member of OVMC VI, LLC, the general partner of each of OVP VI and OVP Entrepreneurs Fund, and a managing member of OVMC VII, LLC, the general partner of OVP VII. Mr. Waite, together with the other managing members of OVMC VI, LLC and OVMC VII, LLC are deemed to have shared voting and dispositive power over the shares held by OVP VI, OVP VII and OVP Entrepreneurs Fund. These individuals disclaim beneficial ownership with respect to such shares except to the extent of their pecuniary interest therein. The address of each of the entities affiliated with OVP Venture Partners is 1616 Eastlake Ave. E, Suite 208, Seattle, Washington 98102.
- (4) Includes 86,790 shares held and options to purchase 371,151 shares of common stock that are exercisable within 60 days of May 31, of which 174,407 shares are vested as of July 30, 2013.
- (5) Includes 5,313 shares held, 437 shares that may be acquired pursuant to the exercise of warrants held of record and options to purchase 63,125 shares of common stock that are exercisable within 60 days of May 31, 2013, of which 38,750 shares are vested as of July 30, 2013.
- (6) Consists of options to purchase 107,967 shares of common stock that are exercisable within 60 days of May 31, 2013, of which 30,781 shares are vested as of July 30, 2013.
- (7) Includes 54,688 shares held and options to purchase 68,280 shares of common stock that are exercisable within 60 days of May 31, 2013, of which 39,995 shares are vested as of July 30, 2013.
- (8) Includes 32,196 shares held indirectly through Dr. Cowens' s spouse and options to purchase 71,614 shares of common stock that are exercisable within 60 days of May 31, 2013, of which 18,040 shares are vested as of July 30, 2013.

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- (9) Consists of options to purchase 114,217 shares of common stock that are exercisable within 60 days of May 31, 2013, of which 3,906 shares are vested as of July 30, 2013.
- (10) Consists of options to purchase 23,436 shares of common stock that are exercisable within 60 days of May 31, 2013, none of which are vested as of July 30, 2013.
- (11) Consists of options to purchase 76,113 shares of common stock that are exercisable within 60 days of May 31, 2013, of which 55,712 shares are vested as of July 30, 2013.
- (12) Consists of options to purchase 87,967 shares of common stock that are exercisable within 60 days of May 31, 2013, of which 24,822 shares are vested as of July 30, 2013.
- (13) Consists of options to purchase 34,374 shares of common stock that are exercisable within 60 days of May 31, 2013, none of which are vested as of July 30, 2013.
- (14) Consists of options to purchase 50,245 shares of common stock that are exercisable within 60 days of May 31, 2013, all of which are vested as of July 30, 2013.
- (15) Mr. Crutchfield joined the board in June 2013. It is anticipated he will receive an option to purchase 0.08% of our outstanding shares, including the shares to be issued in this offering, upon the effective date of the registration statement of which this prospectus forms a part, at an exercise price equal to the initial public offering price.
- (16) Includes (a) 1,694,122 shares held and 85,728 shares that may be acquired pursuant to the exercise of warrants held of record by Draper Fisher Jurvetson Fund VII, L.P., (b) 32,154 shares held of record by Draper Associates, L.P., (c) 24,707 shares held and 1,249 shares that may be acquired pursuant to the exercise of warrants held of record by Draper Fisher Jurvetson Partners VII, LLC, (d) 11,743 shares held and 1,923 shares that may be acquired pursuant to the exercise of warrants held of record by Draper Associates Riskmasters Fund II, LLC and (e) 1,989 shares held and 396 shares that may be acquired pursuant to the exercise of warrants held of record by Draper Associates Riskmasters Fund, LLC. If the investment entities affiliated with the foregoing DFJ Funds and Ms. Fonstad purchase a number of shares in this offering equal to that for which they have expressed interest, we anticipate that, upon completion of this offering, they collectively would beneficially own shares representing approximately 12.68% of our common stock (or 12.02% if the underwriters exercise their overallotment option in full) in the aggregate (assuming a purchase price of \$14.00 per share, the midpoint of the range set forth on the cover of this prospectus). Timothy C. Draper, John H.N. Fisher and Steven T. Jurvetson are Managing Directors of the general partner entities of Draper Fisher Jurvetson Fund VII, L.P. (Fund VII) that directly hold shares and as such, they may be deemed to have voting and investment power with respect to such shares. Draper Fisher Jurvetson Partners VII, LLC (Partners VII) invests lockstep alongside Fund VII. The Managing Partners of Partners VII are Timothy C. Draper, John H.N. Fisher and Steven T. Jurvetson. DALP invests lockstep alongside Fund VII. The General Partners of DALP is Draper Associates, Inc. which is controlled by its President and majority shareholder, Timothy C. Draper. DARF and DARF II invest lockstep alongside Fund VII, instead and in place of DALP beginning June 2010. The Managing Member of DARF and DARF II is Timothy C. Draper. These individuals disclaim beneficial ownership with respect to such shares except to the extent of their pecuniary interest therein. The address of each of the entities affiliated with Draper Fisher Jurvetson is 2882 Sand Hill Road, Suite 150, Menlo Park, California 94025.
- (17) Includes 3,209,440 shares held and 162,408 shares that may be acquired pursuant to the exercise of warrants held of record by Clarus. If the investment entities affiliated with Clarus purchase a number of shares in this offering equal to that for which it has expressed interest, we anticipate that, upon completion of this offering, it would beneficially own shares representing approximately 26.47% of our common stock (or 25.09% if the underwriters exercise their overallotment option in full) in the aggregate (assuming a purchase price of \$14.00 per share, the midpoint of the range set forth on the cover of this prospectus). The GPLP, as the sole general partner of Clarus, may be deemed to beneficially own certain of the shares held of record by Clarus. The GPLP disclaims beneficial ownership of all shares held of record by

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Clarus in which the GPLP does not have an actual pecuniary interest. The GPLLC, as the sole general partner of the GPLP, may be deemed to beneficially own certain of the shares held of record by Clarus. The GPLLC disclaims beneficial ownership of all shares held of record by Clarus in which it does not have an actual pecuniary interest. Each

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of Nicholas Galakatos, a member of the board of directors, and Messrs. Henner, Liptak, Simon, Steinmetz and Wheeler, as individual Managing Directors of the GPLLC, may be deemed to beneficially own certain of the shares held of record by Clarus. Each of Messrs. Galakatos, Henner, Liptak, Simon, Steinmetz and Wheeler disclaims beneficial ownership of all shares held of record by Clarus in which he does not have an actual pecuniary interest.

- (18) Includes 3,209,440 shares held and 162,408 shares that may be acquired pursuant to the exercise of warrants held of record by Clarus. If the investment entities affiliated with Clarus purchase a number of shares in this offering equal to that for which it has expressed interest, we anticipate that, upon completion of this offering, it would beneficially own shares representing approximately 26.47% of our common stock (or 25.09% if the underwriters exercise their over-allotment option in full) in the aggregate (assuming a purchase price of \$14.00 per share, the midpoint of the range set forth on the cover of this prospectus). The GPLP, as the sole general partner of Clarus, may be deemed to beneficially own certain of the shares held of record by Clarus. The GPLP disclaims beneficial ownership of all shares held of record by Clarus in which the GPLP does not have an actual pecuniary interest. The GPLLC, as the sole general partner of the GPLP, may be deemed to beneficially own certain of the shares held of record by Clarus. The GPLLC disclaims beneficial ownership of all shares held of record by Clarus in which it does not have an actual pecuniary interest. Each of Nicholas Galakatos, a member of the board of directors, and Messrs. Henner, Liptak, Simon, Steinmetz and Wheeler, as individual Managing Directors of the GPLLC, may be deemed to beneficially own certain of the shares held of record by Clarus. Each of Messrs. Galakatos, Henner, Liptak, Simon, Steinmetz and Wheeler disclaims beneficial ownership of all shares held of record by Clarus in which he does not have an actual pecuniary interest.
- (19) Consists of options to purchase 2,601 shares of common stock that are exercisable within 60 days of May 31, 2013, all of which are vested as of July 30, 2013.
- (20) Includes: (a) 1,412,550 shares held by OVP VI, (b) 610,526 shares held and 103,404 shares that may be acquired pursuant to the exercise of warrants held of record by OVP Venture Partners VII, L.P., (c) 19,408 shares held by OVP Entrepreneurs Fund and (d) 945 shares held by OVP VII Entrepreneurs Fund. If the investment entities affiliated with the foregoing OVP Funds purchase a number of shares in this offering equal to that for which they have expressed interest, we anticipate that, upon completion of this offering, they collectively would beneficially own shares representing approximately 14.93% of our common stock (or 14.15% if the underwriters exercise their over-allotment option in full) in the aggregate (assuming a purchase price of \$14.00 per share, the midpoint of the range set forth on the cover of this prospectus). Charles P. Waite, a member of the board of directors, is a managing member of OVMC VI, LLC, the general partner of each of OVP VI and OVP Entrepreneurs Fund, and a managing member of OVMC VII, LLC, the general partner of OVP VII. Mr. Waite, together with the other managing members of OVMC VI, LLC and OVMC VII, LLC are deemed to have shared voting and dispositive power over the shares held by OVP VI, OVP VII and OVP Entrepreneurs Fund. These individuals disclaim beneficial ownership with respect to such shares except to the extent of their pecuniary interest therein. The address of each of the entities affiliated with OVP Venture Partners is 1616 Eastlake Ave. E, Suite 208, Seattle, Washington 98102.
- (21) Includes 7,196,570 shares held, 355,545 shares that may be acquired pursuant to the exercise of warrants held of record and options to purchase 1,071,090 shares of common stock that are exercisable within 60 days of May 31, 2013, of which 439,259 shares are vested as of July 30, 2013.

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DESCRIPTION OF CAPITAL STOCK

The following is a summary of the rights of our common stock and convertible preferred stock. This summary is not complete. For more detailed information, please see the certificate of incorporation and bylaws which are filed as exhibits to the registration statement of which this prospectus is a part.

Upon the closing of this offering and the filing of the certificate of incorporation to be effective upon completion of this offering, our authorized capital stock will consist of 150,000,000 shares of common stock, par value \$0.0001 per share, and 15,000,000 shares of preferred stock, par value \$0.0001 per share.

Upon the closing of this offering, all the outstanding shares of our convertible preferred stock will automatically convert into an aggregate of 8,631,427 shares of our common stock. In addition, upon the closing of this offering and after giving effect to the 1-for-32 reverse stock split and the conversion of our convertible preferred stock into common stock, warrants to purchase an aggregate of 617,605 shares of common stock will remain outstanding if they are not exercised prior to closing of this offering.

Common Stock

Outstanding Shares

Based on 570,339 shares of common stock outstanding as of May 31, 2013, the 1-for-32 reverse stock split of our common stock and preferred stock, the conversion of convertible preferred stock outstanding as of May 31, 2013 into 8,631,427 shares of common stock upon the completion of this offering, the issuance of 5,400,000 shares of common stock in this offering, and no exercise of options or warrants, there will be 14,601,766 shares of common stock outstanding upon the closing of this offering. As of May 31, 2013, assuming the conversion of all outstanding convertible preferred stock into common stock upon the closing of this offering, we had approximately 90 record holders of our common stock.

As of May 31, 2013, there were 617,605 shares of common stock subject to outstanding warrants, assuming the conversion of all outstanding convertible preferred stock into common stock upon the closing of this offering, and 1,796,671 shares of common stock subject to outstanding options.

Voting Rights

Each holder of common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. The certificate of incorporation and bylaws to be in effect upon the completion of this offering do not provide for cumulative voting rights. Because of this, the holders of a plurality of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose. With respect to matters other than the election of directors, at any meeting of the stockholders at which a quorum is present or represented, the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at such meeting and entitled to vote on the subject matter shall be the act of the stockholders, except as otherwise required by law. The holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders.

Dividends

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of common stock are entitled to receive dividends, if any, as may be declared from time to time by the board of directors out of legally available funds. For more information, see the section of this prospectus captioned Dividend Policy.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of preferred stock.

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Rights and Preferences

Holders of common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of the holders of common stock are subject to and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued pursuant to this offering, when paid for, will be fully paid and nonassessable.

Preferred Stock

Upon the closing of this offering, the board of directors will have the authority, without further action by the stockholders, to issue up to 15,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, redemption rights, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing change in our control or other corporate action. Upon closing of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Warrants

As of May 31, 2013, we had the following warrants outstanding:

a warrant exercisable for 4,691 shares of our Series B preferred stock at an exercise price of \$17.47 per share issued to the lender under a prior credit facility in October 2007. As a result of the anti-dilution provisions of such warrant, in connection with the offering contemplated by this prospectus, it will become exercisable for 7,315 shares of our common stock. This warrant will expire in October 2014; provided that the expiration of such warrant will be extended to the first anniversary of the offering contemplated by this prospectus if such offering is consummated on or after October 1, 2013;

a warrant exercisable for 16,093 shares of our Series C preferred stock at an exercise price of \$8.45 per share issued to the lender in November 2010 under a prior credit facility originally entered into in October 2007. This warrant will expire in November 2017;

warrants exercisable for an aggregate of 486,002 shares of our Series D preferred stock at an exercise price of \$8.45 per share issued in connection with our 2011 subordinated convertible notes financing. These warrants will expire upon the earliest of (1) November 1, 2018, (2) a change in control of our company and (3) the sale of all or substantially all of our assets;

warrants exercisable for an aggregate of 44,389 shares of our Series D preferred stock at an exercise price of \$8.45 per share issued to the lenders under our existing credit facility in March 2012. These warrants will expire in March 2022;

warrants exercisable for an aggregate of 32,551 shares of our Series D preferred stock at an exercise price of \$8.45 per share issued to the lenders under our existing credit facility in December 2012. These warrants will expire in December 2022;

warrants exercisable for an aggregate of 20,837 shares of our Series E preferred stock at an exercise price of \$14.40 per share issued to the lenders under our amended credit facility in December 2012. These warrants will expire in December 2022; and

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warrants exercisable for an aggregate of 10,418 shares of our Series E preferred stock at an exercise price of \$14.40 per share issued in connection with the April 2013 term loan borrowing under our credit facility. These warrants will expire in April 2023.

These warrants have a net exercise provision under which their holders may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net amount of shares based on the fair market value of our stock at the time of exercise of the warrants after deduction of the aggregate exercise price. These warrants contain provisions for adjustment of the exercise price and number of shares issuable upon the exercise of warrants in the event of certain stock dividends, stock splits, reorganizations, reclassifications and consolidations.

Except for the warrant to purchase shares of our Series B preferred stock as described above, in connection with the offering contemplated by this prospectus, the warrants will become exercisable for a number of shares of our common stock equal to the number of shares of our redeemable convertible preferred stock that underlie such warrants.

Registration Rights

Under our investors' rights agreement, following the closing of this offering, the holders of approximately 9,535,713 shares of common stock (including the shares underlying the warrants described in "Shares Eligible for Future Sale Warrants") or their transferees, have the right to require us to register the offer and sale of their shares, or to include their shares in any registration statement we file, in each case as described below.

Demand Registration Rights

The holders of at least 60% of the shares having registration rights have the right to demand that we use best efforts to file a registration statement for the registration of the offer and sale of at least such number of shares with an anticipated offering proceeds in excess of \$5.0 million. We are only obligated to file up to two registration statements in connection with the exercise of demand registration rights. These registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration under certain circumstances and our ability to defer the filing of a registration statement with respect to an exercise of such demand registration rights for up to 90 days under certain circumstances.

Form S-3 Registration Rights

At any time after we are qualified to file a registration statement on Form S-3, the holders of at least 25% of the shares having registration rights have the right to demand that we file a registration statement on Form S-3 so long as the aggregate amount of shares to be offered and sold under such registration statement on Form S-3 is at least \$1.0 million. We are not obligated to file any registration statements within 180 days of a registration statement that we propose. These registration rights are subject to specified conditions and limitations, including our ability to defer the filing of a registration statement with respect to an exercise of such Form S-3 registration rights for up to 90 days under certain circumstances.

Piggyback Registration Rights

At any time after the closing of this offering, if we propose to register the offer and sale of any of our securities under the Securities Act either for our own account or for the account of other stockholders, a stockholder with registration rights will have the right, subject to certain exceptions, to include their shares of common stock in the registration statement. These registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration statement under certain circumstances, but not below 25% of the total number of shares covered by the registration statement.

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Expenses of Registration

We will pay all expenses relating to any demand registrations, Form S-3 registrations and piggyback registrations, other than underwriting discounts and selling commissions.

Termination

The registration rights terminate upon the earliest of (1) the date that is five years after the closing of this offering, (2) as to a given holder of registration rights, when such holder of registration rights can sell all of such holder's registrable securities in a three month-period pursuant to Rule 144 promulgated under the Securities Act and (3) a change in control of us.

Anti-Takeover Effects of Delaware and Washington Law and Our Certificate of Incorporation and Bylaws

Delaware Law

We are subject to Section 203 of the Delaware General Corporation Law. Section 203 generally prohibits a publicly held Delaware corporation from engaging in a business combination with any interested stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

any merger or consolidation involving the corporation and the interested stockholder;

any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;

subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; and

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the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

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Washington Business Corporation Act

The laws of Washington, where our principal executive offices are located, impose restrictions on certain transactions between certain foreign corporations and significant stockholders. In particular, the Washington Business Corporation Act, or WBCA, prohibits a target corporation, with certain exceptions, from engaging in certain significant business transactions with a person or group of persons which beneficially owns 10% or more of the voting securities of the target corporation, an acquiring person, for a period of five years after such acquisition, unless the transaction or acquisition of shares is approved by a majority of the members of the target corporation's board of directors prior to the time of acquisition. Such prohibited transactions may include, among other things:

any merger or consolidation with, disposition of assets to, or issuance or redemption of stock to or from, the acquiring person;

any termination of 5% or more of the employees of the target corporation as a result of the acquiring person's acquisition of 10% or more of the shares; and

allowing the acquiring person to receive any disproportionate benefit as a stockholder.

After the five-year period, a significant business transaction may take place as long as it complies with certain fair price provisions of the statute or is approved at an annual or special meeting of stockholders.

We will be considered a target corporation so long as our principal executive office is located in Washington, and: (1) a majority of our employees are residents of the state of Washington or we employ more than one thousand residents of the state of Washington; (2) a majority of our tangible assets, measured by market value, are located in the state of Washington or we have more than \$50 million worth of tangible assets located in the state of Washington; and (3) any one of the following: (a) more than 10% of our stockholders of record are resident in the state of Washington; (b) more than 10% of our shares are owned of record by state residents; or (c) 1,000 or more of our stockholders of record are resident in the state.

If we meet the definition of a target corporation, the WBCA may have the effect of delaying, deferring or preventing a change of control.

Certificate of Incorporation and Bylaws

Provisions of the certificate of incorporation and bylaws may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, the certificate of incorporation and bylaws will:

permit the board of directors to issue up to 15,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate, including the right to approve an acquisition or other change in our control;

provide that the authorized number of directors may be changed only by resolution of the board of directors;

provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;

divide the board of directors into three classes;

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provide that a director may only be removed from the board of directors by the stockholders for cause;

require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;

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provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner, and also meet specific requirements as to the form and content of a stockholder's notice;

not provide for cumulative voting rights (therefore allowing the holders of a plurality of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);

provide that special meetings of our stockholders may be called only by the chairman of the board, our chief executive officer or by the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors; and

provide that stockholders will be permitted to amend the bylaws only upon receiving at least two-thirds of the votes entitled to be cast by holders of all outstanding shares then entitled to vote generally in the election of directors, voting together as a single class. The amendment of any of these provisions would require approval by the holders of at least two-thirds of our then outstanding common stock, voting as a single class.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent and registrar's address is 6201 15th Avenue, Brooklyn, New York 11219.

Listing

Our common stock has been approved for listing on The NASDAQ Global Market under the symbol NSTG.

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SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock, and although we expect that our common stock will be approved for listing on The NASDAQ Global Market, we cannot assure investors that there will be an active public market for our common stock following this offering. We cannot predict what effect, if any, sales of our shares in the public market or the availability of shares for sale will have on the market price of our common stock. Future sales of substantial amounts of common stock in the public market, including shares issued upon exercise of outstanding options, or the perception that such sales may occur, however, could adversely affect the market price of our common stock and also could adversely affect our future ability to raise capital through the sale of our common stock or other equity-related securities of ours at times and prices we believe appropriate.

Upon completion of this offering, based on our shares outstanding as of May 31, 2013 and after giving effect to the conversion of all outstanding shares of our convertible preferred stock, 14,601,766 shares of our common stock will be outstanding, or 15,411,766 shares of common stock if the underwriters exercise their over-allotment option in full. All of the shares of common stock expected to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act unless held by our affiliates, as that term is defined in Rule 144 under the Securities Act. The remaining outstanding shares of our common stock will be deemed restricted securities as that term is defined under Rule 144. Restricted securities may be sold in the public market only if their offer and sale is registered under the Securities Act or if the offer and sale of those securities qualify for an exemption from registration, including exemptions provided by Rules 144 and 701 under the Securities Act, which are summarized below.

As a result of the lock-up agreements and market stand-off provisions described below and the provisions of Rules 144 or 701 and no exercise of the underwriters' over-allotment option, the shares of our common stock that will be deemed restricted securities will be available for sale in the public market following the completion of this offering as follows:

No shares will be eligible for sale on the date of this prospectus; and

9,201,766 shares will be eligible for sale upon expiration of the lock-up agreements and market stand-off provisions described below, beginning more than 180 days after the date of this prospectus.

We may issue shares of our common stock from time to time for a variety of corporate purposes, including in capital-raising activities through future public offerings or private placements, in connection with exercise of stock options, vesting of restricted stock units and other issuances relating to our employee benefit plans and as consideration for future acquisitions, investments or other purposes. The number of shares of our common stock that we may issue may be significant, depending on the events surrounding such issuances. In some cases, the shares we issue may be freely tradable without restriction or further registration under the Securities Act; in other cases, we may grant registration rights covering the shares issued in connection with these issuances, in which case the holders of the common stock will have the right, under certain circumstances, to cause us to register any resale of such shares to the public.

Lock-up Agreements

We, our directors and officers and substantially all of the holders of our equity securities have agreed, subject to certain exceptions, not to offer, sell or transfer any common stock or securities convertible into or exchangeable or exercisable for common stock, for 180 days after the date of this prospectus without first obtaining the written consent of J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC on behalf of the underwriters, after the date of this prospectus. These agreements are described in the section of this prospectus captioned "Underwriting."

J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC have advised us that they have no present intent or arrangement to release any shares subject to a lock-up, and will consider the release of any lock-up on a case-by-case basis. Upon a request to release any shares subject to a lock-up, J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC would consider the particular circumstances surrounding the request, including, but

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not limited to, the length of time before the lock-up expires, the number of shares requested to be released, reasons for the request, the possible impact on the market or our common stock and whether the holder of our shares requesting the release is an officer, director or other affiliate of ours.

Rule 144

In general, under Rule 144, beginning 90 days after the date of this prospectus, a person who is not our affiliate and has not been our affiliate for purposes of the Securities Act at any time during the preceding three months will be entitled to sell any shares of our common stock that such person has beneficially owned for at least six months, including the holding period of any prior owner other than one of our affiliates, without being required to comply with the notice, manner of sale or public information requirements or volume limitation provisions of Rule 144. Sales of our common stock by any such person would be subject to the availability of current public information about us if the shares to be sold were beneficially owned by such person for less than one year.

In addition, under Rule 144, a person may sell shares of our common stock acquired from us immediately upon the completion of this offering, without regard to the registration requirements of the Securities Act or the availability of public information about us, if:

the person is not our affiliate and has not been our affiliate at any time during the preceding three months; and

the person has beneficially owned the shares to be sold for at least one year, including the holding period of any prior owner other than one of our affiliates.

Beginning 90 days after the date of this prospectus, our affiliates who have beneficially owned shares of our common stock for at least six months, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

1% of the number of shares of our common stock then outstanding, which will equal approximately 146,018 shares immediately after this offering; and

the average weekly trading volume in our common stock on The NASDAQ Global Market during the four calendar weeks preceding the date of filing of a notice on Form 144 with respect to the sale.

Sales under Rule 144 by our affiliates are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us. To the extent that shares were acquired from one of our affiliates, a person's holding period for the purpose of effecting a sale under Rule 144 would commence on the date of transfer from the affiliate.

Rule 701

In general, under Rule 701 a person who purchased shares of our common stock pursuant to a written compensatory plan or contract and who is not deemed to have been one of our affiliates during the immediately preceding 90 days may sell these shares in reliance upon Rule 144, but without being required to comply with the notice, manner of sale or public information requirements or volume limitation provisions of Rule 144. Rule 701 also permits affiliates to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required to wait until 90 days after the date of this prospectus before selling such shares pursuant to Rule 701.

As of May 31, 2013, 461,593 shares of our outstanding common stock had been issued in reliance on Rule 701 as a result of exercises of stock options. All of these shares, however, are subject to lock-up agreements or market stand-off provisions as discussed above, and, as a result, these shares will only become eligible for sale at the earlier of the expiration of the lock-up period or upon obtaining the consent of J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC on behalf of the underwriters to release all or any portion of these shares from the lock-up agreements.

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Stock Options

As of May 31, 2013, options to purchase an aggregate 1,796,671 shares of our common stock were outstanding. We intend to file one or more registration statements on Form S-8 under the Securities Act to register the offer and sale of all shares of our common stock subject to outstanding stock options and all shares issued or issuable under our stock plans. We expect to file the registration statement covering these shares after the date of this prospectus, which will permit the resale of such shares by persons who are non-affiliates of ours in the public market without restriction under the Securities Act, subject, with respect to certain of the shares, to the provisions of the lock-up agreements and market stand-off provisions described above.

Warrants

Upon completion of this offering, warrants entitling holders to purchase an aggregate of 617,605 shares of our common stock at a weighted-average exercise price of \$8.78 per share, after conversion of the convertible preferred stock will remain outstanding. See Description of Capital Stock Warrants for additional information. Such shares issued upon exercise of the warrants may be able to be sold after the expiration of the lock-up period described above subject the requirements of Rule 144 described above.

Registration Rights

Upon completion of this offering, the holders of approximately 9,535,713 shares of our common stock (including the shares underlying the warrants described in Warrants above), will be eligible to exercise certain rights to cause us to register their shares for resale under the Securities Act, subject to various conditions and limitations. These registration rights are described under the caption Description of Capital Stock Registration Rights. Upon the effectiveness of a registration statement covering these shares, the shares would become freely tradable, and a large number of shares may be sold into the public market. If that occurs, the market price of our common stock could be adversely affected.

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MATERIAL U.S. FEDERAL TAX CONSEQUENCES

TO NON-U.S. HOLDERS OF COMMON STOCK

The following is a summary of the material U.S. federal income and estate tax consequences to non-U.S. holders (as defined below) of the ownership and disposition of our common stock, but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the U.S. Internal Revenue Code, or the Code, U.S. Treasury Regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof, all of which are subject to change, possibly with retroactive effect, which could result in U.S. federal income and estate tax consequences different than those summarized below. We have not sought a ruling from the Internal Revenue Service, or IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions.

This summary does not address the potential application of the Medicare contribution tax or the tax considerations arising under the laws of any state, local or other jurisdiction and is limited to investors who will hold our common stock as a capital asset for tax purposes. This summary does not address all tax considerations that may be important to a particular investor in light of the investor's circumstances or to certain categories of non-U.S. investors that may be subject to special rules, such as:

banks, insurance companies or other financial institutions (except to the extent specifically set forth below);

tax-exempt organizations;

controlled foreign corporations, passive foreign investment companies and corporations that accumulate earnings to avoid U.S. federal income tax;

dealers in securities or currencies;

traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;

persons that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below);

certain former citizens or long-term residents of the United States;

persons who hold our common stock as a position in a hedging transaction, straddle, conversion transaction or other risk reduction transaction; or

persons deemed to sell our common stock under the constructive sale provisions of the Code.

In addition, if a partnership (including any entity classified as a partnership for U.S. federal income tax purposes) holds our common stock, the tax treatment of a partner generally will depend on the status of the partner and upon the activities of the partnership. Accordingly, partnerships that hold our common stock and partners in such partnerships should consult their tax advisors.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income and estate tax laws to your particular situation, as well as any tax consequences of the purchase, ownership and disposition of our common stock arising under other U.S. federal tax rules or under the laws of any state, local, non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

Non-U.S. Holder Defined

For purposes of this discussion, you are a non-U.S. holder if you are a beneficial owner of our common stock other than a (1) U.S. citizen or U.S. resident alien, (2) a corporation or other entity taxable as a corporation for U.S. federal income tax purposes that was created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (3) an estate whose income is subject to U.S. federal income taxation

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regardless of its source, (4) a trust that either is subject to the supervision of a court within the United States and has one or more U.S. persons with authority to control all of its substantial decisions, or has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a United States person or (5) a partnership.

Distributions on Common Stock

If we make distributions on our common stock, these distributions generally will constitute dividends for U.S. tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent these distributions exceed both our current and our accumulated earnings and profits, they will constitute a return of capital and will first reduce your basis in our common stock, but not below zero, and then will be treated as gain from the sale of stock.

Any dividend paid to you generally will be subject to U.S. withholding either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty. In order to receive a reduced treaty rate, you must provide us with an IRS Form W-8BEN or other appropriate version of IRS Form W-8 certifying qualification for the reduced rate. If you are eligible for a reduced rate of withholding pursuant to an income tax treaty, you may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS. If you hold our common stock through a financial institution or other agent acting on your behalf, you will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our paying agent, either directly or through other intermediaries.

Dividends received by you that are effectively connected with your conduct of a U.S. trade or business (and, if an income tax treaty applies, attributable to a permanent establishment maintained by you in the United States) are exempt from withholding. In order to claim this exemption, you must provide us with an IRS Form W-8ECI or other applicable IRS Form W-8 properly certifying exemption. Such effectively connected dividends, although not subject to withholding, are taxed at the same graduated U.S. federal income tax rates applicable to U.S. persons, net of certain deductions and credits. In addition, if you are a corporate non-U.S. holder, dividends you receive that are effectively connected with your conduct of a U.S. trade or business may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty.

Gain on Disposition of Common Stock

Subject to the discussion below regarding recent legislative withholding developments, a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock unless:

the gain is effectively connected with your conduct of a U.S. trade or business (and, if an income tax treaty applies, the gain is attributable to a permanent establishment maintained by you in the U.S.);

you are an individual who is present in the U.S. for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met; or

our common stock constitutes a U.S. real property interest by reason of our status as a United States real property holding corporation, or USRPHC, for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding the disposition and your holding period for our common stock.

If you are described in the first bullet above, you will generally be required to pay tax on the net gain derived from the sale at the same graduated U.S. federal income tax rates applicable to U.S. persons (net of certain deductions and credits), and if you are a corporate non-U.S. holder, you may be subject to branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty. If you are described in the second bullet above, you will be required to pay a flat 30% tax on the gain derived from the sale, which tax may be offset by U.S. source capital losses (even though you are not considered a resident of the United States).

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We believe that we are not currently and will not become a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property relative to the fair market value of our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, however, as long as our common stock is regularly traded on an established securities market, our common stock will be treated as a U.S. real property interest only if you actually or constructively hold more than 5% of such regularly traded common stock at any time during the applicable period described above.

Federal Estate Tax

Our common stock beneficially owned by an individual who is not a citizen or resident of the United States (as defined for U.S. federal estate tax purposes) at the time of death generally will be includable in the decedent's gross estate for U.S. federal estate tax purposes, unless an applicable estate tax treaty provides otherwise.

Backup Withholding and Information Reporting

Generally, we must report annually to the IRS the amount of dividends paid to you, your name and address, and the amount of tax withheld, if any. A similar report will be sent to you. Pursuant to applicable income tax treaties or other agreements, the IRS may make these reports available to tax authorities in your country of residence.

Payments of dividends on or the gross proceeds of a disposition of our common stock may be subject to additional information reporting and backup withholding at a current rate of 28% unless you establish an exemption, for example by properly certifying your non-U.S. status on a Form W-8BEN or another appropriate version of IRS Form W-8. Notwithstanding the foregoing, backup withholding and information reporting may apply if either we or our paying agent has actual knowledge, or reason to know, that you are a U.S. person.

Backup withholding is not an additional tax. Any amounts withheld from a payment to you under the backup withholding rules will be allowed as a credit against your U.S. federal income tax liability and may entitle you to a refund, provided that the required information or returns are furnished to the IRS in a timely manner.

Foreign Accounts

The Code imposes a U.S. federal withholding tax of 30% on dividends on, and the gross proceeds of a disposition of, our common stock to a foreign financial institution (as specifically defined for this purpose) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or such institution otherwise qualifies for an exemption. A U.S. federal withholding tax of 30% is generally imposed on dividends and the gross proceeds of a disposition of our common stock to a non-financial foreign entity unless such entity provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or information regarding direct and indirect U.S. owners of the entity. Although these rules currently apply to applicable payments made after December 31, 2012, the IRS has issued guidance providing that the withholding provisions described above will generally apply to payments of dividends on our common stock made on or after January 1, 2014 and to payments of gross proceeds from a sale or other disposition of such stock on or after January 1, 2017. You should consult your tax advisors regarding the application of these withholding provisions to you.

Table of Contents**UNDERWRITING**

We are offering the shares of common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC are acting as joint book-running managers of the offering and as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of common stock listed next to its name in the following table:

Name	Number of Shares
J.P. Morgan Securities LLC	
Morgan Stanley & Co. LLC	
Leerink Swann LLC	
Robert W. Baird & Co. Incorporated	
Total	5,400,000

The underwriters are committed to purchase all the common shares offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the common shares directly to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$ per share. After the initial public offering of the shares, the offering price and other selling terms may be changed by the underwriters. Sales of shares made outside of the United States may be made by affiliates of the underwriters. The representatives have advised us that the underwriters do not intend to confirm discretionary sales in excess of 5% of the common shares offered in this offering.

The underwriters have an option to buy up to 810,000 additional shares of common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this overallotment option. If any shares are purchased with this overallotment option, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The underwriting fee is \$ per share. The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Without Overallotment Exercise	With Full Overallotment Exercise
Per Share	\$	\$
Total	\$	\$

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately \$3.3 million.

A prospectus in electronic format may be made available on the web sites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

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We, all of our directors and executive officers and holders of substantially all of our common stock and securities exercisable for or convertible into our common stock outstanding immediately prior to this offering have agreed not to (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, or file with the SEC a registration statement under the Securities Act relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock (including, without limitation, common stock or such other securities which may be deemed to be beneficially owned by such directors, executive officers and security holders in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant), or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, (2) enter into any swap or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of any shares of our common stock or any such other securities (whether any such transactions described in clause (1) or (2) above is to be settled by the delivery of shares of common stock or such other securities, in cash or otherwise) or (3) in the case of our directors, executive officers and holders of common stock and securities exercisable for or convertible into our common stock outstanding immediately prior to this offering, make any demand for or exercise any right with respect to the registration of any shares of our common stock or any security convertible into or exercisable or exchangeable for our common stock, in each case without the prior written consent of J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC for a period of 180 days after the date of this prospectus.

In our case, such restrictions shall not apply to:

the shares of our common stock to be sold in this offering;

any shares of our common stock issued upon the exercise of options or warrants or the conversion of a security outstanding on the date of the underwriting agreement of which J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC have been advised in writing;

the grant of options or the issuance of shares of common stock by us to our employees, officers, directors, advisors or consultants pursuant to employee benefit plans in effect on the date of the underwriting agreement and as described herein;

the filing by us of a registration statement with the SEC on Form S-8 in respect of any shares issued under or the grant of any award pursuant to an employee benefit plan described herein; or

the sale or issuance of or entry into an agreement to sell or issue shares of our common stock or securities convertible into or exercisable or exchangeable for our common stock in connection with any (1) mergers, (2) acquisition of securities, businesses, property or other assets, (3) joint ventures, (4) strategic alliances, (5) partnerships with experts or other talent to develop or provide content, (6) equipment leasing arrangements or (7) debt financing, provided that the aggregate number of shares of our common stock or securities convertible into or exercisable for common stock (on an as-converted or as-exercised basis, as the case may be) that we may sell or issue or agree to sell or issue as described in this bullet point shall not exceed 5% of the total number of shares of our common stock issued and outstanding immediately following the completion of this offering, and provided, further, that each recipient of shares of our common stock or securities convertible into or exercisable for our common stock pursuant to this bullet point shall execute and deliver to J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC a lock-up agreement.

In the case of our directors, executive officers and holders of common stock, and subject to certain conditions, such restrictions shall not apply to:

the sale and transfer of shares of our common stock to the underwriters;

sales of shares of our common stock or other securities acquired in open market transactions after the completion of this offering, provided that no filing under Section 16(a) of the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with subsequent sales of our common stock or other securities acquired in such open market transactions;

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transfers of shares of our common stock or any securities convertible into or exercisable or exchangeable for common stock (1) by bona fide gift, will or intestacy, (2) to the spouse, domestic partner, parent, child or grandchild of the director, executive officer or security holder, or to a trust for the benefit of such spouse, domestic partner, parent, child or grandchild, (3) if the director, executive officer or security holder is a corporation, partnership or other business entity (a) to another corporation, partnership or other business entity that controls, is controlled by or is under common control with it or (b) as part of a disposition, transfer or distribution without consideration by such director, executive officer or security holder to its equity holders, or (4) if the director, executive officer or security holder is a trust, to a trustee or beneficiary of the trust, provided that in the case of any transfer or distribution pursuant to this bullet point, each donee, transferee or distributee shall execute and deliver to J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC a lock-up agreement; and provided, further, that no filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of our common stock or other public announcement shall be required or shall be voluntarily made;

transfers of shares of our common stock or any security convertible into common stock to us upon a vesting event of our securities or upon the exercise of options or warrants to purchase our securities, in each case on a cashless or net exercise basis or to cover tax withholding obligations of the director, executive officer or security holder in connection with such vesting or exercise, provided that no filing under Section 16(a) of the Exchange Act reporting a disposition of shares of our common stock or other public announcement shall be required or shall be made voluntarily in connection with such vesting or exercise;

the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of our common stock, provided that such plan does not provide for the transfer of our common stock during the 180-day restricted period and no public announcement or filing under the Exchange Act regarding the establishment of such plan shall be required of or made voluntarily by or on behalf of the director, executive officer, security holder or us;

the conversion of our outstanding preferred stock into shares of our common stock, provided that such shares of common stock remain subject to the terms of the lock-up agreement;

the transfer of shares of our common stock or any security convertible into or exercisable or exchangeable for our common stock to us, pursuant to agreements under which we have the option to repurchase such shares or a right of first refusal with respect to transfers of such shares;

transfers of shares of our common stock or any security convertible into or exercisable or exchangeable for our common stock that occurs by operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement;

transfers of shares of our common stock or any security convertible into or exercisable or exchangeable for our common stock pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction made to all holders of our common stock involving a change of control of our company, provided that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the common stock owned by the director, executive officer or security holder shall remain subject to the restrictions of the lock up agreement; or

the exercise of any right with respect to, or the taking of any other action in preparation for, a registration by us of shares of our common stock or any securities convertible into or exercisable or exchangeable for, our common stock, provided that no transfer of the director s, executive officer s or security holder s common stock registered pursuant to the exercise of such rights shall occur, and no registration statement shall be filed, nor shall any public announcement of the intention to file be made, during the 180-day restricted period.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

Our common stock has been approved for listing on The NASDAQ Global Market under the symbol NSTG.

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In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of common stock in the open market for the purpose of preventing or retarding a decline in the market price of the common stock while this offering is in progress. These stabilizing transactions may include making short sales of the common stock, which involves the sale by the underwriters of a greater number of shares of common stock than they are required to purchase in this offering, and purchasing shares of common stock on the open market to cover positions created by short sales. Short sales may be covered shorts, which are short positions in an amount not greater than the underwriters' overallotment option referred to above, or may be naked shorts, which are short positions in excess of that amount. The underwriters may close out any covered short position either by exercising their overallotment option, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the overallotment option. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act of 1933, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock, and, as a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on The NASDAQ Global Market, in the over-the-counter market or otherwise.

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. In determining the initial public offering price, we and the representatives of the underwriters expect to consider a number of factors including:

the information set forth in this prospectus and otherwise available to the representatives;

our prospects and the history and prospects for the industry in which we compete;

an assessment of our management;

our prospects for future earnings;

the general condition of the securities markets at the time of this offering;

the recent market prices of, and demand for, publicly traded common stock of generally comparable companies; and

other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for our common shares, or that the shares will trade in the public market at or above the initial public offering price.

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The shares of common stock offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer

and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating

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to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

In November 2012, affiliates of Morgan Stanley & Co. LLC, one of the underwriters, purchased an aggregate of 347,300 shares of Series E convertible preferred stock from us for a total of \$5 million. In December 2012, Leerink Swann LLC, one of the underwriters, purchased 1,563 shares of common stock from us pursuant to the exercise of a warrant for a total of \$3,500.

Investment entities affiliated with Clarus Ventures, OVP Venture Partners and Draper Fisher Jurvetson and other existing stockholders (Jennifer Scott Fonstad, one of our directors, Henri Termeer, BMV Direct LLP, Troy Fukumoto, who currently is and until the completion of this offering will be a board observer, and GE Ventures Limited) have expressed interest in acquiring shares of our common stock in this offering. We have requested the representatives of the underwriters to allocate shares in this offering to these investors. It is not currently anticipated that the allocation of shares to these investors will exceed 715,244 shares of the common stock being offered by this prospectus in the aggregate (assuming a purchase price of \$14.00 per share, the midpoint of the range set forth on the cover of this prospectus). Of these shares, an aggregate of approximately 593,214 shares are expected to be allocated to investment entities affiliated with Clarus Ventures, OVP Venture Partners and Draper Fisher Jurvetson and Ms. Fonstad. For additional information regarding such persons' shareholdings and the number of shares such persons have expressed an interest in purchasing, please see the section of this prospectus captioned "Principal Stockholders." Any purchase by such investors would be part of this offering and, consequently, would be made at the initial public offering price. There is no agreement for purchase or sale of these shares, and we do not know if such investors will place an order to purchase or purchase all or any portion of these shares. However, the number of shares available for sale to the general public will be reduced to the extent that such investors purchase such shares.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive, each referred to as a Relevant Member State, from and including the date, or Relevant Implementation Date, on which the European Union Prospectus Directive, or EU Prospectus Directive, was implemented in that Relevant Member State, an offer of shares of common stock described in this prospectus may not be made to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the EU Prospectus Directive, except that, with effect from and including the Relevant Implementation Date, an offer of securities described in this prospectus may be made to the public in that Relevant Member State at any time:

to any legal entity which is a qualified investor as defined under the EU Prospectus Directive;

to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150 natural or legal persons (other than qualified investors as defined in the EU Prospectus Directive), as permitted under the EU Prospectus Directive, subject to obtaining the prior consent of J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC for any such offer; or

in any other circumstances falling within Article 3(2) of the EU Prospectus Directive, provided that no such offer of securities described in this prospectus shall result in a requirement for the publication by us of a prospectus pursuant to Article 3 of the EU Prospectus Directive.

For the purposes of this provision, the expression "an offer of securities to the public" in relation to any securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares of common stock to be offered so as to enable an investor to decide to purchase or subscribe for the shares, as the same may be varied in that Member State by any measure implementing the EU Prospectus Directive in that Member State. The expression "EU Prospectus Directive"

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means Directive 2003/71/EC (and any amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in each Relevant Member State, and the expression 2010 PD Amending Directive means Directive 2010/73/EU.

Notice to Prospective Investors in the United Kingdom

Each of the book-running managers has represented and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of the shares in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and

(b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

This document is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) to investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, referred to as the Order, or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling with Article 49(2)(a) to (d) of the Order, all such persons together being referred to as relevant persons. The shares of common stock are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such securities will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

Notice to Prospective Investors in Switzerland

This document, as well as any other material relating to the shares which are the subject of the offering contemplated by this prospectus, do not constitute an issue prospectus pursuant to Article 652a and/or 1156 of the Swiss Code of Obligations. The shares will not be listed on the SIX Swiss Exchange and, therefore, the documents relating to the shares, including, but not limited to, this document, do not claim to comply with the disclosure standards of the listing rules of SIX Swiss Exchange and corresponding prospectus schemes annexed to the listing rules of the SIX Swiss Exchange. The shares are being offered in Switzerland by way of a private placement, i.e., to a small number of selected investors only, without any public offer and only to investors who do not purchase the shares with the intention to distribute them to the public. The investors will be individually approached by the issuer from time to time. This document, as well as any other material relating to the shares, is personal and confidential and does not constitute an offer to any other person. This document may only be used by those investors to whom it has been handed out in connection with the offering described herein and may neither directly nor indirectly be distributed or made available to other persons without express consent of the issuer. It may not be used in connection with any other offer and shall in particular not be copied and/or distributed to the public in (or from) Switzerland.

Notice to Prospective Investors in Hong Kong

The shares may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or (ii) to professional investors within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a prospectus within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

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Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and each underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

The underwriters and their respective affiliates are full-service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing, and brokerage activities. Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

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LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Seattle, Washington. Davis Polk & Wardwell LLP, Menlo Park, California is representing the underwriters. Investment funds associated with Wilson Sonsini Goodrich & Rosati, Professional Corporation hold shares of our capital stock equal to 7,593 shares of our common stock on an as converted to common stock basis, which represent less than 1.0% of our outstanding shares of common stock.

EXPERTS

The financial statements as of December 31, 2011 and 2012 and for each of the three years in the period ended December 31, 2012 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of our common stock offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some items of which are contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our common stock, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or document referred to are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit.

You may read and copy the registration statement, including the exhibits and schedules thereto, at the Public Reference Section of the SEC, 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the public reference rooms by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov. We also maintain a website at www.nanostring.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on our website is not a part of this prospectus and the inclusion of our website address in this prospectus is an inactive textual reference only.

As a result of this offering, we will become subject to the information and reporting requirements of the Exchange Act and, in accordance with this law, will file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available for inspection and copying at the SEC's public reference facilities and the website of the SEC referred to above.

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NANOSTRING TECHNOLOGIES, INC.

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of NanoString Technologies, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of comprehensive income, of changes in mandatorily redeemable convertible preferred stock and stockholders' deficit and of cash flows present fairly, in all material respects, the financial position of NanoString Technologies, Inc. and its subsidiaries (the Company) at December 31, 2011 and 2012, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012 in conformity with accounting principles generally accepted in the United States of America. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Seattle, Washington

March 11, 2013, except for the effects of the reverse stock split described in the last paragraph of

Note 1, as to which the date is June 12, 2013.

Table of Contents**NanoString Technologies, Inc.****Consolidated Balance Sheets**

	December 31,		Pro Forma	
	2011	2012	March 31,	March 31,
	(In thousands, except share and per share amounts)			
	(Unaudited)			
Assets:				
Current assets:				
Cash and cash equivalents	\$ 10,868	\$ 21,692	\$ 11,794	\$ 11,794
Accounts receivable, net	3,112	3,322	4,356	4,356
Inventory	3,496	5,380	5,337	5,337
Prepaid expenses and other	1,541	1,320	2,162	2,162
Total current assets	19,017	31,714	23,649	23,649
Restricted cash	180	180	180	180
Deferred offering costs		1,765	2,336	2,336
Property and equipment, net	5,196	3,674	3,346	3,346
Related party loans and other assets	191	73	64	64
Total assets	\$ 24,584	\$ 37,406	\$ 29,575	\$ 29,575
Liabilities, Mandatorily Redeemable Convertible Preferred Stock and Stockholders' (Deficit) Equity				
Current liabilities:				
Accounts payable	\$ 1,650	\$ 2,865	\$ 1,839	\$ 1,839
Accrued liabilities	2,551	4,481	3,796	3,796
Deferred revenue, current portion	991	878	965	965
Deferred rent, current portion	714	764	778	778
Long-term debt, current portion	875	2,789	4,021	4,021
Total current liabilities	6,781	11,777	11,399	11,399
Deferred revenue, net of current portion	103	362	486	486
Deferred rent, net of current portion	2,685	1,903	1,706	1,706
Long-term debt, net of current portion	1,012	9,970	8,814	8,814
Preferred stock warrant liability	2,497	3,532	4,014	
Total liabilities	13,078	27,544	26,419	22,405
Commitments and contingencies (Note 11)				
Mandatorily redeemable convertible preferred stock:				
Series A, \$0.0001 par value, 564,083 shares authorized; 557,339 shares issued and outstanding; liquidation preference of \$15,628 at December 31, 2012; pro forma zero shares	14,383	15,605	15,961	
Series B, \$0.0001 par value, 520,839 shares authorized; 515,836 shares issued and outstanding; liquidation preference of \$14,045 at December 31, 2012; pro forma zero shares	12,793	13,865	14,155	
Series C, \$0.0001 par value, 3,659,375 shares authorized; 3,551,060 shares issued and outstanding; liquidation preference of \$38,709 at December 31, 2012; pro forma zero shares	35,614	38,592	39,399	
Series D, \$0.0001 par value, 3,125,000 authorized; 2,430,054 shares issued and outstanding; liquidation preference of \$22,510 at December 31, 2012; pro forma	18,167	20,323	20,887	

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zero shares				
Series E, \$0.0001 par value, 1,109,375 authorized; zero and 1,063,951 shares issued and outstanding at December 31, 2011 and 2012, respectively; liquidation preference of \$23,078 at December 31, 2012; pro forma zero shares		15,237		15,562
Stockholders (Deficit) Equity:				
Common stock, \$0.0001 par value, 11,712,500 shares authorized; 324,529, 411,226 and 563,318 shares issued and outstanding at December 31, 2011 and 2012 and March 31, 2013 (unaudited), respectively; issued and outstanding pro forma, 9,194,745 shares (unaudited)				1
Additional paid in capital				109,977
Accumulated deficit	(69,451)	(93,760)	(102,808)	(102,808)
Total stockholders (deficit) equity	(69,451)	(93,760)	(102,808)	7,170
 Total liabilities, mandatorily redeemable convertible preferred stock and stockholders (deficit) equity	 \$ 24,584	 \$ 37,406	 \$ 29,575	 \$ 29,575

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents**NanoString Technologies, Inc.****Consolidated Statements of Comprehensive Income**

	Years Ended December 31,			Three Months Ended	
	2010	2011	2012	2012	2013
	(In thousands, except per share amounts)				
	(Unaudited)				
Revenue	\$ 11,730	\$ 17,800	\$ 22,973	\$ 4,502	\$ 5,676
Costs and expenses					
Cost of revenue	9,128	9,777	12,361	2,656	2,882
Research and development	7,547	8,990	11,635	2,197	3,059
Selling, general and administrative	8,027	9,529	15,486	3,167	6,126
Total costs and expenses	24,702	28,296	39,482	8,020	12,067
Loss from operations	(12,972)	(10,496)	(16,509)	(3,518)	(6,391)
Other income (expense)					
Interest income	29	10	21	7	3
Interest expense	(94)	(599)	(804)	(112)	(385)
Other income (expense)	254	80	(29)	(13)	(4)
Revaluation of preferred stock warrant liability	15	73	(387)	26	(482)
Total other income (expense)	204	(436)	(1,199)	(92)	(868)
Net loss	(12,768)	(10,932)	(17,708)	(3,610)	(7,259)
Accretion of mandatorily redeemable convertible preferred stock	(4,351)	(5,251)	(7,533)	(1,793)	(2,342)
Net loss attributable to common stockholders	\$ (17,119)	\$ (16,183)	\$ (25,241)	\$ (5,403)	\$ (9,601)
Net loss per share basic and diluted	\$ (54.17)	\$ (50.10)	\$ (71.10)	\$ (16.52)	\$ (17.88)
Shares used in computing basic and diluted net loss per share	316	323	355	327	537
Pro forma net loss per share basic and diluted (unaudited)			\$ (2.16)		\$ (0.74)
Shares used in computing pro forma net loss per share, basic and diluted (unaudited)			8,018		9,168

The accompanying notes are an integral part of these consolidated financial statements.

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NanoString Technologies, Inc.

Consolidated Statements of Changes in Mandatorily Redeemable Convertible Preferred Stock and Stockholders' Deficit

Period From December 31, 2009 Through March 31, 2013

	Series A Preferred Stock		Series B Preferred Stock		Series C Preferred Stock		Series D Preferred Stock		Series E Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
(In thousands, except share amounts)															
Balance at December 31, 2009	557,339	\$ 12,217	515,836	\$ 10,897	1,775,530	\$ 15,437		\$		\$	312,584	\$	\$	\$ (36,565)	\$ (36,565)
Issuance of Series C convertible preferred stock, net of issuance costs					1,775,530	14,985									
Conversion of convertible preferred stock into common stock		1,033		903		2,415								(167)	(4,184)
Issuance of Series E convertible preferred stock											9,741		23		
Share-based compensation													144		
Share-based compensation														(12,768)	(12,768)
Balance at December 31, 2010	557,339	13,250	515,836	11,800	3,551,060	32,837					322,325			(53,517)	(53,517)
Issuance of Series D convertible preferred stock, net of issuance costs								2,430,054	17,819						
Conversion of convertible preferred stock into common stock		1,133		993		2,777			348					(249)	(5,002)
Issuance of Series E convertible preferred stock											2,204		6		
Share-based compensation													243		
Share-based compensation														(10,932)	(10,932)
Balance at December 31, 2011	557,339	14,383	515,836	12,793	3,551,060	35,614	2,430,054	18,167			324,529			(69,451)	(69,451)
Issuance of Series E convertible preferred stock, net of issuance costs										1,063,951	15,132				
Conversion of convertible preferred stock into common stock		1,222		1,072		2,978		2,156		105				(932)	(6,601)
Issuance of Series E convertible preferred stock											85,135		183		
Share-based compensation											1,562		4		
Share-based compensation													745		
Share-based compensation														(17,708)	(17,708)
Balance at December 31, 2012	557,339	\$ 15,605	515,836	\$ 13,865	3,551,060	\$ 38,592	2,430,054	\$ 20,323	1,063,951	\$ 15,237	411,226	\$	\$	\$ (93,760)	\$ (93,760)
Issuance of Series E convertible preferred stock (net of issuance costs)		356		290		807		564		325			(553)	(1,789)	(1,789)

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Increase of stock based on issuance (unaudited)													152,092	322		
Decrease of stock based on issuance (unaudited)														231	(7,259)	
Net change in cash and cash equivalents at December 31, 2013 (audited)	557,339	\$ 15,961	515,836	\$ 14,155	3,551,060	\$ 39,399	2,430,054	\$ 20,887	1,063,951	\$ 15,562	563,318	\$	\$	\$ (102,808)	\$ (102,808)	

The accompanying notes are an integral part of these consolidated financial statements.

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Table of Contents**NanoString Technologies, Inc.****Consolidated Statements of Cash Flows**

	Years Ended December 31,			Three Months Ended	
	2010	2011	2012	2012	2013
	(In thousands)			(Unaudited)	
Operating activities:					
Net loss	\$ (12,768)	\$ (10,932)	\$ (17,708)	\$ (3,610)	\$ (7,259)
Adjustments to reconcile net loss to net cash used in operating activities					
Depreciation and amortization	972	1,454	1,947	484	464
Amortization of debt discount		330	136	77	51
Stock-based compensation	144	243	745	280	231
Revaluation of preferred stock warrant liability	(15)	(73)	387	(26)	482
Interest accrued on convertible promissory notes		87			
Interest accrued on long-term note loan			90		79
Loss on disposal of property and equipment	117		3		1
Changes in operating assets and liabilities					
Accounts receivable	62	(965)	(210)	499	(1,034)
Inventory	(233)	(1,338)	(1,884)	(246)	43
Prepaid expenses and other	(139)	(1,100)	221	(660)	(842)
Related party loans and other assets	(128)	(58)	118	41	9
Accounts payable	1,008	(1,231)	103	524	(62)
Accrued liabilities	454	781	1,830	(504)	(1,201)
Deferred revenue	49	624	146	396	211
Deferred rent	(488)	1,486	(732)	(170)	(183)
Net cash used in operating activities	(10,965)	(10,692)	(14,808)	(2,915)	(9,010)
Investing activities:					
Purchases of property and equipment	(1,932)	(2,688)	(428)	(131)	(136)
Increase in restricted cash		(112)		(1)	
Net cash used in investing activities	(1,932)	(2,800)	(428)	(132)	(136)
Financing activities:					
Proceeds from issuance of preferred stock and warrants	14,985	14,883	15,132		
Proceeds from issuance of convertible promissory notes and warrants		5,000			
Proceeds from issuance of long-term debt	1,197	5,004	13,000	7,500	
Repayment of long-term debt	(681)	(4,899)	(1,706)	(1,551)	(55)
Deferred offering costs			(553)		(1,019)
Proceeds from exercise of stock options	23	6	183	13	322
Proceeds from exercise of common stock warrant			4		
Net cash provided by (used in) financing activities	15,524	19,994	26,060	5,962	(752)
Net increase (decrease) in cash and cash equivalents	2,627	6,502	10,824	2,915	(9,898)
Cash and cash equivalents:					
Beginning of period	1,739	4,366	10,868	10,868	21,692

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End of period	\$ 4,366	\$ 10,868	\$ 21,692	\$ 13,783	\$ 11,794
Supplemental disclosures:					
Accretion of preferred stock	\$ 4,351	\$ 5,251	\$ 7,533	\$ 1,793	\$ 2,342
Accrual of offering costs			1,212		571
Cash paid for interest	94	167	563	36	254
Issuance of preferred stock warrants with debt		661	648	263	
Issuance of preferred stock warrants with equity		1,867			
Conversion of convertible promissory notes and accrued interest into Series D preferred stock			5,087		

The accompanying notes are an integral part of these consolidated financial statements.

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NanoString Technologies, Inc.

Notes to Consolidated Financial Statements

1. Description of the Business

NanoString Technologies, Inc. (the Company) was incorporated in the state of Delaware on June 20, 2003. The Company's headquarters is located in Seattle, Washington. The Company's technology enables direct detection, identification and quantification of individual target molecules in a biological sample by attaching a unique color coded fluorescent reporter to each target molecule of interest.

The Company markets its proprietary nCounter Analysis System, consisting of instruments and consumables, to academic, government and biopharmaceutical laboratories.

The Company operates in a highly regulated environment. The Company's business also involves inherent risks, including, among others, dependence on key personnel, availability of raw materials and patentability of the Company's products and processes. Further, any of the technologies covering the Company's products under development could become obsolete or diminished in value by discoveries at other organizations.

The Company has incurred losses to date and expects to incur additional losses in the foreseeable future. The Company continues to devote the majority of its resources to the growth of the Company's business in accordance with its business plan. The Company's activities have been financed primarily through the sale of equity securities and incurrence of indebtedness, and to a lesser extent, capital leases and other borrowings.

Cash used in operations for the year ended December 31, 2012 was \$14.8 million. As of December 31, 2012, the Company had cash and cash equivalents of \$21.7 million and available borrowing capacity under the credit facility totaling \$12.0 million. Cash used in operations for the three months ended March 31, 2013 was \$9.0 million (unaudited). As of March 31, 2013, the Company had cash and cash equivalents of \$11.8 million (unaudited) and available borrowing capacity under the credit facility totaling \$12.0 million (unaudited). In the Company's current mode of operation, management expects the Company's cash, cash equivalents and available borrowing capacity will be sufficient to meet its anticipated cash needs at least through the end of 2013. However, the Company's operating plan for 2013 reflects substantial incremental investment in the launch of its first diagnostic product, which it intends to fund through equity financing. Without these additional funds, the Company will be required to reduce the pace of its investment in the commercialization of its diagnostic product.

On June 12, 2013, the Company effected a 1-for-32 reverse stock split of its common stock and preferred stock. All share and per share numbers have been revised to reflect the reverse stock split.

2. Significant Accounting Policies

Accounting Principles

The consolidated financial statements and accompanying notes were prepared in accordance with accounting principles generally accepted in the United States of America (US GAAP).

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its two wholly-owned subsidiaries, NanoString Technologies Europe Limited, which operates in the United Kingdom and NanoString Technologies SAS, which operates in France. Both of these subsidiaries function as European sales and support offices. The functional currency of both subsidiaries is the U.S. dollar. All significant intercompany balances and transactions have been eliminated.

Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of

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contingent assets and liabilities at the date of the consolidated financial statements and that affect the reported amounts of revenue and expenditures during the reporting period. Actual results could differ from those estimates.

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NanoString Technologies, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

Significant estimates inherent in the preparation of the accompanying consolidated financial statements include the estimation of the fair value of the Company's equity securities and the calculation of stock-based compensation.

Unaudited Consolidated Interim Financial Information

The consolidated financial statements as of March 31, 2013 and for the three months ended March 31, 2012 and March 31, 2013 are unaudited. All disclosures as of March 31, 2013 and for the three months ended March 31, 2012 and 2013, presented in the notes to the consolidated financial statements, are unaudited. The unaudited interim consolidated financial statements have been prepared on the same basis as the annual consolidated financial statements and, in the opinion of management, reflect all normal recurring adjustments necessary for a fair statement of the Company's financial position as of March 31, 2013 and results of operations and cash flows for the three months ended March 31, 2012 and 2013. The results of operations for the three months ended March 31, 2013 are not necessarily indicative of the results to be expected for the year ending December 31, 2013 or for other interim periods or for future years.

Unaudited Pro Forma Information

The unaudited pro forma information has been prepared assuming that upon the completion of an initial public offering (1) all of the Company's mandatorily redeemable convertible preferred stock outstanding will automatically convert into shares of common stock and (2) all preferred stock warrants will be converted to warrants to purchase common stock.

The March 31, 2013 unaudited pro forma consolidated balance sheet reflects the conversion of all 8,118,240 outstanding shares of mandatorily redeemable convertible preferred stock into 8,631,427 shares of common stock and the reclassification of the preferred stock warrant liability to additional paid in capital. The unaudited pro forma basic and diluted net loss per share for the year ended December 31, 2012 and the three months ended March 31, 2013 has been prepared assuming the conversion of preferred stock (using the if-converted method).

Cash and Cash Equivalents

The Company considers all highly-liquid investments with purchased maturities of three months or less to be cash equivalents. The Company's cash equivalents consist principally of funds maintained in depository accounts. The Company invests its cash and cash equivalents with major financial institutions; at times these investments exceed federally insured limits.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are stated at the amount management expects to collect from customers based on their outstanding invoices. Management reviews accounts receivable regularly to determine if any receivable will potentially be uncollectible. Estimates are used to determine the amount of allowance for doubtful accounts necessary to reduce accounts receivable to its estimated net realizable value. At December 31, 2011 and 2012 and March 31, 2013, the allowance for doubtful accounts was approximately \$4,000, \$0 and \$0 (unaudited), respectively. These estimates were made by analyzing the status of significant past due receivables and by establishing provisions for estimated losses by analyzing current and historical bad debt trends.

Concentration of Risks

Financial instruments that potentially expose the Company to concentrations of credit risk consist principally of cash and cash equivalents and accounts receivable. The Company has credit risk related to the

Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****2. Significant Accounting Policies (Continued)**

collectability of its accounts receivable. The Company performs initial and ongoing evaluations of its customers' financial position and generally extends credit on account without collateral.

The Company did not have any customers that individually represented more than 10% of total revenue during the years ended December 31, 2010, 2011 or 2012 or for the three months ended March 31, 2012 or 2013.

The Company had the following customers that each represented more than 10% of total accounts receivable:

	Years Ended December 31,		Three Months Ended	
	2011	2012	March 31, 2012	2013
Customer A	15%	*%	12%	*%
Customer B	10	*	11	*
	25%	*%	23%	*%

* Accounts receivable balance for an individual customer was less than 10% of total accounts receivable.

The Company is also subject to supply chain risks related to the outsourcing of the manufacturing and production of its instruments to sole suppliers. Although there are a limited number of manufacturers for instruments of this type, the Company believes that other suppliers could provide similar products on comparable terms. A change in suppliers, however, could cause a delay in manufacturing and a possible loss of sales, which would adversely affect operating results.

Fair Value Measurements

The Company establishes the fair value of its assets and liabilities using the price that would be received to sell an asset or paid to transfer a financial liability in an orderly transaction between market participants at the measurement date. A fair value hierarchy is used to measure fair value. The three levels of the fair value hierarchy are as follows:

- Level 1 Quoted prices in active markets for identical assets and liabilities.
- Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.
- Level 3 Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

The recorded amounts of certain financial instruments, including cash and cash equivalents, accounts receivable, prepaid expenses and other, accounts payable and accrued liabilities, approximate fair value due to their relatively short-term maturities. The recorded amount of the Company's long-term debt approximates fair value because the related interest rates approximate rates currently available to the Company.

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The Company has mandatorily redeemable convertible preferred stock which contains certain redemption provisions that preclude equity classification. Accordingly, warrants to purchase this mandatorily redeemable convertible preferred stock are classified as liabilities. These preferred stock warrants are subject to remeasurement at each balance sheet date and any change in fair value is recognized as a component of other income (expense).

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NanoString Technologies, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

The Company's preferred stock warrants are categorized as Level 3 because they were valued based on unobservable inputs and management judgment due to the absence of quoted market prices, inherent lack of liquidity and the long-term nature of such financial instruments. The Company performs a fair value assessment of the preferred stock warrant inputs on a quarterly basis using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model are inherently subjective and involve significant judgment.

The Company may elect to apply fair value to its financial assets and liabilities on an instrument-by-instrument basis. The Company has not elected to apply the fair value option to any eligible financial assets or liabilities in 2010, 2011 or 2012.

Inventory

Inventory consists of finished goods, work in process, raw materials and certain component parts to be used in manufacturing the Company's products. Inventory is stated at the lower of cost or market. Cost is determined using a standard cost system, whereby the standard costs are updated periodically to reflect current costs and market represents the lower of replacement cost or estimated net realizable value. The Company records adjustments to inventory for potentially excess, obsolete, slow-moving or impaired items.

The Company outsources the manufacturing of its instruments to third-party contract manufacturers who manufacture them to certain specifications and source certain raw materials from sole source providers. Major delays in shipments, inferior quality, insufficient quantity or any combination of these or other factors may harm the Company's business and results of operations. In addition, the inability of one or more of these suppliers to provide the Company with an adequate supply of its products or raw materials or the loss of one or more of these suppliers may cause a delay in the Company's ability to fulfill orders while it obtains a replacement supplier and may harm the Company's business and results of operations.

Property and Equipment

Property and equipment are recorded at cost, net of accumulated depreciation and amortization. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets. Manufacturing equipment is amortized over five years, computer equipment is generally depreciated over three years, furniture and fixtures are depreciated over five years and leasehold improvements are amortized over the life of the related assets or the term of the lease, whichever is less. Expenditures for additions are capitalized and expenditures for maintenance and repairs are expensed as incurred. Gains and losses from the disposal of property and equipment are reflected in the statements of comprehensive income in the year of disposition.

Leases and Leasehold Improvements

Rent expense for leases that provide for scheduled rent increases during the lease term is recognized on a straight-line basis over the term of the related lease. Leasehold improvements that are funded by landlord incentives or allowances are recorded in property and equipment and as a component of deferred rent and are amortized as a reduction of rent expense over the term of the related lease.

Impairment of Long-Lived Assets

The Company recognizes impairment losses on long-lived assets when indicators of impairment are present and the anticipated undiscounted cash flows to be generated by those assets are less than the asset's carrying values. The Company has not experienced any impairment losses on its long-lived assets during the periods presented.

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NanoString Technologies, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

Deferred Offering Costs

Deferred offering costs represent legal, accounting and other direct costs related to the Company's efforts to raise capital through an initial public offering of the Company's common stock. Future costs will be deferred until the completion of the initial public offering, at which time they will be reclassified to additional paid-in capital as a reduction of the proceeds. All deferred costs will be expensed if the Company terminates its plan for an initial public offering. The Company has recorded approximately \$1.8 million and \$2.3 million (unaudited) of deferred offering costs as a non-current asset in the accompanying balance sheet as of December 31, 2012 and March 31, 2013, respectively.

Segments

The Company follows the authoritative literature that established annual and interim reporting standards for enterprises' operating segments and related disclosures about its products and services, geographic regions and major customers. Operating segments are defined as components of an entity for which separate financial information is available and evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. The Company is organized as and operates in two reportable segments: life sciences segment and diagnostics segment.

Revenue Recognition

The Company recognizes revenue when (1) persuasive evidence of an arrangement exists, (2) delivery has occurred or services have been rendered, (3) the price to the customer is fixed or determinable and (4) collectability is reasonably assured.

The Company generates revenue from the sale of products and services. The Company's products consist of its proprietary nCounter Analysis System and related consumables. Services consist of extended warranties and service fees for assay processing. A delivered product or service is considered to be a separate unit of accounting when it has value to the customer on a stand-alone basis. Products or services have value on a stand-alone basis if they are sold separately by any vendor or the customer could resell the delivered product.

Systems product revenue is recognized upon installation and calibration, which is performed by specialized Company technicians. Systems and related installation and calibration are considered to be one separate unit of accounting, as systems are required to be professionally installed and calibrated before use. Until such time as installation and calibration can generally be provided by other vendors, they will not be considered separate revenue elements. Consumables are considered to be separate units of accounting as they are sold separately. Consumables product revenue is recognized upon shipment.

Service revenue is recognized when earned, which is generally upon the rendering of the related services. Extended warranties and service fees for assay processing are each considered separate units of accounting as they are sold separately. The Company offers extended warranties on its nCounter Analysis System for periods ranging from 12 to 36 months after the end of the standard 12-month warranty period. Extended warranties are generally separately priced. Revenue from extended warranties are deferred and recognized in income on a straight-line basis over the warranty period.

On January 1, 2011, new revenue recognition guidance for arrangements with multiple deliverables became effective. For sales of products and services after 2010, the Company allocates the contract consideration at the inception of the contract to the deliverables based upon their relative selling prices. To date, selling prices have been established by reference to vendor specific objective evidence based on stand alone sales transactions for each deliverable. Vendor specific objective evidence is considered to have been established when a substantial majority of individual sales transactions within the previous 12 month period fall within a reasonably narrow

Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****2. Significant Accounting Policies (Continued)**

range, which the Company has defined to be plus or minus 15% of the median sales price of actual stand-alone sales transactions. The Company uses its best estimate of selling price for individual deliverables when vendor specific objective evidence or third-party evidence is unavailable. Allocated revenue is only recognized for each deliverable when the revenue recognition criteria have been met.

For sales of products and services prior to 2011, the Company allocated revenue for multiple element transactions to each unit of accounting using the residual method as objective and reliable evidence of fair value existed for the undelivered items, but not for the delivered items. The adoption of the new guidance in 2011 did not have a material impact on the Company's financial statements.

Cost of Revenue

Cost of revenue consists primarily of costs incurred in the production process, including costs of purchasing instruments from third-party contract manufacturers, consumable component materials and assembly labor and overhead, installation, warranty, service and packaging and delivery costs. In addition, cost of revenue includes royalty costs for licensed technologies included in the Company's products, provisions for slow-moving and obsolete inventory and stock-based compensation expense. Cost of revenue for instruments and consumables is recognized in the period the related revenue is recognized.

Shipping and Handling Costs

Shipping and handling costs incurred for product shipments are included in cost of revenue in the consolidated statements of comprehensive income.

Reserve for Product Warranties

The Company generally provides a one-year warranty on its nCounter Analysis Systems and establishes an accrual based on historical product failure rates and actual warranty costs incurred. Warranty expense is recorded as a component of cost of revenue in the consolidated statements of comprehensive income.

The following information reconciles changes in the Company's warranty reserve and related costs:

	(In thousands)
Warranty reserve, December 31, 2009	\$ 87
Cost of warranty claims	(173)
Warranty accrual	149
Warranty reserve, December 31, 2010	63
Cost of warranty claims	(518)
Warranty accrual	622
Warranty reserve, December 31, 2011	167
Cost of warranty claims	(244)
Warranty accrual	325
Warranty reserve, December 31, 2012	248
Cost of warranty claims (unaudited)	(63)

Warranty accrual (unaudited)	43
Warranty reserve, March 31, 2013 (unaudited)	\$ 228

Research and Development

Research and development expenses, consisting primarily of salaries and benefits, occupancy, laboratory supplies, clinical study costs, consulting fees and related costs, are expensed as incurred.

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NanoString Technologies, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Significant Accounting Policies (Continued)

Selling, General and Administrative

Selling expenses consist primarily of personnel costs for sales and marketing and professional costs and are expensed as the related costs are incurred. Advertising costs are charged to operations as incurred and are included in sales and marketing expenses. Advertising costs totaled approximately \$558,000, \$417,000 and \$590,000 during the years ended December 31, 2010, 2011 and 2012, respectively.

General and administrative expenses consist primarily of personnel costs for the Company's finance, human resources, business development and general management, as well as professional services, such as legal and accounting services. General and administrative expenses are expensed as they are incurred.

Income Taxes

The Company accounts for income taxes under the liability method. Under the liability method, deferred tax assets and liabilities are determined based on the differences between the financial reporting and income tax bases of assets and liabilities and are measured using the tax rates that will be in effect when the differences are expected to reverse. A valuation allowance is recorded when it is more likely than not that some of the deferred tax assets will not be realized.

The Company determines whether a tax position is more likely than not to be sustained upon examination based on the technical merits of the position. For tax positions meeting the more-likely-than-not threshold, the tax amount recognized in the financial statements is reduced by the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with the relevant tax authority.

Stock-Based Compensation

The Company accounts for stock-based compensation under the fair value method. Stock-based compensation costs recognized during the years ended December 31, 2010, 2011 and 2012 were based on option awards granted and vested based on their grant-date fair value, estimated using the Black-Scholes option pricing model. The Company uses the straight-line attribution method for recognizing compensation expense.

The Company recognizes compensation expense for only the portion of options expected to vest. Therefore, management applied an estimated forfeiture rate that was derived from historical employee termination behavior. If the actual number of forfeitures differs from these estimates, adjustments to compensation expense may be required in future periods.

Guarantees and Indemnifications

In the normal course of business, the Company guarantees and/or indemnifies other parties, including vendors, lessors and parties to transactions with the Company, with respect to certain matters. The Company has agreed to hold the other parties harmless against losses arising from breach of representations or covenants, or out of intellectual property infringement or other claims made against certain parties. It is not possible to determine the maximum potential amount the Company could be required to pay under these indemnification agreements, since the Company has not had any prior indemnification claims, and each claim would be based upon the unique facts and circumstances of the claim and the particular provisions of each agreement. In the opinion of management, any such claims would not be expected to have a material adverse effect on the Company's consolidated results of operation, financial condition or cash flows. The Company did not have any related liabilities recorded at December 31, 2011 and 2012.

Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****2. Significant Accounting Policies (Continued)***Comprehensive Income (Loss)*

There were no differences between comprehensive income or loss as defined by ASC 220, Comprehensive Income, and net income or loss as reported in the Company's statement of comprehensive income.

Recent Accounting Pronouncements

The Company has reviewed recent accounting pronouncements and concluded that they are either not applicable to the business, or that no material effect is expected on the consolidated financial statements as a result of future adoption.

3. Inventory

Inventory consisted of the following at:

	December 31, 2011	December 31, 2012 (In thousands)	March 31, 2013 (Unaudited)
Raw materials	\$ 1,568	\$ 2,120	\$ 2,298
Work in process	889	962	1,020
Finished goods	1,039	2,298	2,019
	\$ 3,496	\$ 5,380	\$ 5,337

4. Prepaid Expenses and Other

Prepaid expenses and other consisted of the following at:

	December 31, 2011	December 31, 2012 (In thousands)	March 31, 2013 (Unaudited)
Prepaid royalties	\$ 200	\$ 175	\$ 175
Deposits for inventory	857	883	1,503
Other	484	262	484
	\$ 1,541	\$ 1,320	\$ 2,162

5. Property and Equipment

Property and equipment consisted of the following at December 31:

	Useful Life (Years)	2011	2012
(In thousands)			
Manufacturing equipment	5	\$ 2,481	\$ 2,854
Prototype systems	2	1,939	1,893
Computer equipment	3	571	651
Furniture and fixtures	5	507	517
Leasehold improvements	Various	4,713	4,713
Construction in progress		59	14
		10,270	10,642
Less: Accumulated depreciation and amortization		(5,074)	(6,968)
		\$ 5,196	\$ 3,674

Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****5. Property and Equipment (Continued)**

Prototype systems consist of digital imagers and liquid handling robots used in internal testing and other development activities.

Depreciation and amortization expense for the years ended December 31, 2010, 2011 and 2012 totaled approximately \$1.0 million, \$1.5 million and \$1.9 million, respectively.

6. Accrued Liabilities

Accrued liabilities consisted of the following at:

	December 31, 2011	December 31, 2012 (In thousands)	March 31, 2013 (Unaudited)
Salaries and bonuses	\$ 1,725	\$ 2,071	\$ 1,587
Clinical study costs		847	217
Accounting and legal	107	491	705
Other accrued liabilities	719	1,072	1,287
	\$ 2,551	\$ 4,481	\$ 3,796

7. Long-Term Debt and Obligations

In November 2010, the Company amended its existing loan and security agreement (the Amended Agreement). Under the Amended Agreement, the financial institution provided a \$5.0 million operating facility, consisting of a \$2.0 million term loan to finance the acquisition of property and equipment, a \$1.5 million revolving line and a \$1.5 million accounts receivable revolving line. Advances under the term loan were payable over 36 months and advances under the revolving lines were due November 8, 2012. As discussed below, all of the indebtedness incurred under this loan and security agreement was repaid in connection with the entry into a new credit facility in March 2012.

In March 2012, the Company entered into a \$15.0 million credit facility that consists of a \$13.0 million term loan and a \$2.0 million accounts receivable revolving line of credit with a maturity date of November 2015 and interest rates based on the three-month LIBOR rate plus 8.39% (subject to a LIBOR floor of 0.50%) and the Prime Rate plus 3.70% (subject to a floor of 6.95%), respectively. At December 31, 2012, three-month LIBOR was equal to 0.31% and the Prime Rate was equal to 3.25%. At closing, the Company drew \$7.5 million on the term facility and terminated its existing credit facility by paying off the outstanding balance of approximately \$1.4 million.

In connection with the March 2012 draw down of the term loan, the Company issued warrants to purchase an aggregate of 44,389 shares of Series D preferred stock. These warrants were treated as debt discount and will be amortized over the term of the debt. These warrants have a ten-year term and an exercise price of \$8.45 per share. The warrants were valued at the date of issuance at \$263,000 using the Black-Scholes option pricing model with the following assumptions; fair value of preferred stock equal to exercise price of warrant, volatility of 61.0%, and a risk free interest rate of 2.20%.

In December 2012, the Company drew down the remaining \$5.5 million term loan under the Company's credit facility. In connection with this borrowing, the Company issued warrants to purchase an aggregate of 32,551 shares of Series D preferred stock, which were valued at the date of

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issuance at \$184,000 using the Black-Scholes option pricing model with the following assumptions: fair value of preferred stock equal to exercise price of warrant, volatility of 58.0% and a risk-free interest rate of 1.63%.

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Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****7. Long-Term Debt and Obligations (Continued)**

Under the terms of the credit facility, the Company was required to comply with certain reporting covenants and was in compliance at March 31, 2013 (unaudited).

Also, in December 2012, the credit facility was amended to allow for the borrowing on or prior to April 30, 2013 of up to an additional \$10.0 million in term loans, subject to the Company's satisfaction of a revenue-based milestone. The amendment also provided that if an initial public offering is completed on or prior to May 31, 2013 and generates gross proceeds of at least \$50.0 million, the period during which the Company is required to only pay interest on all outstanding term borrowings will be extended from May 2013 to January 2014 and the maturity date will be similarly extended by eight months. In addition, the credit facility was amended to provide that if the Company borrows any of the additional \$10.0 million in term loans, then the Company must comply with financial covenants based on life sciences revenue over the remaining term of the facility on a trailing three month basis. In connection with the amendment, the Company issued the lenders warrants to purchase an aggregate of 20,837 shares of its Series E preferred stock at an exercise price of \$14.40 per share. These warrants have a ten-year term and were valued at the date of issuance at \$201,000 using the Black-Scholes option pricing model with the following assumptions: fair value of preferred stock equal to exercise price of warrants, volatility of 58.0% and a risk-free interest rate of 1.78%. If the Company borrows any of the additional \$10.0 million in term loans it must issue the lenders warrants to purchase up to 20,837 additional shares of its Series E preferred stock at an exercise price of \$14.40 per share.

Pursuant to an office building lease, the owner of the building financed a portion of tenant improvements under an arrangement in which the Company is obligated to pay the amount financed over the term of the lease. The amount financed totaled \$843,000 and is being repaid over the five-year term of the lease, which expires in August 2016. Interest accrues on the unpaid balance at a rate of 10% per annum.

Borrowings, including current portion, consisted of the following at:

	December 31, 2011	December 31, 2012 (In thousands)	March 31, 2013 (Unaudited)
Landlord payable	\$ 404	\$ 235	\$ 191
Equipment line of credit	1,562		
Term loans payable		13,115	13,184
	1,966	13,350	13,375
Less: Unamortized debt discount	(79)	(591)	(540)
Current portion	(875)	(2,789)	(4,021)
Non-current portion	\$ 1,012	\$ 9,970	\$ 8,814

Scheduled future payments for principal obligations under outstanding debt facilities at December 31, 2012 and March 31, 2013 were as follows:

	December 31, 2012 (In thousands)	March 31, 2013 (Unaudited)
Long-term debt:		

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2013	\$ 2,992	\$ 2,938
2014	5,164	5,164
2015	5,104	5,273
2016	90	
	\$ 13,350	\$ 13,375

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NanoString Technologies, Inc.

Notes to Consolidated Financial Statements (Continued)

7. Long-Term Debt and Obligations (Continued)

In connection with previous bank borrowing arrangements, the Company issued warrants to purchase 4,691 shares of Series B preferred stock with an exercise price of \$17.47 in 2007 and 2008 and a fair value at the date of issuance of \$14,000 and warrants to purchase 16,093 shares of Series C preferred stock with an exercise price of \$8.45 in 2010 with a fair value at the date of issuance of \$72,000. These warrants have a contractual life of seven years and were valued at the date of issuance using the Black-Scholes option pricing model with the following assumptions: (1) fair value of preferred stock equal to exercise price of warrants; (2) volatility of 42% to 73%; and (3) risk free interest rates of 1.87% to 3.67%.

8. Common Stock and Preferred Stock

The Company is authorized to issue common stock and Series A, Series B, Series C, Series D and Series E preferred stock.

Common Stock

Each share of common stock is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when declared by the Board of Directors, subject to the prior rights of holders of other classes of stock outstanding.

Preferred Stock

The Series A, Series B, Series C, Series D and Series E preferred stock (collectively, the Preferred Stock), together with their respective rights and preferences, are as follows:

Series A Preferred Stock

In July and August 2004, the Company sold and issued 295,798 shares of Series A preferred stock and warrants to purchase 268,290 shares of Series A preferred stock at a price of \$14.82 per share for the shares of Series A preferred stock and \$0.0001 per share for the warrant shares, representing total gross proceeds of \$4.4 million.

The preferred stock warrants had an exercise price of \$14.82 per share and were immediately exercisable. Warrants to purchase 261,541 shares of Series A preferred stock were exercised in 2005. The remaining 6,749 warrants to purchase shares of Series A preferred stock expired in May 2011. The fair value of the warrants at the time of issuance of \$569,000 was estimated using the Black-Scholes option pricing model. The value at the date of issuance allocated to the Series A preferred stock totaled \$3.8 million. Cash issuance costs totaled \$64,000 and were netted against the allocated proceeds. The difference between the carrying value and the redemption value of the Series A preferred stock is being accreted over the redemption period using the effective interest method.

Series B Preferred Stock

In May and June 2007, the Company sold and issued 515,836 shares of its Series B preferred stock at a price of \$17.47 per share. Total gross proceeds received from this offering were \$9.0 million. Cash issuance costs totaled \$54,000 and were netted against the gross proceeds. The difference between the carrying value and the redemption value of the Series B preferred stock is being accreted over the redemption period using the effective interest method.

Series C Preferred Stock

In June 2009, the Company sold and issued 1,775,530 shares of its Series C preferred stock at a price of \$8.45 per share. Total gross proceeds received from this offering were \$15.0 million. Cash issuance costs totaled \$276,000 and were netted against the gross proceeds.

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NanoString Technologies, Inc.

Notes to Consolidated Financial Statements (Continued)

8. Common Stock and Preferred Stock (Continued)

In February 2010, the Company sold and issued an additional 1,775,530 shares of its Series C preferred stock at a price of \$8.45 per share. Total gross proceeds received from this offering were \$15.0 million. Cash issuance costs of \$15,000 were netted against the gross proceeds.

The difference between the carrying value and the redemption value of the Series C preferred stock is being accreted over the redemption period using the effective interest method.

Series D Preferred Stock

In January 2011, the Company entered into a Note and Warrant Purchase Agreement with certain of its existing investors under which the investors agreed to purchase up to \$10.0 million aggregate principal amount of subordinated convertible promissory notes issued by the Company. Pursuant to this agreement, the Company issued in June and September 2011, an aggregate of \$5.0 million principal amount of notes and warrants to purchase Series D preferred stock. Such notes were to be converted into preferred stock, upon the occurrence of a qualified financing event, or repaid no later than December 31, 2011. Pursuant to their terms, interest on the notes accrued at 8% per annum, and warrant coverage was dependent on, among other things, the total principal amount of notes issued and the period of time any such amounts were outstanding.

In November and December 2011, the Company sold and issued 2,430,054 shares of its Series D preferred stock together with warrants to purchase 367,634 shares of Series D preferred stock at a price of \$8.45 per share. Total gross proceeds from this offering were \$20.5 million, which included the conversion of \$5.0 million in subordinated convertible promissory notes and related accrued interest of \$87,000. In addition, the warrants issued pursuant to the January 2011 Note and Warrant Purchase Agreement became exercisable for 118,368 shares of Series D Preferred Stock on conversion of the related notes into Series D Preferred Stock. Cash issuance costs totaled \$559,000 and were netted against the allocated proceeds.

The Series D preferred stock warrants have an exercise price of \$8.45 per share and are exercisable over a seven-year period from issuance. The total fair value of the Series D warrants at the date of issuance was \$2.5 million and was estimated using the Black-Scholes option pricing model with the following variables: (1) Series D preferred stock price of \$8.45; (2) the contractual life of seven years; (3) volatility of 61%; and (4) risk-free interest rates of 1.30 to 2.20%. The difference between the carrying value and the redemption value of the Series D preferred stock is being accreted over the redemption period using the effective interest method.

Series E Preferred Stock

In November 2012, the Company sold and issued 1,063,951 shares of its Series E preferred stock at a price of \$14.40 per share. Total gross proceeds received from this offering were \$15.3 million. Cash issuance costs totaled \$185,000 and were netted against the gross proceeds. The difference between the carrying value and the redemption value of the Series E preferred stock is being accreted over the redemption period using the effective interest method.

Voting

Each share of Preferred Stock has voting rights equal to an equivalent number of shares of common stock into which it is convertible and votes together as one class with the common stock.

Liquidation

In connection with the Series E preferred stock financing, the liquidation preferences of the preferred stock were amended such that in the event of any liquidation, dissolution or winding up of the Company, including a merger, acquisition or sale of assets where the beneficial owners of the Company's common stock and Preferred

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NanoString Technologies, Inc.

Notes to Consolidated Financial Statements (Continued)

8. Common Stock and Preferred Stock (Continued)

Stock own less than 50% of the resulting voting power of the surviving entity, the holders of Series E preferred stock are entitled to receive \$21.60 per share as adjusted for any stock splits, stock dividends, reclassification and the like plus any declared but unpaid dividends. Upon completion of the Series E preferred stock preference distribution, the holders of Series D preferred stock are entitled to receive \$8.45 per share as adjusted for any stock splits, stock dividends, reclassification and the like plus any declared but unpaid dividends. Upon the completion of the Series D preferred stock preference distribution, the holders of Series C preferred stock are entitled to receive \$8.45 per share as adjusted for any stock splits, stock dividends, reclassification and the like plus any declared but unpaid dividends. Upon the completion of the Series C preferred stock preference distribution, the holders of Series B preferred stock are entitled to receive \$17.47 per share as adjusted for any stock splits, stock dividends, reclassification and the like plus any declared but unpaid dividends. Upon the completion of the Series B preferred stock preference distribution, the holders of Series A preferred stock are entitled to receive \$14.82 per share as adjusted for any stock splits, stock dividends, reclassification and the like plus any declared but unpaid dividends. Any remaining proceeds will be distributed on a pro rata basis among the holders of the common stock and the Preferred Stock on an as converted basis.

Conversion

Each share of Series E preferred stock is convertible at the option of the holder at any time into common stock on a one-for-one basis, subject to (1) until such time as the Company next issues shares of its equity securities in an equity financing other than certain excluded issuances, a full ratchet anti-dilution adjustment if the Company issues equity securities for a price per share less than \$14.40 or the then effective conversion price of the Series E preferred stock and (2) after the Company next issues shares of its equity securities in an equity financing other than certain excluded issuances, certain broad-based weighted-average anti-dilution adjustments if the Company issues equity securities for a price per share less than \$14.40 or the then effective conversion price of the Series E preferred stock.

In connection with the Series E preferred stock financing, the anti-dilution protections for the Series D preferred stock were amended such that each share of Series D preferred stock is convertible at the option of the holder at any time into common stock on a one-for-one basis, subject to certain broad-based weighted-average anti-dilution adjustments if the Company issues equity securities for a price per share less than \$8.45 or the then effective conversion price of the Series D preferred stock.

Each share of Series C preferred stock is convertible at the option of the holder at any time into common stock on a one-for-one basis, subject to certain broad-based weighted-average anti-dilution adjustments if the Company issues equity securities for a price per share less than \$8.45 or the then effective conversion price of the Series C preferred stock.

Each share of Series B preferred stock is convertible at the option of the holder at any time into common stock on a 1.559429-for-one basis, subject to certain anti-dilution adjustments that are determined based on any anti-dilution adjustments made with respect to the Series C preferred stock.

Each share of Series A preferred stock is convertible at the option of the holder at any time into common stock on a 1.403030-for-one basis, subject to certain anti-dilution adjustments that are determined based on any anti-dilution adjustments made with respect to the Series C preferred stock.

In connection with the Series E preferred stock financing, the automatic conversion terms of the preferred stock were amended such that each share of preferred stock automatically converts into shares of common stock at the applicable conversion rate for such share upon the earlier of (1) an initial public offering of the Company's common stock pursuant to which shares of the Company's common stock are listed on a nationally-recognized securities exchange and which results in net proceeds of at least \$50.0 million and an issuance price of at least

Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****8. Common Stock and Preferred Stock (Continued)**

\$14.40 per share, as adjusted for stock splits and dividends, and (2) the affirmative vote by holders of at least 65% of the holders of the then outstanding preferred stock (voting together as a single class with each holder of preferred stock entitled to one vote per share of preferred stock then held by such holder).

At December 31, 2012, the Company has reserved 8,963,046 shares of common stock for issuance upon the conversion of the Preferred Stock.

Dividends

The holders of Preferred Stock are entitled to receive dividends as declared by the Board of Directors. Dividends are payable when and if declared by the Board of Directors out of funds generally available. No dividends have been declared through December 31, 2012.

Redemption

In connection with the Series E preferred stock financing, the redemption terms of the preferred stock were amended such that at any time after November 29, 2017 and upon 30 days notice from the holders of 65% of the outstanding Preferred Stock, such holders may compel the Company to redeem, from any funds legally available, all or part of the Preferred Stock and any accumulated or declared but unpaid dividends thereon.

The redemption value of the Preferred Stock is equal to the original issue price with interest compounded from the original issuance date to the first installment redemption date at a rate of 8% compounded quarterly. The Company recorded accretion related to issue costs and dividends of Series A, Series B, Series C, Series D and Series E preferred stock totaling approximately \$4.4 million, \$5.3 million and \$7.5 million for the years ended December 31, 2010, 2011 and 2012, respectively. The Company also accretes any related issuance costs or discounts. Any redemption amount shall be paid in three equal annual installments.

Preferred Stock Warrants

The following information summarizes the Company's outstanding convertible preferred stock warrants:

Preferred Stock	Preferred Stock Warrants	Issue Date	Expiry Date	Number of shares	Fair Value	Fair Value	Fair Value
					at December 31, 2011	at December 31, 2012	at March 31, 2013
					(In thousands, except share amounts)		
							(unaudited)
Series B		October 2007	October 2014	2,458	\$ 4	\$ 7	\$ 8
Series B		April 2008	October 2014	2,233	4	7	9
Series C		November 2010	November 2017	5,918	21	24	28
Series C		October 2011	November 2018	10,175	40	44	51
Series D		November 2011	November 2018	486,002	2,428	2,725	3,060
Series D		March 2012	March 2022	44,389		299	334
Series D		December 2012	December 2022	32,551		225	250
Series E		December 2012	December 2022	20,837		201	274
				604,563	\$ 2,497	\$ 3,532	\$ 4,014

The warrants to purchase preferred stock are recorded as liabilities and measured at fair value at each reporting date.

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Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****8. Common Stock and Preferred Stock (Continued)**

The following information summarizes the carrying value of the warrants to purchase shares of the Company's preferred stock:

	(In thousands)
Balance at December 31, 2009	\$ 27
Issuance of preferred stock warrants	30
Warrant revaluation	(15)
Balance at December 31, 2010	42
Issuance of preferred stock warrants	2,528
Warrant revaluation	(73)
Balance at December 31, 2011	2,497
Issuance of preferred stock warrants	648
Warrant revaluation	387
Balance at December 31, 2012	\$ 3,532
Issuance of preferred stock warrants (unaudited)	482
Warrant revaluation (unaudited)	482
Balance at March 31, 2013 (unaudited)	\$ 4,014

The warrants to purchase preferred stock are valued at each reporting date using the Black-Scholes option pricing model with the following variables: (1) underlying preferred stock prices of \$8.45 to \$14.40; (2) remaining contractual life of 1.75 to 10 years; (3) volatility of 58% to 70%; and (4) risk-free interest rates of 0.23% to 2.20%.

9. Stock Option Plan

The Company's Amended 2004 Stock Option Plan authorizes the grant of options to employees and consultants for up to 2,386,033 shares of the Company's common stock as of December 31, 2012. All options granted have a ten-year term and generally vest and become exercisable over four years of continued employment or service as defined in each option agreement. The Board of Directors determines the option exercise price and may designate stock options granted as either incentive or nonstatutory stock options. The Company generally grants stock options to employees with exercise prices equal to the estimated fair value of the Company's common stock on the date of grant.

Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****9. Stock Option Plan (Continued)**

A summary of the Company's employee stock option activity and related information follows:

	Shares	Weighted-average exercise price per share	Weighted-average remaining contractual term (in years)	Aggregate intrinsic value (in thousands)
Outstanding at December 31, 2011	686,312	\$ 2.24		
Granted	1,114,143	2.28		
Cancelled	(29,141)	1.98		
Exercised	(85,135)	2.15		
Outstanding at December 31, 2012	1,686,179	\$ 2.28	8.59	\$ 7,486
Granted (unaudited)	295,032	6.72		
Canceled (unaudited)	(22,846)	2.21		
Exercised (unaudited)	(152,092)	2.15		
Outstanding at March 31, 2013 (unaudited)	1,806,273	\$ 3.02	8.66	\$ 10,743
December 31, 2012:				
Options vested and expected to vest	1,532,508	\$ 2.28	8.54	\$ 6,820
Options exercisable	1,196,057	\$ 2.35	8.47	\$ 5,223
March 31, 2013:				
Options vested and expected to vest (unaudited)	1,629,336	\$ 2.98	8.62	\$ 9,751
Options exercisable (unaudited)	1,300,620	\$ 3.14	8.60	\$ 7,576

The following table summarizes information about the Company's options outstanding at December 31, 2012:

Exercise Price	Options Outstanding		Options Exercisable	
	Number of Shares	Weighted-Average Remaining Contractual Life in Years	Number of Shares	Weighted-Average Remaining Contractual Life in Years
\$0.32	4,373	2.58	4,373	2.58
0.96	1,353	3.17	1,353	3.17
1.92	942,327	9.22	580,052	9.22
2.24	601,136	7.45	490,180	7.42
3.84	11,118	5.77	11,100	5.77
5.12	125,872	9.79	108,999	9.79
	1,686,179		1,196,057	

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The fair value of each employee option grant for the years ended December 31, 2010, 2011 and 2012 and the three months ended March 31, 2012 and 2013 was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	Years Ended December 31,						Three Months Ended March			
	2010		2011		2012		2012		31, 2013	
	(Unaudited)									
Risk-free interest rates	2.42%	3.14%	2.2%	3.14%	0.85%	1.44%	1.23%	1.44%	1.05%	1.11%
Expected term (years)	6.25		6.25		6.25		6.25		6.25	
Expected dividend yield										
Volatility	92.4%		73.0%		54.0%		61.0%		58.0%	

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Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****9. Stock Option Plan (Continued)**

The risk-free interest rates are based on the implied yield currently available in U.S. Treasury securities at maturity with an equivalent term. For purposes of determining the expected term of the awards in the absence of sufficient historical data relating to stock-option exercises, the Company applies a simplified approach in which the expected term of an award is presumed to be the mid-point between the vesting date and the expiration date of the award. The Company has not declared or paid any dividends and does not currently expect to do so in the foreseeable future. The Company based its expected volatility on the estimated volatility of similar entities whose share prices are publicly available.

Options granted during the years ended December 31, 2010, 2011 and 2012 were granted at exercise prices that the Company's board of directors believed to be equal to the fair value of the common stock underlying such options on the date of grant. In connection with the preparation of the Company's financial statements for the nine months ended September 30, 2012, the Company assessed its estimate of fair value of its common stock for financial reporting purposes given the Company's improving financial performance and prospects, evolving belief during the second half of 2012 that an initial public offering was increasingly viable and the generally improving conditions in the capital markets in the fourth quarter of 2012. Following this assessment, it was determined that for financial reporting purposes the fair value of the Company's common stock was higher than the board of directors' fair market value estimate for each of the option grant dates from March 1, 2012 through September 17, 2012. During 2012, the Company granted 988,268 and 125,875 options at exercise prices that were less than and equal to, respectively, the estimated per share value of the underlying common stock on the date of grant. The weighted-average grant date fair value of options granted during the years ended December 31, 2010, 2011 and 2012 and the three months ended March 31, 2013 was \$1.74, \$1.83, \$1.59 and \$4.23 (unaudited), respectively.

Information on stock options granted during the year ended December 31, 2012 and the three months ended March 31, 2013 is summarized as follows:

	Number of Options Granted	Exercise Price	Estimated Value Per Common Share	Intrinsic Value Per Share
2012				
March 1	730,860	\$ 1.92	\$ 2.24	\$ 0.32
March 26	39,000	1.92	2.24	0.32
April 19	87,563	1.92	2.56	0.64
May 25	106,813	1.92	2.88	0.96
July 17	22,469	1.92	3.20	1.28
September 17	1,563	1.92	4.16	2.24
October 16	125,875	5.12	5.12	
	1,114,143			
2013				
January 10 (unaudited)	213,032	6.72	6.72	\$ 2.24
March 1 (unaudited)	82,000	6.72	8.96	
	295,032			

The aggregate intrinsic value for options exercised during the years ended December 31, 2010, 2011 and 2012 was \$0, \$0 and \$161,000, respectively, determined as of the date of option exercise.

Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****9. Stock Option Plan (Continued)**

Stock compensation was recorded as follows:

	Years Ended December 31,			Three Months Ended	
	2010	2011	2012	2012	2013
	(In thousands)			(Unaudited)	
Cost of revenue	\$ 3	\$ 4	\$ 71	\$ 37	\$ 11
Research and development	26	26	204	82	62
Selling, general and administrative	115	213	470	160	159
Total stock-based compensation expense	\$ 144	\$ 243	\$ 745	\$ 279	\$ 232

At December 31, 2012, the total unrecognized compensation cost was approximately \$1.7 million and will be recognized on a straight-line basis over the weighted-average remaining service period of approximately three years. At March 31, 2013, the total unrecognized compensation cost was approximately \$2.8 million (unaudited), which will be recognized on a straight-line basis over the weighted-average remaining service period of approximately three years.

10. Income Taxes

Loss before income taxes consisted of the following:

	Years Ended December 31,		
	2010	2011	2012
	(In thousands)		
Domestic	\$ (12,798)	\$ (10,966)	(17,618)
Foreign	30	34	(90)
Loss before income taxes	\$ (12,768)	\$ (10,932)	\$ (17,708)

Income tax expense (benefit) differed from the amounts computed by applying the statutory federal income tax rate of 34% to pretax loss as a result of the following:

	Years Ended December 31,		
	2010	2011	2012
	(In thousands)		
Income tax provision at statutory rate	\$ (4,341)	\$ (3,717)	\$ (6,021)
Nondeductible items	13	25	349
Change in tax credits	(251)	(202)	39

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Change in valuation allowance	4,443	3,963	5,894
Other	136	(69)	(261)
	\$	\$	\$

At December 31, 2012, the Company had net operating loss carryforwards of approximately \$62.2 million which will begin to expire in 2023 through 2032. In addition, at December 31, 2012, the Company has research and development tax credit carryforwards of approximately \$1.0 million.

The Company does not expect to utilize any of its net operating loss and tax credit carryforwards in the near term. The Company may have already experienced one or more ownership changes. Depending on the timing of any future utilization of its carryforwards, the Company may be limited as to the amount that can be utilized each year as a result of such previous ownership changes. However, the Company does not believe such limitations

Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****10. Income Taxes (Continued)**

will cause its carryforwards to expire unutilized. The Company is in the process of determining whether this offering would constitute an ownership change, potentially resulting in further limitations on its ability to utilize its net operating loss and tax credit carryforwards.

The effect of temporary differences and carryforwards that give rise to deferred tax assets were as follows:

	December 31,	
	2011	2012
	(In thousands)	
Net operating loss carryforwards	\$ 15,925	\$ 21,569
Research and development tax credit carryforwards	800	761
Other	2,428	2,717
Total deferred tax assets	19,153	25,047
Less: Valuation allowance	(19,153)	(25,047)
Net deferred tax assets	\$	\$

The Company has recorded a full valuation allowance related to its deferred tax assets due to the uncertainty of the ultimate realization of the future benefits from those assets.

The table below summarizes changes in the deferred tax asset valuation allowance:

	Balance at Beginning of Year	Changed to Costs and Expenses	Write-offs	Balance at End of Year
	(In thousands)			
Deferred tax valuation allowance:				
For year ended December 31, 2010	\$ 10,747	\$ 4,443	\$	\$ 15,190
For year ended December 31, 2011	15,190	3,963		19,153
For year ended December 31, 2012	19,153	5,894		25,047

The total balance of unrecognized gross tax benefits was as follows:

	Years Ended December 31,		
	2010	2011	2012
	(In thousands)		
Unrecognized tax benefits at beginning of year	\$ 137	\$ 199	\$ 267
Additions (reductions) based on current year tax positions	62	68	(14)
Unrecognized tax benefits at end of year	\$ 199	\$ 267	\$ 253

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The Company classifies applicable interest and penalties on amounts due to tax authorities as a component of the provision for income taxes. The amount of accrued interest and penalties recorded in 2010, 2011 or 2012 was not material. We do not anticipate that the amount of our existing unrecognized tax benefits will significantly increase or decrease within the next 12 months. Due to the presence of net operating loss carryforwards in most jurisdictions, our tax years remain open for examination by U.S. taxing authorities back to 2003.

11. Commitments and Contingencies

The Company leases its office space and certain office equipment under noncancelable operating leases. During 2011, the Company amended its existing office space lease to take additional space and extend the term of the office lease through August 2016. Rent expense totaled approximately \$550,000, \$807,000 and \$856,000 for the years ended December 31, 2010, 2011 and 2012, respectively.

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Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****11. Commitments and Contingencies (Continued)**

The Company has purchase obligations totaling \$2.6 million at December 31, 2012 related to binding commitments to purchase inventory.

Future minimum lease payments under noncancelable operating leases as of December 31, 2012 were as follows:

	(In thousands)
2013	\$ 2,009
2014	1,925
2015	2,025
2016	1,336
2017	
	\$ 7,295

From time to time, the Company may become involved in litigation relating to claims arising from the ordinary course of business. Management believes that there are no claims or actions pending against the Company currently, the ultimate disposition of which would have a material adverse effect on the Company's consolidated results of operation, financial condition or cash flows.

12. Related Party Transactions

The Company advanced loans to two of its executive officers in connection with their hiring. On July 1, 2010, the Company loaned the chief executive officer \$115,000 at an annual interest rate of 2.72%. On March 10, 2011, the Company loaned the chief medical officer \$100,000 at an annual interest rate of 2.44%. As of December 31, 2012, the loans and related accrued interest were paid in full.

13. Segment Reporting

Operating segments are defined as components of an enterprise for which separate financial information is available and evaluated regularly by the chief operating decision-maker, or decision-making group, in deciding how to allocate resources and in assessing performance.

The Company develops, manufactures and sells products that unlock genetic information from very small amounts of tissue. Products, consisting of instruments, consumables and related services, are currently provided to researchers in the life sciences industry and will be provided to clinical laboratories providing diagnostic testing. The Company is organized as, and operates in, two reportable segments: life sciences segment and diagnostics segment. The life sciences business provides instruments, consumables and services for efficiently profiling the activity of hundreds of genes from a single tissue sample. After launch of the Company's breast cancer diagnostic test, which is expected in 2013, the diagnostics business will provide molecular diagnostic kits to pathology labs enabling complex molecular testing on a decentralized basis.

The Company's chief operating decision maker is the chief executive officer. The chief operating decision maker reviews financial information presented on a total Company basis, accompanied by information about segment revenue and certain direct sales and marketing expenses by segment. The chief operating decision maker does not review segment information related to cost of revenue, research and development or other selling, general and administrative expenses. The Company's chief operating decision maker evaluates performance based on these two measures.

Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****13. Segment Reporting (Continued)**

Operating results for each segment and a reconciliation of segment profit (loss) to loss from operations are as follows:

	Years Ended December 31,			Three Months Ended	
	2010	2011	2012	2012	2013
	(In thousands)				
Product revenue:				(Unaudited)	
Instruments	\$ 6,472	\$ 7,112	\$ 8,786	\$ 1,500	\$ 1,639
Consumables	5,034	9,997	13,036	2,703	3,699
Service revenue	224	691	1,151	299	338
Total life sciences segment	11,730	17,800	22,973	4,502	5,676
Diagnostics segment					
Total revenue	11,730	17,800	22,973	4,502	5,676
Selling, general and administrative expenses:					
Life sciences segment	4,806	5,304	7,175	1,515	2,203
Diagnostics segment			2,378	341	1,440
Life sciences segment profit	6,924	12,496	15,798	2,987	3,473
Diagnostic segment loss			(2,378)	(341)	(1,440)
Total segment profit	6,924	12,496	13,420	2,646	2,033
Adjustments:					
Cost of revenue	(9,128)	(9,777)	(12,361)	(2,656)	(2,882)
Research and development expenses	(7,547)	(8,990)	(11,635)	(2,197)	(3,059)
Unallocated selling, general and administrative expenses	(3,221)	(4,225)	(5,933)	(1,311)	(2,483)
Loss from operations	\$ (12,972)	\$ (10,496)	\$ (16,509)	\$ (3,518)	\$ (6,391)

The following table is based on the geographic location of distributors or end users who purchased products and services. For sales to distributors, their geographic location may be different from the geographic locations of the ultimate end user. Revenue by geography was as follows:

	Years Ended December 31,			Three Months Ended	
	2010	2011	2012	2012	2013
	(In thousands)				
North America	\$ 10,643	\$ 14,044	\$ 15,906	\$ 3,162	\$ 4,477

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Europe & Middle East	909	2,918	4,167	992	616
Asia Pacific	178	838	2,900	348	583
Total revenue	\$ 11,730	\$ 17,800	\$ 22,973	\$ 4,502	\$ 5,676

Total revenue in the United States was \$10.2 million, \$13.5 million, \$14.9 million, \$2.6 million (unaudited) and \$3.7 million (unaudited) for the years ended December 31, 2010, 2011 and 2012 and the three months ended March 31, 2012 and 2013, respectively.

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Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****13. Segment Reporting (Continued)**

The Company's assets are primarily located in the United States and not allocated to any specific segment or geographic region. All of the Company's long-lived assets are located in the United States.

14. Net Loss Per Share and Pro Forma Net Loss Per Share*Net Loss Per Share*

Net loss attributable to common stockholders per share is computed by dividing the net loss allocable to common stockholders by the weighted-average number of shares of common stock outstanding. Outstanding stock options, warrants and preferred stock, have not been included in the calculation of diluted net loss attributable to common stockholders per share because to do so would be anti-dilutive. Accordingly, the numerator and the denominator used in computing both basic and diluted net loss per share for each period are the same.

The following table provides a reconciliation of the numerator and denominator used in computing basic and diluted net loss per share:

	Years Ended December 31,			Three Months Ended March 31,	
	2010	2011	2012	2012	2013
	(In thousands)			(Unaudited)	
Numerator:					
Net loss	\$ (12,768)	\$ (10,932)	\$ (17,708)	\$ (3,610)	\$ (7,259)
Accretion of mandatorily redeemable convertible preferred stock	(4,351)	(5,251)	(7,533)	(1,793)	(2,342)
Net loss attributable to common stockholders	\$ (17,119)	\$ (16,183)	\$ (25,241)	\$ (5,403)	\$ (9,601)

Denominator:

Weighted-average common shares outstanding-basic and diluted	316	323	355	327	537
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The following outstanding options, warrants and preferred stock were excluded from the computation of diluted net loss per share for the periods presented because their effect would have been anti-dilutive:

	Years Ended December 31,			Three Months Ended March 31,	
	2010	2011	2012	2012	2013
	(In thousands)			(Unaudited)	
Options to purchase common stock	598	686	1,686	1,448	1,806
Convertible preferred stock (as converted)	5,137	7,567	8,631	7,567	8,631
Convertible preferred stock warrants (as converted)	22	509	607	553	607
Common stock warrant	1	1		1	

Table of Contents**NanoString Technologies, Inc.****Notes to Consolidated Financial Statements (Continued)****14. Net Loss Per Share and Pro Forma Net Loss Per Share (Continued)***Pro Forma Net Loss Per Share (Unaudited)*

Pro forma net loss per share is computed as follows:

	Year Ended December 31, 2012	Three Months Ended March 31, 2013
	(In thousands)	
Numerator:		
Net loss	\$ (17,708)	\$ (7,259)
Revaluation of preferred stock warrant liability	387	482
Net loss attributable to common stockholders	\$ (17,321)	\$ (6,777)
Denominator:		
Weighted-average common shares outstanding	355	537
Adjustment for conversion of preferred stock	7,663	8,631
Weighted-average common shares outstanding-basic and diluted	8,018	9,168

Outstanding options and warrants were excluded from the computation of pro forma net loss per share because their effect would have been anti-dilutive.

15. Subsequent Events

The Company evaluated subsequent events through March 11, 2013, the date the financial statements were issued.

16. Subsequent Events (Unaudited)

In connection with the issuance of the unaudited consolidated financial statements for the interim period ended March 31, 2013, the Company has evaluated transactions that occurred through May 20, 2013, the date those consolidated financial statements were issued.

In April 2013, the Company borrowed an additional \$5.0 million term loan under its March 2012 credit facility and entered into an amendment to extend the period for borrowing the remaining \$5.0 million of term loan funding from April 30, 2013 to June 30, 2013. Pursuant to this amendment, the interest only period for all term loans under the facility was extended through June 2013, and the date for completing an initial public offering that generates gross proceeds of at least \$50.0 million, and extending the interest only period through January 2014, was extended to June 30, 2013. If the initial public offering is not completed by June 30, 2013, the term loans will begin amortizing over 29 months starting in July 2013. As a result of borrowing the \$5.0 million in April 2013, the Company must comply with financial covenants based on life sciences revenue over the remaining term of the facility on a trailing three month basis. Also, the Company issued the lenders warrants to purchase 10,418 shares of its Series E preferred stock at an exercise price of \$14.40 per share for a term of ten years, and if the Company borrows any of the additional \$5.0 million in term loans it must issue the lenders warrants to purchase up to 10,418 additional shares of its Series

E preferred stock on the same terms.

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Table of Contents**PART II****INFORMATION NOT REQUIRED IN THE PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution.**

Estimated expenses, other than underwriting discounts and commissions, payable by the registrant in connection with the sale of the common stock being registered under this registration statement are as follows:

	Amount to be Paid
SEC registration fee	\$ 11,765
FINRA filing fee	13,438
Exchange listing fee	125,000
Printing and engraving expenses	300,000
Legal fees and expenses	1,850,000
Accounting fees and expenses	750,000
Transfer agent and registrar fees and expenses	5,000
Miscellaneous	244,797
Total	\$ 3,300,000

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law empowers a corporation to indemnify its directors and officers and to purchase insurance with respect to liability arising out of their capacity or status as directors and officers, provided that the person acted in good faith and in a manner the person reasonably believed to be in its best interests, and, with respect to any criminal action, had no reasonable cause to believe the person's actions were unlawful. The Delaware General Corporation Law further provides that the indemnification permitted thereunder shall not be deemed exclusive of any other rights to which the directors and officers may be entitled under the corporation's bylaws, any agreement, a vote of stockholders or otherwise. The certificate of incorporation of the registrant provides for the indemnification of the registrant's directors and officers to the fullest extent permitted under the Delaware General Corporation Law. In addition, the bylaws of the registrant require the registrant to fully indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (whether civil, criminal, administrative or investigative) by reason of the fact that such person is or was a director, or officer of the registrant, or is or was a director or officer of the registrant serving at the registrant's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorney's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, to the fullest extent permitted by applicable law.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) for payments of unlawful dividends or unlawful stock repurchases or redemptions or (4) for any transaction from which the director derived an improper personal benefit. The registrant's certificate of incorporation provides that the registrant's directors shall not be personally liable to it or its stockholders for monetary damages for breach of fiduciary duty as a director and that if the Delaware General Corporation Law is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of the registrant's directors shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

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Section 174 of the Delaware General Corporation Law provides, among other things, that a director who willfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption may be held liable for such actions. A director who was either absent when the unlawful actions were approved, or dissented at the time, may avoid liability by causing his or her dissent to such actions to be entered in the books containing minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts

As permitted by the Delaware General Corporation Law, the registrant has entered into separate indemnification agreements with each of the registrant's directors and certain of the registrant's officers which require the registrant, among other things, to indemnify them against certain liabilities which may arise by reason of their status as directors, officers or certain other employees.

The registrant expects to obtain and maintain insurance policies under which its directors and officers are insured, within the limits and subject to the limitations of those policies, against certain expenses in connection with the defense of, and certain liabilities which might be imposed as a result of, actions, suits or proceedings to which they are parties by reason of being or having been directors or officers. The coverage provided by these policies may apply whether or not the registrant would have the power to indemnify such person against such liability under the provisions of the Delaware General Corporation Law.

These indemnification provisions and the indemnification agreements entered into between the registrant and the registrant's officers and directors may be sufficiently broad to permit indemnification of the registrant's officers and directors for liabilities (including reimbursement of expenses incurred) arising under the Securities Act of 1933.

The underwriting agreement between the registrant and the underwriters filed as Exhibit 1.1 to this registration statement provides for the indemnification by the underwriters of the registrant's directors and officers and certain controlling persons against specified liabilities, including liabilities under the Securities Act with respect to information provided by the underwriters specifically for inclusion in the registration statement.

Item 15. Recent Sales of Unregistered Securities.

The following list sets forth information regarding all unregistered securities sold by us in the past three years. Except for the exercise of warrants by Leerink Swann LLC as described in Item 15(n), no underwriters were involved in the sales and the certificates representing the securities sold and issued contain legends restricting transfer of the securities without registration under the Securities Act or an applicable exemption from registration.

(a) From January 1, 2010 through June 13, 2013, the registrant issued and sold an aggregate of 260,170 shares of its common stock upon the exercise of options issued to certain employees, directors and consultants under the registrant's 2004 Stock Option Plan at exercise prices ranging from \$0.32 to \$6.72 per share, for aggregate consideration of \$564,036.

(b) From January 1, 2010 through June 13, 2013, the registrant granted to certain of its employees, consultants and other service providers under the registrant's 2004 Stock Option Plan options to purchase an aggregate of 725,861 shares of its common stock at exercise prices ranging from \$1.92 to \$8.96 per share.

(c) From January 1, 2010 through June 13, 2013, the registrant granted to certain of its executives and directors under the registrant's 2004 Stock Option Plan options to purchase an aggregate of 1,294,794 shares of its common stock at exercise prices ranging from \$1.92 to \$6.72 per share.

(d) In February 2010, the registrant issued and sold an aggregate of 1,775,533 shares of Series C preferred stock to a total of 15 accredited investors at \$8.45 per share, for aggregate proceeds of \$14,999,651.

(e) In November 2010, the registrant issued a warrant to purchase an aggregate of 16,093 shares of the registrant's Series C preferred stock at an exercise price of \$8.45 per share to one warrant holder as consideration for such warrant holder entering into a loan facility with the registrant.

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(f) In June 2011, the registrant issued and sold convertible promissory notes with an aggregate principal amount of \$2,500,000 and warrants to purchase an aggregate of 59,184 shares of the registrant's Series D preferred stock at an exercise price of \$8.45 per share to a total of five accredited investors.

(g) In September 2011, the registrant issued and sold convertible promissory notes with an aggregate principal amount of \$2,500,000 and warrants to purchase an aggregate of 59,184 shares of the registrant's Series D preferred stock at an exercise price of \$8.45 per share to a total of five accredited investors.

(h) In November 2011, the registrant issued and sold 2,367,433 shares of its Series D preferred stock and issued warrants to purchase an aggregate of 355,110 shares of the registrant's Series D preferred stock to a total of ten accredited investors at an issuance price of \$8.45 per share for aggregate proceeds of \$19,999,998, of which (i) \$5,087,122 was paid by conversion of indebtedness of the registrant and interest accrued thereon, and (ii) \$14,912,876 was paid by cash payments to the registrant.

(i) In December 2011, the registrant issued and sold 62,624 shares of its Series D preferred stock and issued warrants to purchase an aggregate of 12,524 shares of the registrant's Series D preferred stock to a total of three accredited investors at an issuance price of \$8.45 per share for aggregate proceeds of \$529,040.

(j) In March 2012, the registrant issued warrants to purchase an aggregate of 44,389 shares of the registrant's Series D preferred stock at an exercise price of \$8.45 per share to two warrant holders as consideration for each such warrant holder entering into a loan facility with the registrant.

(k) In November 2012, the registrant issued and sold 1,063,951 shares of Series E preferred stock to a total of 15 accredited investors at an issuance price of \$14.40 per share for aggregate proceeds of \$15,317,414.

(l) In December 2012, the registrant issued warrants to purchase an aggregate of 32,551 shares of the registrant's Series D preferred stock at an exercise price of \$8.45 per share to two warrant holders as consideration for each such warrant holder lending funds to the registrant pursuant to an existing loan facility.

(m) In December 2012, the registrant issued warrants to purchase an aggregate of 20,837 shares of the registrant's Series E preferred stock at an exercise price of \$14.40 per share to two warrant holders as consideration for each such warrant holder entering into an amendment to the registrant's existing credit facility to permit the incurrence of up to an additional \$10.0 million in term loan borrowings.

(n) In December 2012, the registrant issued and sold 1,563 shares of common stock to Leerink Swann LLC upon exercise of a warrant at an exercise price of \$2.24 per share for aggregate proceeds of \$3,500.

(o) In April 2013, the registrant issued warrants to purchase an aggregate of 10,418 shares of the registrant's Series E preferred stock at an exercise price of \$14.40 per share to two warrant holders as consideration for each such warrant holder entering into an amendment to the registrant's existing credit facility to permit the bifurcation of the term loan.

The offers, sales and issuances of the securities described in Items 15(a), 15(b) and 15(c) were exempt from registration under the Securities Act under Rule 701 in that the transactions were made pursuant to compensatory benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of such securities were the registrant's employees, consultants or directors and received the securities under the registrant's 2004 Stock Option Plan. The recipients of securities in each of these transactions represented their intention to acquire the securities for investment only and not with view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions.

The offers, sales, and issuances of the securities described in Items 15(d) through 15(o) were exempt from registration under the Securities Act under Section 4(2) of the Securities Act or Regulation D promulgated thereunder as transactions by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was an accredited investor and had adequate access, through employment, business or other relationships, to information about the registrant.

Table of Contents**Item 16. Exhibits and Financial Statement Schedules.***(a) Exhibits.*

Exhibit Number	Description
1.1**	Form of Underwriting Agreement.
3.1	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be effective upon completion of the offering.
3.2**	Form of Amended and Restated Bylaws of the Registrant, to be effective upon completion of the offering.
4.1	Specimen Common Stock Certificate of the Registrant.
4.2**	Amended and Restated Investors Rights Agreement, dated November 29, 2012, by and among the Registrant and the investors named therein.
4.3**	Amendment to Amended and Restated Investors Rights Agreement, dated December 20, 2012, by and among the Registrant and the investors named therein.
4.4**	Warrant to purchase Series B Preferred Stock, issued to lender under Registrant's prior credit facility on October 1, 2007.
4.5**	Warrant to purchase Series C Preferred Stock, issued to lender under Registrant's prior credit facility on November 8, 2010.
4.6**	Form of amended and restated warrant to purchase shares of Series D Preferred Stock, issued to investors on June 23, 2011 and September 26, 2011 in connection with the Registrant's 2011 bridge financing.
4.7**	Form of warrant to purchase shares of Series D Preferred Stock, issued to the investors on November 1, 2011 and December 28, 2011 in connection with the Registrant's preferred stock and warrant financing.
4.8**	Form of warrant to purchase Series D Preferred Stock, issued to lenders on March 30, 2012 and December 10, 2012 under Registrant's March 2012 credit facility.
4.9**	Form of warrant to purchase Series E Preferred Stock, issued to lenders on December 31, 2012 and April 30, 2013 in connection with the amendments of the Registrant's March 2012 credit facility.
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.
10.1	Form of Director and Executive Officer Indemnification Agreement.
10.2**	2004 Stock Option Plan, as amended.
10.3**	Form of Notice of Stock Option Grant and Stock Option Agreement under the 2004 Stock Option Plan, as amended.
10.4**	Form of Notice of Stock Option Grant and Stock Option Agreement permitting early exercise under the 2004 Stock Option Plan, as amended.
10.5	2013 Equity Incentive Plan.
10.6	Form of Notice of Stock Option Grant and Stock Option Agreement under the 2013 Equity Incentive Plan.
10.7	Form of Notice of Restricted Stock Grant and Restricted Stock Agreement under the 2013 Equity Incentive Plan.
10.8	Form of Notice of Restricted Stock Unit Grant and Restricted Stock Unit Agreement under the 2013 Equity Incentive Plan.

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Exhibit Number	Description
10.9	2013 Employee Stock Purchase Plan.
10.10+**	Employment Agreement, dated May 24, 2010, between the Registrant and R. Bradley Gray.
10.11+**	Employment Agreement, dated January 31, 2011, between the Registrant and J. Wayne Cowens, M.D.
10.12+**	Employment Agreement, dated May 18, 2012, between the Registrant and Bruce J. Seeley, as amended on December 26, 2012.
10.13**	Lease between the Registrant and BMR-530 Fairview Avenue LLC, dated October 19, 2007.
10.14**	First Amendment to Lease between the Registrant and BMR-530 Fairview Avenue LLC, dated May 21, 2009.
10.15**	Second Amendment to Lease between the Registrant and BMR-530 Fairview Avenue LLC, dated June 16, 2010.
10.16**	Third Amendment to Lease between the Registrant and BMR-530 Fairview Avenue LLC, dated February 4, 2011.
10.17**	Fourth Amendment to Lease between the Registrant and BMR-530 Fairview Avenue LLC, dated May 28, 2012.
10.18**	Loan and Security Agreement among the Registrant, Oxford Finance LLC and Silicon Valley Bank, dated March 30, 2012.
10.19**	First Amendment to Loan and Security Agreement among the Registrant, Oxford Finance LLC and Silicon Valley Bank, dated December 31, 2012.
10.20**	Second Amendment to Loan and Security Agreement among the Registrant, Oxford Finance LLC and Silicon Valley Bank, dated April 30, 2013.
10.21 **	Exclusive License Agreement, dated February 4, 2004, between the Registrant and The Institute for Systems Biology.
10.22 **	Amendment No. 1 to Exclusive License Agreement, dated February 5, 2007, between the Registrant and The Institute for Systems Biology.
10.23**	Amendment No. 2 to Exclusive License Agreement, dated May 17, 2007, between the Registrant and The Institute for Systems Biology.
10.24 **	Amended and Restated Exclusive License Agreement, effective July 7, 2010, between the Registrant and Bioclassifier, LLC.
21.1	List of subsidiaries of the Registrant.
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).
24.1	Powers of Attorney (included in page II-7 to the original filing of this registration statement and this amendment).

** Previously filed.

+ Indicates a management contract or compensatory plan.

Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

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(b) Financial statement schedules.

Schedules have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

The undersigned hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Table of Contents**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Seattle, State of Washington, on June 13, 2013.

NANOSTRING TECHNOLOGIES, INC.

By: /s/ R. Bradley Gray
R. Bradley Gray
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints R. Bradley Gray and James A. Johnson as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities (including his capacity as a director and/or officer of NanoString Technologies, Inc.) to sign any or all amendments (including post-effective amendments) to this registration statement and any and all additional registration statements pursuant to Rule 462(b) of the Securities Act of 1933, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as they, he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agents or any of them, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated below:

Signature	Title	Date
/s/ R. Bradley Gray	President, Chief Executive Officer and	June 13, 2013
R. Bradley Gray	Director (Principal Executive Officer)	
/s/ James A. Johnson	Chief Financial Officer (Principal	June 13, 2013
James A. Johnson	Accounting and Financial Officer)	
*	Chairman of the Board and Directors	June 13, 2013
William D. Young		
/s/ Bradford Crutchfield	Director	June 13, 2013
Bradford Crutchfield		
*	Director	June 13, 2013
Jennifer Scott Fonstad		
*	Director	June 13, 2013
Nicholas Galakatos		

*

June 13, 2013

Director

Finny Kuruvilla

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Signature	Title	Date
*		June 13, 2013
Gregory Norden	Director	
*		June 13, 2013
Charles P. Waite	Director	

*By: /s/ R. Bradley Gray
R. Bradley Gray
Attorney-in-fact

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Table of Contents**EXHIBIT INDEX**

Exhibit Number	Description
1.1**	Form of Underwriting Agreement.
3.1	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be effective upon completion of the offering.
3.2**	Form of Amended and Restated Bylaws of the Registrant, to be effective upon completion of the offering.
4.1	Specimen Common Stock Certificate of the Registrant.
4.2**	Amended and Restated Investors Rights Agreement, dated November 29, 2012, by and among the Registrant and the investors named therein.
4.3**	Amendment to Amended and Restated Investors Rights Agreement, dated December 20, 2012, by and among the Registrant and the investors named therein.
4.4**	Warrant to purchase Series B Preferred Stock, issued to lender under Registrant's prior credit facility on October 1, 2007.
4.5**	Warrant to purchase Series C Preferred Stock, issued to lender under Registrant's prior credit facility on November 8, 2010.
4.6**	Form of amended and restated warrant to purchase shares of Series D Preferred Stock, issued to investors on June 23, 2011 and September 26, 2011 in connection with the Registrant's 2011 bridge financing.
4.7**	Form of warrant to purchase shares of Series D Preferred Stock, issued to the investors on November 1, 2011 and December 28, 2011 in connection with the Registrant's preferred stock and warrant financing.
4.8**	Form of warrant to purchase Series D Preferred Stock, issued to lenders on March 30, 2012 and December 10, 2012 under Registrant's March 2012 credit facility.
4.9**	Form of warrant to purchase Series E Preferred Stock, issued to lenders on December 31, 2012 and April 30, 2013 in connection with the amendments of the Registrant's March 2012 credit facility.
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.
10.1	Form of Director and Executive Officer Indemnification Agreement.
10.2**	2004 Stock Option Plan, as amended.
10.3**	Form of Notice of Stock Option Grant and Stock Option Agreement under the 2004 Stock Option Plan, as amended.
10.4**	Form of Notice of Stock Option Grant and Stock Option Agreement permitting early exercise under the 2004 Stock Option Plan, as amended.
10.5	2013 Equity Incentive Plan.
10.6	Form of Notice of Stock Option Grant and Stock Option Agreement under the 2013 Equity Incentive Plan.
10.7	Form of Notice of Restricted Stock Grant and Restricted Stock Agreement under the 2013 Equity Incentive Plan.
10.8	Form of Notice of Restricted Stock Unit Grant and Restricted Stock Unit Agreement under the 2013 Equity Incentive Plan.
10.9	2013 Employee Stock Purchase Plan.

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Exhibit Number	Description
10.10+**	Employment Agreement, dated May 24, 2010, between the Registrant and R. Bradley Gray.
10.11+**	Employment Agreement, dated January 31, 2011, between the Registrant and J. Wayne Cowens, M.D.
10.12+**	Employment Agreement, dated May 18, 2012, between the Registrant and Bruce J. Seeley, as amended on December 26, 2012.
10.13**	Lease between the Registrant and BMR-530 Fairview Avenue LLC, dated October 19, 2007.
10.14**	First Amendment to Lease between the Registrant and BMR-530 Fairview Avenue LLC, dated May 21, 2009.
10.15**	Second Amendment to Lease between the Registrant and BMR-530 Fairview Avenue LLC, dated June 16, 2010.
10.16**	Third Amendment to Lease between the Registrant and BMR-530 Fairview Avenue LLC, dated February 4, 2011.
10.17**	Fourth Amendment to Lease between the Registrant and BMR-530 Fairview Avenue LLC, dated May 28, 2012.
10.18**	Loan and Security Agreement among the Registrant, Oxford Finance LLC and Silicon Valley Bank, dated March 30, 2012.
10.19**	First Amendment to Loan and Security Agreement among the Registrant, Oxford Finance LLC and Silicon Valley Bank, dated December 31, 2012.
10.20**	Second Amendment to Loan and Security Agreement among the Registrant, Oxford Finance LLC and Silicon Valley Bank, dated April 30, 2013.
10.21 **	Exclusive License Agreement, dated February 4, 2004, between the Registrant and The Institute for Systems Biology.
10.22 **	Amendment No. 1 to Exclusive License Agreement, dated February 5, 2007, between the Registrant and The Institute for Systems Biology.
10.23**	Amendment No. 2 to Exclusive License Agreement, dated May 17, 2007, between the Registrant and The Institute for Systems Biology.
10.24 **	Amended and Restated Exclusive License Agreement, effective July 7, 2010, between the Registrant and Bioclassifier, LLC.
21.1	List of subsidiaries of the Registrant.
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).
24.1	Powers of Attorney (included in page II-7 to the original filing of this registration statement and this amendment).

** Previously filed.

+ Indicates a management contract or compensatory plan.

Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.