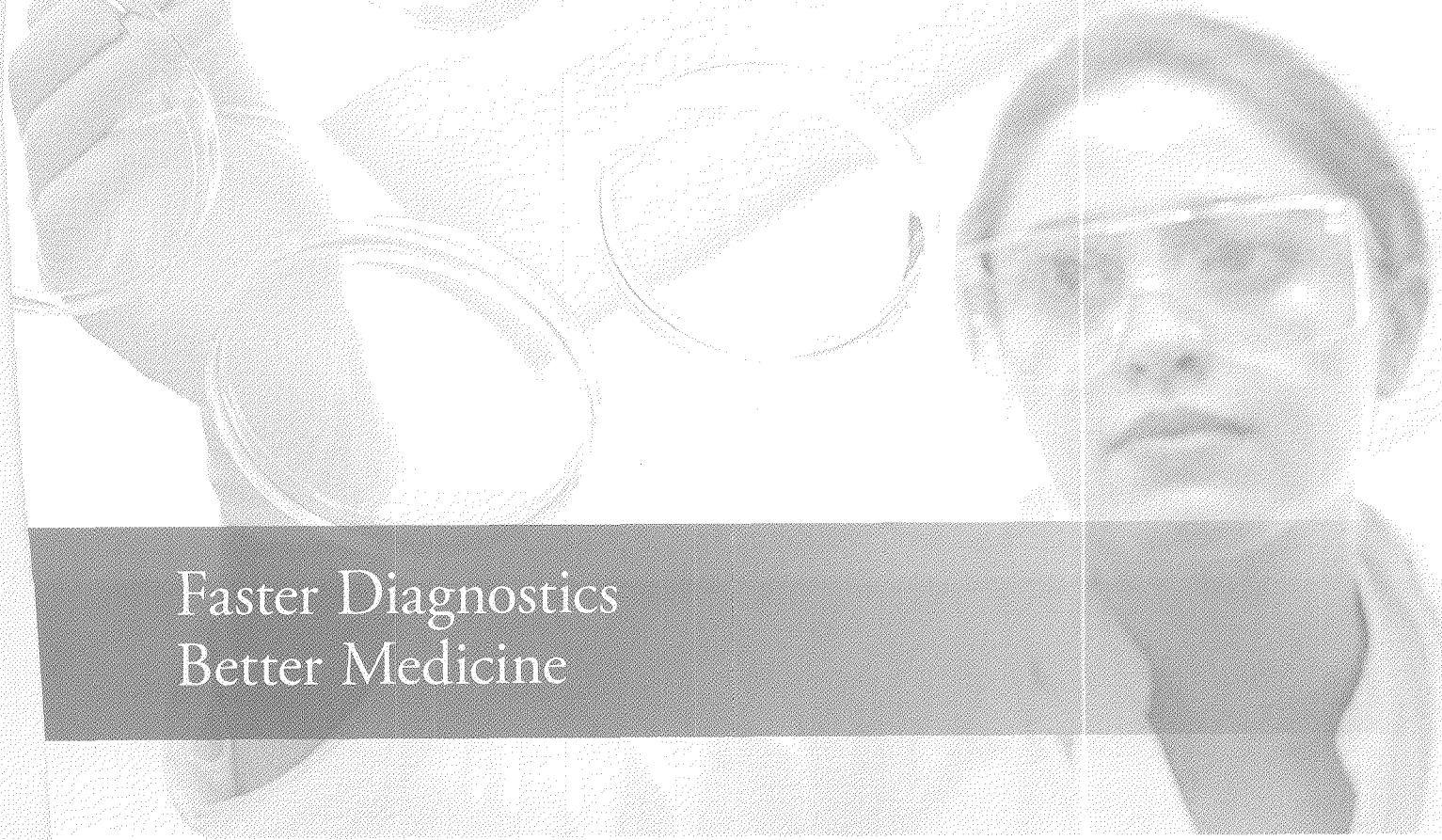
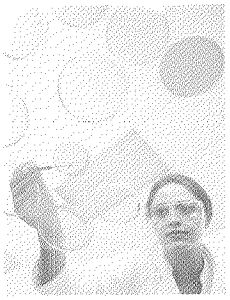
Nanosphere

2011 Annual Report



Faster Diagnostics
Better Medicine

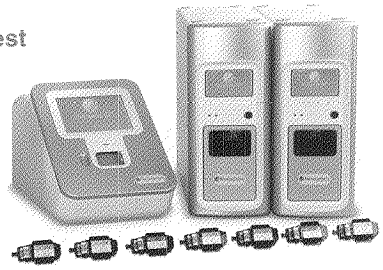
CONVERSION TO MOLECULAR METHODS IN MICROBIOLOGY



(example)

Verigene Gram-Positive Blood Culture Test
- Detects pathogens & resistance markers
- Sample-to-result vs. plated media
- Less than 2.5 hour vs. 2–3 days

Clinically Actionable Results
- Up to 53% reduction in sepsis mortality
- 2–7 day reduction in hospital stay
- Up to $21K per patient cost savings



LOW CLINICAL VALUE HIGH

PCR

Blood Screening
Single Targets
HIV/HBV/HCV

Benefit:
Earlier identification of contaminated blood

Real Time Point-of-Care PCR

Hospital Acquired Infections
Single Targets
MRSA/*C. difficile*

Benefit:
Screening & detection of bacteria

Verigene® Multiplexed Point-of-Care

Hospital Acquired Infections
Broad Panels
Blood Stream/ Gastrointestinal

Benefit:
Earlier diagnosis and treatment for broad range of life threatening infections

1990s 2000s 2010s

Dear Fellow Shareholder,

In 2011 we made significant progress toward our goal of becoming a leader in the global molecular diagnostics market. Test menu expansion and entry into international markets position us for significant future growth.

Ease of use, on-demand 24/7 testing capability and broad panels of tests that address critical diagnostic questions make the Verigene System ideal for providing critical clinical information from complex molecular diagnostic tests in nearly any healthcare setting. We are targeting two areas of significant unmet medical need including infectious disease and cardiovascular medicine. We have a rapidly expanding test menu that addresses needs in these two markets and will drive market penetration and growth in 2012 and beyond.

We are now experiencing increased customer placements and revenue growth driven primarily by our infectious disease products. Moving forward, we expect that our strong pipeline of infectious disease and cardiovascular products will sustain our growth and generate both customer and shareholder value.

As we look back to 2011 a number of noteworthy milestones were achieved.

Early in the year the FDA cleared our expanded respiratory virus panel that includes sub-types for various influenza strains including the 2009 Novel H1N1 ("swine flu"). Late in 2011 we received FDA clearance for a Blood Culture *Staphylococcus* Assay, the first in a series of blood stream infection test panels.

The next test in this series is a comprehensive Blood Culture-Gram Positive Assay that received CE IVD Mark in the fourth quarter of 2011 and is currently under review at the FDA. This clearance, combined with our strong pipeline of infectious disease assays, enabled us to place more Verigene Systems than at any time in our history; and, we expect to see that trend continue.

Importantly, there is an immediate and growing market need for a diagnostic system that can address the number one cost driver of hospital care—sepsis—a blood stream infection often arising from hospitalization or invasive medical procedures. Our Blood Culture-Gram Positive Assay, submitted to the FDA in August, specifically addresses that need. The number of sepsis patients has doubled over the last ten years and mortality of 16% is nearly eight times greater than any other cause of death. Various publications cite the fact that faster diagnosis can reduce mortality up to 53%, reduce the cost of care by as much as $21,000 per patient and move patients out of the intensive care unit two to seven days earlier.

Once cleared by the FDA, our Blood Culture-Gram Positive Assay will be a primary driver for market penetration and revenue growth as market demand is significant for this assay that turns the time to definitive and clinically actionable diagnosis from days into hours.

During the year we also concluded development of an assay for *Clostridium difficile*, a bacterium that infects the gastrointestinal tract leading to adverse medical events and outcomes. We expect to launch this product in 2012.

Currently in development is an Enteric Pathogen Assay, another broad panel for gastrointestinal infections expected to launch in 2013. We are also working in parallel on a Blood Culture-Gram Negative Assay which will continue to build the value of the Verigene System for infectious disease testing. This assay pipeline provides rapid diagnostic and treatment information for life threatening infectious diseases and is driving immediate increases in system placements and revenue and will lead to sustained growth.

In addition to our infectious disease strategy, building a portfolio of assays for diagnosis and management of vascular and cardiovascular disease will drive longer term growth as they become incorporated into the ever changing practice of medicine.

The Verigene System already includes assays to diagnose predisposition to hypercoagulation and to

guide dosing for warfarin-based anticoagulant therapy. During the year we received notification from the FDA that our PMA submission for a CYP 450 2C19 Assay for assessing clopidogrel bisulfate ("Plavix®") metabolism required additional data. Throughout the remainder of the year we conducted the studies necessary to respond to that request and in early 2012 we submitted a 510(k) application to the FDA for this 2C19 Assay.

Clinical research demonstrates that patients with mutations in the 2C19 gene do not sufficiently metabolize Plavix to provide the intended level of platelet inhibition to prevent subsequent, potentially lethal blood clots. This is particularly true for the 1.2 million patients who undergo percutaneous coronary interventions each year. The Nanosphere Assay will provide the required on-demand at the point of care testing needed to ensure effective anticoagulant therapy at the time the procedures are performed.

As genetic information plays a greater role in drug selection and dosing, we believe Nanosphere can play a leadership role in this diagnostics revolution. Our pharmacogenetic tests can help prevent adverse drug reactions when an individual's genetic make-up increases reaction risks and also guide physicians in selecting appropriate drug therapies when a specific drug may not be effective due to those genetic mutations.

Uniquely capable of performing both nucleic acid or genetic assays and ultra-sensitive protein assays, our technology with its greater sensitivity in the detection of protein biomarkers leads to earlier detection of disease. Our ultra-sensitive protein capability not only improves the medical usefulness of many existing biomarkers for leading causes of death, but can also bring new tests to market where none now exist.

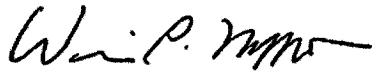
We are building a significant offering in cardiovascular medicine where heart disease is the leading cause of death in the United States. Of particular note is the potential new application for our ultra-sensitive troponin assay to monitor chronic heart failure patients. Two recent studies demonstrate better prognostic value for assessing disease progression when using troponin at extremely sensitive levels. While this specific application of the troponin assay requires further clinical studies to support regulatory clearance and market adoption, it underscores the value of our ultra-sensitive protein testing capability and our ability to generate new medical uses from existing biomarkers.

Throughout 2011 we continued to expand internationally, establishing distribution partnerships in a number of countries in Europe and Asia Pacific. In 2012 we will continue to widen our international presence with additional distribution partnerships.

Your continuing expressions of support and confidence have a significantly positive effect on all of us here at Nanosphere, and we thank you for that. The board, management and employees are focused on the job ahead and committed to enhancing the value of our company and your investment.

We all look forward to a year of positive momentum for Nanosphere.

Sincerely,



William P. Moffitt
President and Chief Executive Officer

April 2012

NANOSPHERE, INC.
4088 Commercial Avenue
Northbrook, Illinois 60062

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To be held May 30, 2012

To the Stockholders of Nanosphere, Inc.:

The board of directors cordially invites you to attend our annual meeting of stockholders on May 30, 2012, at 9:00 a.m. Central Daylight Time (the "Annual Meeting") at The Westin Chicago North Shore, 601 North Milwaukee Avenue, Wheeling, IL 60090 for the following purposes:

- Proposal No. 1 – to elect six directors to serve until our next annual meeting of stockholders in 2013 and until their successors are elected and qualified or their earlier resignation, removal, disqualification or death;
- Proposal No. 2 – to consider and vote, on an advisory basis, for the adoption of a resolution approving the compensation of our named executive officers, as such compensation is described under the "Compensation Discussion and Analysis" and "Executive Compensation" sections of this proxy statement;
- Proposal No. 3 – to ratify the audit committee's selection of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2012; and
- to transact such other business as may properly come before the Annual Meeting or any adjournment or postponement thereof.

Only stockholders of record at the close of business on April 17, 2012 will be entitled to notice of the Annual Meeting and to vote on any matters which come before the meeting or any adjournment or postponement thereof. If you wish to attend the Annual Meeting in person, please bring with you the admission ticket attached to the proxy card or other proof of your share ownership as of the record date (examples of acceptable evidence of share ownership are described in the attached proxy statement). **Whether or not you plan to attend the Annual Meeting, it is important that your shares be represented. To ensure that your vote is counted, you are urged to vote by proxy via mail, telephone or the internet as described on the enclosed proxy card.** Proxies or voting cards delivered to you by or for brokers or fiduciaries should be returned as requested by them. Prompt return of proxies will save the expense involved in further communication. Voting by mail, telephone or internet will not limit your right to vote in person or to attend the Annual Meeting, but will ensure your representation if you cannot attend. Your proxy is revocable at any time prior to its use.

By order of the Board of Directors,

/s/ J. Roger Moody, Jr.
J. Roger Moody, Jr.
Secretary, Nanosphere, Inc.

April 30, 2012
Northbrook, Illinois

NANOSPHERE, INC.

PROXY STATEMENT

FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD MAY 30, 2012

The board of directors of Nanosphere, Inc., a Delaware corporation ("Nanosphere," "we," "us," "our" or the "Company"), hereby solicits your proxy for use at the 2012 annual meeting of stockholders to be held on May 30, 2012, at 9:00 a.m. Central Daylight Time (the "Annual Meeting") at The Westin Chicago North Shore, 601 North Milwaukee Avenue, Wheeling, IL 60090, and at any adjournment or postponement thereof, for the purposes set forth in the accompanying Notice of Annual Meeting of Stockholders. This proxy statement, notice and proxy card are first being mailed to stockholders of record as of April 17, 2012 on or about April 30, 2012.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to be Held on May 30, 2012: This Proxy Statement and the Company's 2011 Annual Report to Stockholders are available online at http://phx.corporate-ir.net/phoenix.zhtml?c=214748&p=irol-reportsannual.

If you complete your proxy by mail, telephone or internet, you appoint William P. Moffitt, III and J. Roger Moody, Jr., or either of them, as your lawful attorneys-in-fact and your proxies, with full power of substitution, at the Annual Meeting and any adjournment(s) or postponement(s) thereof, with all powers that you would possess if personally present at the Annual Meeting. Your proxies will vote your shares as you instruct. If you sign and return your proxy, but fail to instruct how to vote your shares, Mr. Moffitt or Mr. Moody will vote your shares in favor of the slate of directors nominated by the board of directors (Proposal No. 1), "for" the approval of the compensation of our named executive officers (Proposal No. 2) and "for" the ratification of Deloitte & Touche LLP as our independent registered public accounting firm (Proposal No. 3). This way your shares will be voted whether or not you attend. We recommend that you vote by proxy in advance of the Annual Meeting even if you plan to attend just in case your plans change and you are unable to attend. If you are the beneficial owner of your shares that are held in street name, you must provide your broker with a properly executed proxy card and voting instructions in order for your shares to be voted in connection with Proposal Nos. 1 and 2.

The board does not know of any matters to be presented at the Annual Meeting other than those listed on the notice and described in this proxy statement. If a matter comes up for vote that is not covered by your proxy, your proxies will vote your shares in accordance with their judgment if you have completed your proxy card and authorized them to do so.

The board encourages you to attend the Annual Meeting in person. No matter what method you use to vote, if you decide to change your vote, you may revoke your proxy any time before your vote is cast at the annual meeting by (i) giving written notice

of revocation to the Secretary of Nanosphere; (ii) if you voted by telephone or internet, by submitting a new vote by telephone or internet (your latest telephone or internet vote is counted); (iii) submitting a signed proxy bearing a date later than the date of the prior proxy; or (iv) attending the Annual Meeting and voting in person. Attendance at the Annual Meeting will not, in itself, constitute revocation of your proxy.

Our principal executive offices are located at 4088 Commercial Avenue, Northbrook, Illinois 60062, and our telephone number is (847) 400-9000.

PURPOSE OF THE MEETING

At our Annual Meeting, stockholders will be asked to consider and vote upon the following matters:

- Proposal No. 1 – to elect six directors to serve until our next annual meeting of stockholders in 2013 and until their successors are elected and qualified or their earlier resignation, removal, disqualification or death;
- Proposal No. 2 – to consider and vote, on an advisory basis, for the adoption of a resolution approving the compensation of our named executive officers, as such compensation is described under the "Compensation Discussion and Analysis" and "Executive Compensation" sections of this proxy statement;
- Proposal No. 3 – to ratify the audit committee's selection of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2012; and
- to transact such other business as may properly come before the Annual Meeting or any adjournment or postponement thereof.

INFORMATION ABOUT THE ANNUAL MEETING

Who is entitled to vote?

The record date for the Annual Meeting is April 17, 2012. Only stockholders of record at the close of business on that date are entitled to vote at the Annual Meeting. For more information, see the description of shares eligible to vote under the heading "Voting Rights of Common Stockholders" below.

Am I entitled to vote if my shares are held in "street name"?

Yes, if a bank or brokerage firm holds your shares in street name for you, you are considered the "beneficial owner" of the shares. If your shares are held in street name, these proxy materials are being forwarded to you by your bank or brokerage firm (the "record holder"), along with a voting instruction card. As the beneficial owner, you have the right to direct the record holder how to vote your shares, and the record holder is required to vote your shares in accordance with your instructions.

What if I do not give my bank or brokerage firm voting instructions for my shares held in "street name"?

If you do not give instructions to your bank or brokerage firm, it will nevertheless be entitled to vote your shares in its discretion on "routine matters." For purposes of this annual meeting, the Company has determined that the ratification of the appointment of its independent auditors (Proposal 3) is a routine matter. However, absent your instructions, the record holder will not be permitted to vote your shares on a non-routine

matter, which are referred to as "broker non-votes," properly brought before the meeting. Broker non-votes (shares held by brokers that do not have discretionary authority to vote on the matter and have not received voting instructions from their clients) are not counted or deemed to be present or represented for the purpose of determining whether stockholders have approved that proposal. The Company has determined that the election of directors at the Annual Meeting (Proposal No. 1) and the advisory vote to approve executive compensation (Proposal No. 2) are non-routine matters. Accordingly, you must provide voting instructions to your broker in accordance with the voting instruction card that you will receive from your broker in order for your shares to be voted with respect to Proposal Nos. 1 or 2.

May I attend the annual meeting if I hold my shares in "street name"?

As the beneficial owner of shares, you are invited to attend the Annual Meeting. If you are not a record holder, however, you may not attend the meeting or vote your shares in person at the meeting unless you obtain a proxy, executed in your favor, from the record holder of your shares. See "Who can attend the meeting?" below.

How many shares must be present to hold the meeting?

A quorum must be present at the meeting for any business to be conducted at the Annual Meeting. At any meeting of stockholders, the holders of a majority in voting power of all issued and outstanding stock entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum for the transaction of business. Proxies received but marked as abstentions or treated as broker non-votes will be included in the calculation of the number of shares considered to be present at the meeting for quorum purposes.

What if a quorum is not present at the meeting?

If a quorum is not present or represented at the Annual Meeting, then the Chairman of the meeting or the holders of a majority in voting power of the stock entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present or represented. If a quorum initially is present at the Annual Meeting, the stockholders may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum, but if a quorum is not present at least initially, no business other than adjournment may be transacted.

The time and place of the adjourned meeting will be announced at the time the adjournment is taken, and no other notice may be given.

How do I vote if I am a registered stockholder?

1. <u>You may vote by mail</u>. If you are a registered stockholder (that is, if you hold your stock directly and not in street name), you may vote by mail by completing, signing and dating the accompanying proxy card and returning it in the enclosed postage

prepaid envelope. Your proxy will then be voted at the annual meeting in accordance with your instructions.

2. You may vote in person at the meeting. If you are a registered stockholder and attend the meeting (please remember to bring your admission ticket or other acceptable evidence of stock ownership as of the record date), you may deliver your completed proxy card in person.

How do I vote if I hold my shares in "street name"?

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received a voting card and voting instructions with these proxy materials from that organization rather than from Nanosphere. Your bank or broker may permit you to vote your shares electronically by telephone or on the internet. A large number of banks and brokerage firms participate in programs that offer telephone and Internet voting options. If your shares are held in an account at a bank or brokerage firm that participates in such a program, you may vote those shares electronically by telephone or on the Internet by following the instructions set forth on the voting form provided to you by your bank or brokerage firm.

These Internet and telephone voting procedures, which comply with Delaware law, are designed to authenticate stockholders' identities, allow stockholders to vote their shares and confirm that stockholders' votes have been recorded properly. Stockholders voting via either telephone or the Internet should understand that there may be costs associated with electronic access, such as usage charges from Internet access providers and telephone companies that must be borne by the stockholder using such services. Also, please be aware that Nanosphere is not involved in the operation of these voting procedures and cannot take responsibility for any access, Internet or telephone service interruptions that may occur or any inaccuracies, erroneous or incomplete information that may appear.

Who can attend the meeting?

Only stockholders eligible to vote or their authorized representatives will be admitted to the Annual Meeting. If you are a stockholder of record and plan to attend the Annual Meeting, you must detach and bring with you the stub portion of your proxy card, which is marked "Admission Ticket." You must also bring a valid government-issued photo identification, such as a driver's license or a passport.

If your shares are held in street name and you wish to attend the meeting and/or vote in person, you must bring your broker or bank voter instruction card and a proxy, executed in your favor, from your broker or bank. In addition, you must bring valid government-issued photo identification, such as a driver's license or a passport.

Security measures will be in place at the meeting and briefcases, handbags and packages are subject to inspection. No cameras or recording devices of any kind, or signs, placards, banners or similar materials, may be brought into the meeting. Anyone

who refuses to comply with these requirements will not be admitted or, if admitted, will be required to leave.

Can I change my vote after I submit my proxy?

Yes, you may revoke your proxy and change your vote any time before your vote is cast at the meeting:

- by submitting another properly completed proxy card with a later date;
- by changing your vote submitted by telephone or on the internet (your latest telephone or Internet vote is counted); or
- if you are a registered stockholder, by giving written notice of such revocation to the Secretary of Nanosphere prior to or at the meeting. If notice is to be given prior to the meeting, please send it to: Nanosphere, Inc., 4088 Commercial Avenue, Northbrook, Illinois 60062, Attention: J. Roger Moody, Jr. Your attendance at the meeting itself will not revoke your proxy unless you give written notice of revocation to the Secretary before your proxy is voted or you vote in person at the meeting.

Who will count the votes?

Our transfer agent, American Stock Transfer & Trust Company, will tabulate and certify the votes. A representative of the transfer agent will serve as the inspector of election.

How does the board of directors recommend that I vote on the proposals?

The board recommends that you vote:

- FOR the election of the six nominees to the board of directors;
- FOR the advisory approval of compensation of our named executive officers; and
- FOR the ratification of the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2012.

What if I do not specify how my shares are to be voted?

If you submit a proxy but do not indicate any voting instructions, your shares will be voted:

- FOR the election of the six nominees to the board of directors;
- FOR the advisory approval of compensation of our named executive officers; and

- FOR the ratification of the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2012.

Will any other business be conducted at the meeting?

We are not aware of any other business that will be presented at the meeting. If any other matter properly comes before the stockholders for a vote at the meeting, however, your proxy (one of the individuals named on your proxy card) will vote your shares in accordance with his best judgment if you so authorize.

How many votes are required to elect the director nominees (Proposal No. 1)?

At all meetings of stockholders for the election of directors at which a quorum is present, a plurality of the votes cast shall be sufficient to elect each such director standing for election. This means that the six nominees will be elected if they receive more affirmative votes than any other person. If you vote "Withheld" with respect to one or more nominees, your shares will not be voted with respect to the person or persons indicated, although they will be counted for purposes of determining whether there is a quorum.

What happens if a nominee is unable to stand for election?

If a nominee is unable to stand for election, the board of directors may either reduce the number of directors to be elected or select a substitute nominee. If a substitute nominee is selected, the proxy holder will vote your shares for the substitute nominee, unless you have withheld authority.

How many votes are required to approve, on an advisory basis, the compensation of our named executive officers (Proposal No. 2)?

Proposal No. 2 requires the affirmative vote of the holders of a majority in voting power of the stock present in person or represented by proxy and entitled to vote on the subject matter to approve, on an advisory basis, the compensation of our named executive officers.

How many votes are required to approve the ratification of the appointment of Deloitte & Touche LLP as Nanosphere's independent registered public accounting firm (Proposal 3)?

Proposal No. 3 requires the affirmative vote of the holders of a majority in voting power of the stock present in person or represented by proxy and entitled to vote on the subject matter to approve the ratification of the appointment of Deloitte & Touche LLP as Nanosphere's independent registered public accounting firm.

How will abstentions and broker non-votes be treated?

Shares voting "abstain" have no effect on the outcome of and of the matters covered by Proposal Nos. 1 and 2. For the ratification of the appointment of our independent registered public accounting firm (Proposal 3), abstentions are treated as shares present or represented and voting, so abstaining has the same effect as a negative vote. Broker non-votes will be treated as shares present for quorum purposes, but not entitled to vote.

VOTING RIGHTS OF COMMON STOCKHOLDERS

The board has fixed the close of business on April 17, 2012 as the record date for determination of stockholders entitled to notice of and to vote at the Annual Meeting. Holders of record of our common stock, $0.01 par value (the "Common Stock") at the close of business on the record date will be entitled to vote together as a single class on all matters that come before the Annual Meeting. At the close of business on the record date, there were issued and outstanding 44,040,437 shares of Common Stock (representing 44,040,437 votes), each of which is entitled to vote at the Annual Meeting.

The presence, in person or represented by proxy, of the holders of a majority of the outstanding shares of Common Stock, as a single class, represented in person or by proxy, constitutes a quorum for the transaction of business at the Annual Meeting.

PROPOSAL 1

ELECTION OF DIRECTORS

Information about the Nominees

Your vote is requested in favor of six directors to serve until the next annual meeting of stockholders and until their successors are elected and qualified or their earlier resignation, removal, disqualification or death. The board, pursuant to the recommendation of the Company's corporate governance and nominating committee, has selected the six persons listed below as nominees. The table below sets forth the names and principal occupation of each of the nominees. A summary of the background and experience of each of these individuals is set forth after the table.

Name	Age	Current Occupation
Mark Slezak	53	Chairman of the Board
William P. Moffitt, III	65	President, Chief Executive Officer, Director
André de Bruin	65	Director
Chad A. Mirkin, Ph.D.	48	Director
Lorin J. Randall	68	Director
William T. White III	51	Executive Vice President of Lurie Investments, Inc.

Mark Slezak. Mr. Slezak has served as Chairman of our board of directors since 2000. Mr. Slezak is the chief executive officer of Lurie Investments, Inc. and served as a director of Lurie Investments, Inc. until January 2012. As such, Mr. Slezak oversees financial activities as (i) a trustee of AOQ Trust, (ii) a managing member of Eagle Capital Management, LLC, which is the managing member of Alfa-Tech, LLC, (iii) the investment manager of LFT Partnership, (iv) vice president and a director of the Ann and Robert H. Lurie Foundation, (v) the managing member of WASK Investments, LLC and (vi) the managing member of Anda-Proquest, LLC. Lurie Investments, Inc. and Eagle Capital Management, LLC are both managing members of Lurie Investment Fund, LLC. These entities are deemed to be affiliates of the Company. He is chairman of the board at NanoInk and a member of the board of directors at Ardesta, LLC, Joint Juice, Inc. and numerous other private companies and foundations. From 1979 to 1996, Mr. Slezak has held various accounting and financial positions with Arthur Rubloff & Company and Equity Group Investments, Inc. Mr. Slezak is a managing member of several investment funds investing in venture and public markets. He holds a B.S./B.A. degree from Roosevelt University in Chicago, Illinois. Based on Mr. Slezak's familiarity with the Company as a long-standing member of its Board of Directors and his vast investment, operations, financial and governance experience with emerging and public companies,

the Corporate Governance and Nominating Committee of the Board of Directors concluded that Mr. Slezak has the requisite experience, qualifications, attributes and skill necessary to serve as a member of the Board of Directors.

William P. Moffitt, III. Mr. Moffitt became President and Chief Executive Officer of Nanosphere in 2004, and serves on the board of directors. Mr. Moffitt has over 30 years of experience in the diagnostics and medical device industry, and has spent the last 20 years developing novel technologies into products and solutions that have helped shape the industry. Prior to joining Nanosphere, he served as president and chief executive officer of i-STAT Corporation, a developer, manufacturer and marketer of diagnostic products in the point-of-care blood analysis market. Mr. Moffitt led i-STAT from its early stage to commercialization and its initial public offering in 1992 to its acquisition by Abbott Laboratories in 2003. Prior to i-STAT, Mr. Moffitt held increasingly responsible executive positions from 1973 through 1989 with Baxter Healthcare Corporation, a manufacturer and distributor of healthcare products, and American Hospital Supply Corporation, a diversified manufacturer and distributor of healthcare products, which Baxter acquired in 1985. Mr. Moffitt earned a B.S. in zoology from Duke University. Based on Mr. Moffitt's extensive industry experience and proven track record in leading the growth of diagnostics companies from development stage through market leadership, as well as the Company-specific knowledge and strategic perspective possessed by Mr. Moffitt as its Chief Executive Officer, the Corporate Governance and Nominating Committee of the Board of Directors concluded that Mr. Moffitt has the requisite experience, qualifications, attributes and skill necessary to serve as a member of the Board of Directors.

André de Bruin. Mr. de Bruin has served as member of our board of directors since 2005. Mr. de Bruin has more than 35 years of global healthcare industry experience spanning the bio-pharmaceutical, medical device and diagnostics markets. Most recently, Mr. de Bruin was the founder and chief executive officer of DuraPorts Inc., a manufacturer of steel and fabric structures. He also serves on the board of Directors of NxThera Inc., a medical device company based in St. Paul, MN, where he is Chairman of the Board. Prior to his retirement in 2004 as executive chairman of Quidel Corporation's board of directors, Mr. de Bruin served as the company's chief executive officer from 1998 until 2001. He was president and chief executive officer of Somatogen and was elected chairman in 1996. Prior to joining Somatogen, Mr. de Bruin was chairman, president and chief executive officer of Boehringer Mannheim Corporation, a global healthcare concern subsequently acquired by Hoffman-La Roche. Past experience includes advisory services for Ferrer, Freeman and Company, LLC and various boards of directors. Mr. de Bruin graduated from the University of Potchefstroom in South Africa, where he earned a B.S. in finance, economics and business. Based on Mr. de Bruin's extensive experience in the bio-pharmaceutical, medical device and diagnostics industry as both a director and executive officer, the Corporate Governance and Nominating Committee of the Board of Directors concluded that Mr. de Bruin has the requisite experience, qualifications, attributes and skill necessary to serve as a member of the Board of Directors.

Chad A. Mirkin, Ph.D. Dr. Mirkin, one of our co-founders, has served as a member of our board of directors since 2000. Dr. Mirkin is a scientist and pioneer in the development of ultra-high sensitivity and selectivity assays based upon nanostructures. He is currently the director of the Northwestern University International Institute for Nanotechnology and the George B. Rathmann Professor of Chemistry, Professor of Medicine, and Professor of Materials Science and Engineering. Dr. Mirkin received his undergraduate training at Dickinson College (B.S., 1986) and his graduate training at the Pennsylvania State University, where he completed his Ph.D. in chemistry in 1989. That same year, he moved to MIT as a National Science Foundation Postdoctoral Fellow. Dr. Mirkin joined the faculty at Northwestern University in 1991. He has won over 60 national and international awards for his research, including the ACS Nobel Signature Award, the NIH Director's Pioneer Award, the Feynman Prize, the Leo Hendrik Baekeland Award, the ACS Award in Pure Chemistry, the Sackler Prize, the E. Bright Wilson Prize, and the Lemelson-MIT Prize. He is a member of the National Academy of Sciences, Institute of Medicine, and National Academy of Engineering. Based on Dr. Mirkin's familiarity with the Company as a long-standing member of its Board of Directors and his significant scientific knowledge and expertise in molecular diagnostics and especially in the application of nanotechnology to the development of medical diagnostic products, the Corporate Governance and Nominating Committee of the Board of Directors concluded that Dr. Mirkin has the requisite experience, qualifications, attributes and skill necessary to serve as a member of the Board of Directors.

Lorin J. Randall. Mr. Randall has served as a member of our board of directors and the chairman of the audit committee since 2008. Mr. Randall is a financial consultant and also serves on the boards of the following healthcare companies: Tengion, Inc., Athersys, Inc. and Acorda Therapeutics, Inc. Mr. Randall previously served as senior vice president-chief financial officer of Eximias Pharmaceutical Corporation, a development stage provider of oncology therapeutics. Mr. Randall held the same position at i-STAT Corporation, a manufacturer of medical diagnostic devices, which was acquired by Abbott Laboratories in 2004. His career also includes senior management positions at CFM Technologies, a semiconductor manufacturing equipment company; Greenwich Pharmaceutical Corporation, a development stage provider of immune system disease therapeutics; and Surgilase, a provider of surgical lasers to hospitals and clinics. Mr. Randall received a B.S. in accounting from The Pennsylvania State University and an M.B.A. from Northeastern University. Based on Mr. Randall's background as a financial consultant, executive and director at diagnostic and other healthcare companies, as well as his expertise in finance, accounting, internal controls and enterprise risk, the Corporate Governance and Nominating Committee of the Board of Directors concluded that Mr. Randall has the requisite experience, qualifications, attributes and skill necessary to serve as a member of the Board of Directors.

William T. White III. Mr. White has served as executive vice president of Lurie Investments since 2002. Since joining Lurie Investments in 2000, Mr. White has been responsible for managing the investments of the Ann and Robert H. Lurie Family of Chicago, including its portfolio of Life Sciences and Technology investments. Prior to joining Lurie Investments, Mr. White was Managing Director of Corporate Investments at Equity Group Investments, LLC, where he was responsible for a portfolio of

companies in a variety of industries. While at Equity Group, he also managed the organization's financing activities, including its relationships with investment banks and other financial institutions. He was also previously the Vice President of Corporate Banking at Manufacturers Hanover. Mr. White is a director of Aperion Biologics Inc., Cernium, Inc. CytoPherx, Inc., Discera, Inc., Impact Health, Inc., Joint Juice, Inc., NanoInk, Inc., and Viamet Pharmaceuticals, Inc., all of which are privately held companies. He holds an A.B. degree from Dartmouth College. Based on Mr. White's familiarity with the Company as a long-standing executive officer of Lurie Investments and his significant investment and operations experience, the Corporate Governance and Nominating Committee of the Board of Directors concluded that Mr. White has the requisite experience, qualifications, attributes and skill necessary to serve as a member of the Board of Directors.

Each of the above nominees has indicated a willingness to serve. Should any nominee become unavailable prior to the Annual Meeting, your proxy will vote your shares for the person or persons recommended by the board to the extent you authorize. If you sign and return your proxy (whether by mail, telephone or internet) your shares will be voted for the director slate nominated by the board except to the extent that you withhold authority for any nominee(s). The affirmative vote of a plurality of the shares present in person or represented by proxy at the meeting and entitled to vote is required to elect the six nominees as directors.

THE BOARD UNANIMOUSLY RECOMMENDS THAT YOU VOTE IN FAVOR OF THE ABOVE NOMINEES FOR THE BOARD OF DIRECTORS.

Board of Directors; Committees

During the fiscal year ended December 31, 2011 ("Fiscal Year 2011"), the board of directors held a total of seven in-person or telephonic board meetings and took action by unanimous written consent on one occasion. All of our director nominees have agreed, if elected at the Annual Meeting, to serve from the Annual Meeting until the next annual meeting of stockholders in 2013 and until their successors have been duly elected and qualified or their earlier resignation, removal, disqualification or death. There are no arrangements between any director or executive officer and any other person pursuant to which the director or officer is to be selected as such. There is no family relationship between the directors, executive officers or persons nominated or appointed by the board to become directors or executive officers. Current directors Mark Slezak, Jeffrey R. Crisan, André de Bruin, Lorin J. Randall and Sheli Z. Rosenberg, and director nominee William T. White III, are "independent" in accordance with the rules of the NASDAQ Global Market.

Each director attended at least 75% of the aggregate of the total number of meetings of the board of directors and the total number of meetings of all committees of the board of directors on which he or she served for Fiscal Year 2011, except for André de Bruin who attended 71% of the aggregate of the total number of such meetings.

The board of directors has an Audit Committee, a Compensation Committee and a Corporate Governance and Nominating Committee. The function, composition, and number of meetings of each of these committees are described below.

Audit Committee

André de Bruin, Lorin J. Randall and Sheli Z. Rosenberg currently serve on our Audit Committee. Mr. Randall is the chairman of our Audit Committee. The Audit Committee's responsibilities include, but are not limited to:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing and discussing with management and the independent registered public accounting firm our annual and quarterly financial statements and related disclosure;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of confidential, anonymous submissions by our employees regarding

questionable accounting, internal control, financial disclosure or auditing related complaints and concerns; and

- preparing the audit committee report required by SEC rules to be included in our annual proxy statement.

Our board of directors has determined that Mr. Randall qualifies as an "audit committee financial expert" as defined under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the applicable rules of the NASDAQ Global Market. The board has determined that each of Mr. de Bruin, Mr. Randall and Ms. Rosenberg is "independent" pursuant to Rule 10A-3 of the Exchange Act. We believe that the composition of our Audit Committee meets the requirements for independence and financial sophistication under the current requirements of the NASDAQ Global Market and SEC rules and regulations. The Audit Committee held a total of five meetings and took no actions by written unanimous consent, during Fiscal Year 2011. Our Audit Committee's charter can be found on our website at http://www.nanosphere.us in the "Investor Relations/Media" section under the heading "Corporate Governance." Any amendments to this charter will be posted to the website promptly upon adoption by the Audit Committee.

Compensation Committee

Mark Slezak, André de Bruin and Jeffrey R. Crisan currently serve on the Compensation Committee. Mr. Slezak is the chairman of our Compensation Committee. We believe that the composition of our Compensation Committee meets the requirements for independence under the current requirements of the NASDAQ Global Market, the requirements for non-employee directors under the Exchange Act, and the requirements for outside directors under Section 162(m) of the Internal Revenue Code of 1986, as amended (the "Code").

The Compensation Committee's responsibilities include, but are not limited to:

- annually reviewing and approving corporate goals and objectives relevant to compensation of our chief executive officer;
- evaluating the performance of our chief executive officer in light of such corporate goals and objectives and reviewing and recommending the compensation of our chief executive officer to the board;
- reviewing and approving the compensation of our other executive officers;
- overseeing and administering our compensation, welfare, benefit and pension plans and similar plans; and
- reviewing and making recommendations to the board with respect to director compensation.

The Compensation Committee held a total of three meetings and took no actions by written consent, during Fiscal Year 2011. Our Compensation Committee's charter can be found on our website at http://www.nanosphere.us in the "Investor Relations/Media" section under the heading "Corporate Governance." Any amendments to this charter will be posted to the website promptly upon adoption by the Compensation Committee.

Corporate Governance and Nominating Committee

Sheli Z. Rosenberg, Mark Slezak and Jeffrey R. Crisan serve on the Corporate Governance and Nominating Committee. Ms. Rosenberg is the chairman of our Corporate Governance and Nominating Committee. We believe that the composition of our Corporate Governance and Nominating Committee meets the requirements for independence under the current requirements of the NASDAQ Global Market.

The Corporate Governance and Nominating Committee's responsibilities include, but are not limited to:

- developing and recommending to the board criteria for board and committee membership;
- establishing procedures for identifying and evaluating director candidates including nominees recommended by stockholders;
- identifying individuals qualified to become board members;
- recommending to the board the persons to be nominated for election as directors and to each of the board's committees;
- developing and recommending to the board a code of business conduct and ethics and a set of corporate governance guidelines; and
- overseeing the evaluation of the board and management.

The Corporate Governance and Nominating Committee will consider recommendations for director candidates submitted in good faith by stockholders. A stockholder recommending an individual for consideration by the Corporate Governance and Nominating Committee must provide (i) evidence of ownership of shares of the Company's Common Stock, (ii) the written consent of the candidate(s) for nomination as a director, (iii) a resume or other written statement of the qualifications of the candidate(s) and (iv) all information regarding the candidate(s) that would be required to be disclosed in a proxy statement filed with the SEC if the candidate(s) were nominated for election to the board, including, without limitation, name, age, business and residence address and principal occupation or employment during the past five years. Stockholders should send the required information to the Company at 4088 Commercial Avenue, Northbrook, Illinois 60062, Attention: J. Roger Moody, Jr. In order for a stockholder's nomination of a candidate for nomination as a director to be valid, under the Company's amended and restated by-laws notice of such nomination must be received by the

Corporate Governance and Nominating Committee no more than 120 days and no less than 90 days prior to the one year anniversary of the previous year's annual meeting date.

The Corporate Governance and Nominating Committee evaluates all candidates for nomination, whether identified by the committee or proposed by a stockholder, by considering a number of criteria, which include the candidate's reputation, integrity, business acumen, diligence, experience, age, potential conflicts of interest, the ability to act in the interests of all stockholders, and the perceived need of the board of directors. Although the Corporate Governance and Nominating Committee does not have a formal diversity policy, it endeavors to comprise the board of directors of members with a broad mix of professional and personal backgrounds. Thus, the Corporate Governance and Nominating Committee accords some weight to the individual professional background and experience of each director. Further, in considering nominations, the Corporate Governance and Nominating Committee takes into account how a candidate's professional background would fit into the mix of experiences represented by the then-current board of directors. When evaluating a nominee's overall qualifications, the Corporate Governance and Nominating Committee does not assign specific weights to particular criteria, and no particular criterion is necessarily required of all prospective nominees.

In Fiscal Year 2011 the Corporate Governance and Nominating Committee acted to approve the slate of nominees for election to the Board of Directors at the Company's annual meeting of stockholder on June 1, 2011 during a meeting of the full Board of Directors but did not conduct any other meetings or take any action by written consent in Fiscal Year 2011. Our Corporate Governance and Nominating Committee's charter can be found on our website at http://www.nanosphere.us in the "Investor Relations/Media" section under the heading "Corporate Governance." Any amendments to this charter will be posted to the website promptly upon adoption by the Corporate Governance and Nominating Committee.

Corporate Governance

Code of Business Conduct and Ethics

Our code of business conduct and ethics can be found on our website at http://www.nanosphere.us in the "Investor Relations/Media" section under the heading "Corporate Governance." Any amendments to or waivers from our code of business conduct and ethics shall be posted to our website within four business days in accordance with paragraph (c) of Item 5.05 of Form 8-K.

Communications with the Board of Directors

The board has provided a procedure for shareholders or other persons to send written communications to the board, a board committee or any of the directors, including complaints to the Audit Committee regarding accounting, internal accounting controls, or auditing matters. Shareholders may send written communications to the board, the appropriate committee or any of the directors by certified mail only, c/o J.

Roger Moody, Jr., Nanosphere, Inc., 4088 Commercial Avenue, Northbrook, Illinois 60062. All such written communications will be compiled by the chief financial officer and submitted to the board, a committee of the board or the individual directors, as appropriate, within a reasonable period of time. These communications will be retained with Nanosphere's corporate records.

Director Attendance at Annual Meeting of Shareholders

We do not have a formal policy regarding attendance by directors at our annual meeting of shareholders but invite and encourage all directors to attend. Five of our then directors attended our 2011 annual meeting of stockholders on June 1, 2011. We make every effort to schedule our annual meeting of shareholders at a time and date to permit attendance by directors, taking into account the directors' schedules and the timing requirements of applicable law.

Board Leadership Structure

Currently, the Company has separated the roles of Chief Executive Officer and Chairman of the Board. The Company believes that at this time the separation of these roles permits the Chairman of the Board to focus on oversight of the Company's long-term corporate development goals while the Chief Executive Officer focuses on the strategic direction of the Company and oversees the day to day performance of the other executive officers in executing the Company's business plan. Executive Sessions of the board of directors consisting only of non-management directors are held periodically as determined by the non-management directors. Such Executive Sessions typically occur immediately following regularly scheduled meetings of the board of directors, and may occur at any other time and place as the non-management directors may determine.

Pursuant to authority vested in the Audit Committee of the board of directors pursuant to its charter, the Audit Committee is responsible for overseeing the Company's financial risk exposure and assisting the board of directors in overseeing the Company's risk assessment and risk management policies and procedures. The Audit Committee discharges its risk oversight responsibilities as part of its quarterly reviews of the Company's quarterly and annual financial statements by discussing with management, the Company's independent auditors and outside legal counsel the Company's risk profile and its financial risk exposure and assisting the board of directors with respect to risk mitigation policies and procedures as determined by the board of directors. In addition, the Compensation Committee has assessed the Company's compensation programs as described under "Compensation Risk Assessment" in this Proxy Statement. The Company does not believe that the performance of these oversight functions by these committees has any effect on the leadership structure of the board of directors.

Policies and Procedures for Related Party Transactions

Our Audit Committee charter provides that our Audit Committee must review and approve in advance any related party transaction. All of our directors, officers and employees are required to report to our Audit Committee any such related party

transaction for approval prior to its completion. In approving or rejecting a proposed related party transaction, our Audit Committee shall consider the relevant facts and circumstances available and deemed relevant to the Audit Committee, including, but not limited to, the risks, costs and benefits to us, the terms of the transaction and the impact on a director's independence. Our Audit Committee shall approve only those related party transactions that, in the light of known circumstances, are consistent with, our best interests, as our audit committee determines in the good faith exercise of its discretion. A related party transaction includes any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships in which we were or are to be a participant, the amount involved exceeds $120,000, and a related person had or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness, and employment by us of a related person.

In addition, any related person transaction previously approved by the Audit Committee or otherwise already existing that is ongoing in nature will be reviewed by the Audit Committee on an ongoing basis to ensure that such related person transaction has been conducted in accordance with the previous approval granted by the Audit Committee, if any, and that all required disclosures regarding the related person transaction are made. No such transactions were approved during fiscal 2011.

Compensation Risk Assessment

In setting compensation, the Compensation Committee considers the risks to the Company's stockholders and to achievement of its goals that may be inherent in its compensation programs. The Compensation Committee conducted a risk assessment of the Company's compensation programs, including its executive compensation programs. The Compensation Committee reviewed and discussed its assessment with management and outside legal counsel and concluded that the Company's compensation programs are within industry standards and are designed with the appropriate balance of risk and reward to align employees' interests with those of the Company and do not incent employees to take unnecessary or excessive risks. Although a portion of our executives' and employees' compensation is performance-based and "at risk," we believe our compensation plans are appropriately structured and are not reasonably likely to result in a material adverse effect on the Company.

Information about Executive Officers and Key Employees

The table below sets forth the names and ages of our executive officers and key employees, as well as the positions and offices held by such persons as of March 15, 2012. A summary of the background and experience of each of these individuals is set forth after the table. For biographical information for William P. Moffitt, III, please see "Election of Directors - Information about the Nominees" above.

Name	Age	Position with Nanosphere
William P. Moffitt, III	65	President and Chief Executive Officer
J. Roger Moody, Jr.	44	Chief Financial Officer, Vice President of Finance & Administration, Treasurer and Secretary
Winton G. Gibbons	49	Senior Vice President, Business Development
Michael K. McGarrity	49	Chief Commercial Officer, Vice President, Sales and Marketing
Timothy J. Patno	46	Chief Technology Officer

J. Roger Moody, Jr. Mr. Moody joined Nanosphere in 2007 as Chief Financial Officer and Vice President of Finance & Administration. He also serves as the Company's Treasurer and Secretary. Mr. Moody has more than 20 years of experience in leading finance, corporate development and operations for high growth healthcare and technology companies. Previously, Mr. Moody spent six years at Medsn, a medical education company where he began as chief financial officer and was promoted to chief operating officer where he led Medsn's United States and off-shore operations. Mr. Moody also served as chief financial officer and led corporate development for two private venture backed companies sold to strategic partners. Additionally, Mr. Moody provided mergers and acquisition and strategic advisory services to technology and healthcare companies for Volpe Brown Whelan & Company. Mr. Moody began his career at IBM. Mr. Moody received his B.S. from Syracuse University and his M.B.A. from the University of Chicago, Graduate School of Business.

Winton G. Gibbons. Mr. Gibbons joined us in 2007 as Senior Vice President, Business Development. From 2005 to 2007, he was senior vice president for strategic and global product marketing at Biosite (now Inverness Medical). For the period of 1997 through 2005, he was a sell-side equity analyst for the investment firm of William Blair & Company, LLC, covering diagnostic, life science and biotechnology companies, and during which he became a principal, as well as group head for healthcare. Prior to that position, from 1994 to 1997, Mr. Gibbons was vice president of strategy and business development for the Patient Care Division of Boehringer Mannheim Diagnostics (now Roche Diagnostics). He has also been a director of management services at Merck & Co., a consultant and manager at McKinsey & Company, and held marketing and sales positions at Conoco Chemicals, where he began his career. Mr. Gibbons holds an M.B.A. in Finance and Business Policy from the University of Chicago, Graduate School of Business and a B.S. degree in Chemistry from Duke University.

Michael K. McGarrity. Mr. McGarrity joined Nanosphere in 2005 as Chief Marketing Officer. Mr. McGarrity, who has more than 18 years of sales and marketing experience in the medical device industry, joined Nanosphere after 13 years with Stryker Corporation. At Stryker, he served in leadership roles in marketing and strategic development, most recently as vice president of marketing for Stryker Instruments, where he also had executive general management responsibility for a newly created business focused on interventional pain management. Mr. McGarrity is a graduate of the University of Notre Dame and began his career in commercial banking in Chicago.

Timothy J. Patno. Mr. Patno has been at Nanosphere since 2001. Mr. Patno led the development efforts of the Verigene Systems and the Verigene genomic assays. Additionally, he led the design efforts for the consumable manufacturing operations and has operationally led the microarray and consumable manufacturing teams since 2008. In 2009 he became responsible for Nanosphere's other manufacturing operations. Prior to joining Nanosphere, Mr. Patno spent 9 years leading the System Engineering Groups for Baxter Fenwal's Amicus® (blood cell) Separator. He was part of this team from product conception through a successful global market launch with annual global product sales of approximately $115M in 2001. From 1988 to 1992, Mr. Patno learned System Engineering and system integration skills working at Hughes Aircraft Company's Space & Communications Group working on the HS601 spacecraft bus and the UHF F/O satellite system. Mr. Patno has degrees in General Engineering, BS, from the University of Illinois – Urbana/Champaign and Electrical Engineering, MS, from the University of Southern California. Mr. Patno was a Hughes Fellow at USC and an Evans Scholar at the University of Illinois.

Compensation Discussion and Analysis

Overview of Compensation Program

The Compensation Committee of the board of directors is responsible for establishing and implementing our compensation philosophy, as detailed below. The Compensation Committee reviews and approves all of our compensation policies, including executive officer salaries, bonuses and equity incentive compensation. The Compensation Committee ensures that the total compensation paid to the executive management is fair, reasonable, competitive, and includes incentives that are designed to appropriately drive corporate performance.

The Compensation Committee reviews and approves the annual compensation for our executive officers, other than our chief executive officer, with respect to whom the Compensation Committee reviews and recommends the compensation for approval by the board of directors, which approval was obtained with respect to all 2011 compensation of our chief executive officer. The Compensation Committee may retain the services of an independent compensation consultant or research firm with respect to compensation of all named executive officers, but did not do so with respect to 2011 compensation. In addition, the Compensation Committee considers recommendations from the chief executive officer and from persons serving in supervisory positions over a particular officer or executive officer.

Overview of Compensation Philosophy and Objectives

The compensation of our executive officers is based in part on the terms of the employment agreements that we entered into with each of our named executive officers. In addition, our "pay-for-performance" philosophy is among the fundamental tenets of our executive compensation program. We have adopted an approach to compensation comprised of a mix of short-term and long-term components that are designed to provide proper incentives and to reward our senior management team.

Our intent regarding the compensation of our executive officers is to provide salary levels and compensation incentives that:

- are competitive within the life sciences and medical technology industries;
- attract and retain talented and experienced executives;
- motivate our executives to manage our business to meet our short-term and long-term business objectives;
- align the interests of our executives and stockholders by motivating the executives to increase stockholder value; and
- tie executive compensation to the achievement of certain short-term and long-term corporate objectives.

Compensation Policies and Procedures

Our Compensation Committee is responsible for administering our compensation practices. Our Compensation Committee was appointed by our board of directors, and consists entirely of directors who are "outside directors" for purposes of Section 162(m) of the Code, and non-employee directors for purposes of Rule 16b-3 under the Exchange Act. Our Compensation Committee members are Mark Slezak, André de Bruin and Jeffrey R. Crisan, with Mr. Slezak as our Compensation Committee chairperson. Our Compensation Committee holds meetings as necessary throughout the year.

Within the context of the overall objectives of our executive compensation philosophy, the Compensation Committee determines the specific types and amounts of compensation to be paid to each of our named executive officers based on a number of factors including:

- the roles and responsibilities of our executives;
- the individual experience and skills of, and expected contributions from, our executives;
- compensation levels of executive officers at peer companies in the life sciences and medical technology industries; and
- our executives' historical compensation at the Company.

In determining the appropriate amounts and mix of various types of compensation for the named executive officers, the Compensation Committee considers the competitiveness of the Company's overall compensation arrangements. In connection with the Company's initial public offering in 2007, the Compensation Committee considered the executive compensation practices at 28 peer companies in the life sciences and medical technology industries and concluded that the compensation of the Company's named executive officers was appropriately near the 50th percentile of compensation paid to the named executive officers of these peer companies as a function of both total compensation paid and the allocation among the various components of compensation paid. The Compensation Committee has adjusted the compensation of the named executive officers each year based on the Committee's assessment of current market conditions and Company and individual performance but has not formally evaluated peer company compensation data subsequent to the Company's initial public offering. The Compensation Committee retains complete discretion with respect to the types and amounts of compensation awards each year.

When discussing performance evaluations and setting new compensation levels, the Compensation Committee reviews and considers recommendations from Mr. Moffitt, our chief executive officer, regarding the performance and contributions of the other four named executive officers and the senior management team, other than for himself. In its sole discretion, the Compensation Committee may accept or reject, in whole or in part, the recommendations of Mr. Moffitt. For 2011, the Compensation Committee evaluated executive officer compensation levels by considering the Company's overall performance

and that of Mr. Moffitt, and input from Mr. Moffitt with respect to the performance and individual contributions of the other four named executive officers. Mr. Moffitt does not participate in discussions about the amount of his own compensation. With the exception of Mr. Moffitt as our chief executive officer, the Compensation Committee has the final authority regarding the overall compensation for the executive officers and the senior management team. In the case of Mr. Moffitt, the Compensation Committee evaluates Mr. Moffitt's performance and contributions and recommends compensation levels to the board of directors. In its sole discretion, the board of directors may accept or reject, in whole or in part, the recommendations of the Compensation Committee with respect to Mr. Moffitt's overall compensation. For 2011, the board of directors reviewed and accepted all of the recommendations of the Compensation Committee.

Stockholder Say-on-Pay Advisory Vote

The Compensation Committee attempts to balance the interests of stockholders, regulators, and other interested parties. In 2011, we sought a stockholder say-on-pay advisory vote regarding executive compensation, and approximately 99% of the votes cast were in favor of our executive compensation. The Committee viewed this vote as supportive of the Company's overall approach to executive compensation. Due to such strong stockholder support, we did not make any material changes to our compensation policies in 2011. Stockholders also provided strong support (approximately 95% of the votes cast) for holding such advisory votes every year, although approximately 4% of the votes cast favored a vote every third year. As a result, we currently intend to continue to provide an annual, stockholder say-on-pay advisory vote regarding executive compensation.

Elements of Compensation

The compensation of our named executive officers consists primarily of five components:

- base salary;
- annual incentive cash bonuses;
- equity-based incentives;
- other benefits; and
- severance and termination protection, in the case of some, but not all of our executive officers.

In general, total compensation is geared to be sufficient to attract and retain the best possible human resource talent. In determining the adjustments to the compensation of our executive officers for the fiscal year ended December 31, 2011 and prior periods, we relied on the experience of the members of our Compensation Committee who serve on the boards of directors and compensation committees for other similar companies, and we annually take into account the performance of each executive officer, their

contributions toward the Company's success, and the Company's growth and stage of development.

We use a mix of short-term compensation (base salaries and cash incentive bonuses) and long-term compensation (equity incentive compensation) to provide a total compensation structure that is designed to achieve our pay-for-performance philosophy and our compensation objectives. We discuss each of the principal elements of our executive compensation in detail below.

Annual Cash Compensation

Base Salary

In general the base salaries are designed to provide a consistent base of income and to attract the appropriate level of talent. Our executive base salaries reflect (1) the initial base salaries that we negotiated with each of them at the time of their initial employment or promotion to their current positions, (2) in the case of our chief executive officer, the initial base salary reflected in his current employment agreement; and (3) our subsequent adjustments to these amounts, generally between 2% and 5% each year, are primarily attributable to the Company's annual performance and any changes in our executives' roles and responsibilities. In 2012 none of the named executive officers received salary adjustments based on the Company's 2011 performance.

The following table presents base salaries for our named executive officers in 2011 and 2012:

	2012	2011
William P. Moffitt, III, *President and Chief Executive Officer*	$457,885	$457,885
J. Roger Moody, Jr., *Chief Financial Officer*	$303,966	$303,966
Winton G. Gibbons, *Senior Vice President, Business Development*	$284,109	$284,109
Michael K. McGarrity, *Chief Commercial Officer*	$298,453	$298,453
Timothy J. Patno, *Chief Technology Officer*	$278,100	$278,100

The base salaries of our executive officers are reviewed annually. We may also increase the base salary of an executive officer at other times if a change in the scope of the officer's responsibilities justifies such consideration or in order to maintain salary equity among our executive officers or for competitive reasons.

Annual Incentive Compensation

Annual incentive awards are designed to reward near-term operating performance and the achievement of milestones critical to our success in both the near and the long-term. Consistent with our emphasis on pay-for-performance, we have adopted a management incentive bonus program. Executive officers will have an opportunity to earn bonuses based on the attainment of Company performance goals and a subjective analysis of individual performance that contributes to the attainment of those goals. The target bonuses and our establishment of business goals for the Company reinforces three of our compensation goals — namely, to motivate our executives toward even higher achievement and business results, to tie our executives' goals and interests to ours and our stockholders' and to enable us to attract and retain highly qualified individuals.

Since inception of our management incentive bonus program in 2003, our employment offer letters to the executive officers provide for participation in this incentive program and establish the target bonus amounts which are initially set in the employment offer letters but are subject to adjustment by the Compensation Committee. The target bonuses merely reflect an opportunity to receive the specified award, conditioned upon satisfaction of Company performance goals, but are not guarantees for their payout. Under our management incentive bonus program, we may pay less than the target bonus in the event the Company performance goals are only partially achieved. The ultimate payout is determined by the Compensation Committee after reviewing achievement of the Company's performance goals, a subjective analysis of individual performance that contributed to the achievement of those goals, and our chief executive officer's recommendations with respect to the contributions and performance of the other four named executive officers. In the case of our chief executive officer's bonus, the ultimate payout is determined by the board of directors after reviewing the recommendation of the Compensation Committee.

The board of directors determines the target bonus opportunity for our chief executive officer after reviewing the recommendation of the Compensation Committee, and the Compensation Committee determines the target bonus amounts for the other four named executive officers, either from year to year or during a given year, as further incentives to motivate our executives to meet our business objectives. For 2011, the board of directors reviewed and accepted the recommendation of the Compensation Committee and set Mr. Moffitt's target bonus opportunity at 60% of base salary. For 2011, the Compensation Committee considered Mr. Moffitt's input with respect to the other four named executive officers and set all other named executive officers' 2011 target bonus opportunity at 35% of base salary. The target bonuses are reflective of our historical emphasis on performance-based compensation. This approach to compensation is consistent with our overall pay-for-performance philosophy.

With respect to the Company performance goals, our chief executive officer, in consultation with the other executive officers, develops performance goals for the Company and submits the recommended goals for the approval of the Compensation Committee. In its sole discretion, the Compensation Committee may accept or reject, in whole or in part, the Company performance goals recommended by our chief executive

officer. For 2011, the Compensation Committee reviewed and accepted the Company performance goals that Mr. Moffitt recommended. In 2011, the Company performance goals were as follows:

- Financial performance: Achieving revenue target and keeping expenses at or below amounts set forth in board approved operating plan;
- Product development and commercialization: Making progress in the development and commercialization of the Company's 2C19, cTnL and blood stream infection assays in accordance with the board approved operating plan; and
- Exceeding budgeted year-end cash balance.

In addition to these Company performance goals, the Compensation Committee also adopted an individual performance goal in 2011 for Messrs. Moffitt and Gibbons to identify and pursue strategic partnerships that can accelerate achievement of the Company's business plan and help mitigate risk. Some of these performance goals require the application of subjective judgment. Therefore, their outcomes are substantially uncertain at the time established. The Compensation Committee authorizes bonuses to the executive officers, other than the chief executive officer, in amounts that are commensurate with each executive officer's target bonus opportunity relative to the achievement of the Company performance goals. At the close of the performance period, our chief executive officer assesses achievement of the Company performance goals, discusses with the Compensation Committee both that assessment and the contributions of each of the named executive officers toward achievement of the Company performance goals, and submits recommendations for bonus payouts for the approval of the Compensation Committee. The Compensation Committee discusses and reviews our chief executive officer's assessment of the achievement of the Company performance goals, his own individual achievements and the contributions and individual performance of the other four named executive officers, and in its sole discretion may accept or reject, in whole or in part, the recommendations of Mr. Moffitt. For 2011, the Compensation Committee considered the Company's progress toward achieving the Company performance goals, as well as Mr. Moffitt's input, and determined that no bonuses be paid to the other four named executive officers for 2011.

For our chief executive officer, the Compensation Committee and board of directors retains the right to modify the portion of the target bonus to be paid to our chief executive officer based on the Compensation Committee's subjective analysis of the attainment of the Company performance goals and of the chief executive officer's contribution toward achievement of those goals. This process enables the Compensation Committee to more closely align the chief executive officer's performance with the operation and strategic priorities of the Company, which can change from year to year and even during the course of any given year. At the end of every fiscal year, the Compensation Committee assesses the achievement of the Company performance goals and reports to the board of directors its assessment and bonus recommendations with respect to the chief executive officer. In its sole discretion, the board of directors may

accept or reject, in whole or in part, the bonus recommendations of the Compensation Committee. For 2011, the board of directors reviewed and accepted the Compensation Committee's recommendation to not pay any bonus with respect to Mr. Moffitt.

In 2011, the target bonus amounts and actual payouts were as follows:

	Annual Target	Payout
William P. Moffitt, III President and Chief Executive Officer	$274,731	$0
J. Roger Moody, Jr. Chief Financial Officer	$106,388	$0
Winton G. Gibbons Senior Vice President, Business Development	$99,438	$0
Michael K. McGarrity Chief Commercial Officer	$104,458	$0
Timothy J. Patno Chief Technology Officer	$97,335	$0

The Compensation Committee determined not to award any bonuses to the named executive officers for 2011 by assessing the Company's progress toward the achievement of the 2011 Company performance goals. The Compensation Committee noted that achievement of all goals does not automatically result in a 100% payout nor does failure to achieve any goals automatically result in no payout. However, the Compensation Committee was of the view that the Company's near-term operational performance was below expectation. Accordingly, the Compensation Committee determined that the Company and its named executive officers should be awarded no bonus for 2011. The Compensation Committee retains complete and absolute discretion to differentiate among the executive officers with respect to the portion of the target bonus paid to any executive officer based on the Compensation Committee's subjective analysis of performance and Mr. Moffitt's input with respect to the other four named executive officers. For 2011 bonuses, the Compensation Committee made its compensation determinations based only on the Company's lack of achievement of the 2011 Company performance goals. Final decision making authority with respect to all compensation decisions for the chief executive officer rests with the board of directors, which takes into account the recommendations of the Compensation Committee with respect to Mr. Moffitt. In 2011, the board of directors accepted and approved all of the Compensation Committee's recommendations with respect to Mr. Moffitt's compensation.

Equity Incentive Compensation

We grant equity incentive awards in the form of stock options and restricted stock awards to align the interests of our executive officers with the interests of our stockholders. Our decisions regarding the amount and type of equity incentive compensation and relative weighting of these awards among total executive

compensation have been initially based on our negotiations with our executives in connection with their initial employment or promotion by our Company.

We have typically made grants of equity incentive awards to our executive officers on a periodic basis. All such grants are reviewed and approved by the Compensation Committee at regularly scheduled Committee meetings throughout the year. Awards to our chief executive officer are approved by the Compensation Committee and are subject to approval by the board of directors. The date of grant and the fair market value of the awards are established on the date of final approval by the Committee, or by the board of directors in the case of an award to our chief executive officer, in accordance with the Financial Accounting Standards Board's Accounting Standards Codification ("ASC") 718, "Compensation - Stock Compensation." Such fair market value is defined in our 2007 Long-Term Incentive Plan to mean the closing market price of a share of our common stock on the date of the grant, as reported on the NASDAQ Global Market for periods subsequent to our initial public offering. We do not have any program, plan or practice of setting the exercise price at a price less than fair market value of our common stock on the grant date. We do not have any program, plan or obligation that requires us to grant equity compensation on specified dates to our named executive officers.

On December 28, 2011, Mr. Moffitt received stock options to purchase 450,000 shares under the 2007 Plan at the price of $1.38 per share, the grant date fair value under ASC 718, that vest immediately. This grant was associated with his signing a new employment agreement with the Company that is described further below. In our year ended December 31, 2011, we made no equity incentive awards to our other executive officers. Our equity incentive award programs are described under "Stock Option Awards" and "Restricted Stock Purchase Awards" below.

Stock Option Awards

Stock option awards provide our executive officers with the right to purchase shares of our common stock at a fixed exercise price typically for a period of up to ten years, subject to continued employment with our Company. In general, we provide our executives and all of our employees, with service-based stock options that have both gradual and cliff vesting schedules. The gradually-vesting stock options are earned on the basis of continued service to us and generally vest over four years, 25% on each of the four anniversaries of the date of grant. The cliff-vested stock options vest in full on the seventh anniversary of the date of grant. However, the vesting of these stock options is subject to acceleration based on the achievement of distinct corporate milestones relating to product launch, revenues and profit margins, which are identical for all executive officers and for all employees generally. Historically, one-half of the total grants of stock options have typically been subject to the service-based vesting, and the other half are granted with a seven year cliff-vesting schedule, subject to acceleration based on the achievement of distinct corporate milestones. Additionally, the stock option awards have included acceleration of vesting provisions upon a change in control of the Company.

With respect to the acceleration of cliff-vested awards, if there are five milestones associated with the grant of cliff-vested stock options, then 20% of the options granted shall immediately vest and become exercisable upon the achievement of each performance milestone.

We have granted stock options as incentive stock options in accordance with Section 422 of the Code, subject to the volume limitations contained in the Code, as well as non-qualified stock options. Generally, for stock options that do not qualify as incentive stock options, we are entitled to a tax deduction in the year in which the stock options are exercised equal to the difference between the exercise price and the fair market value, at the time of exercise, of the stock for which the stock option was exercised. The holders of the non-qualified stock options are generally taxed on this same amount in the year of exercise. For stock options that qualify as incentive stock options, we do not receive a tax deduction, and the holder of the stock option may receive more favorable tax treatment than he or she would for a non-qualified stock option. Historically, we have primarily granted incentive stock options to provide these potential tax benefits to our executives and because of the limited expected benefits to our company of the potential tax deductions as a result of our historical net losses.

Effective March 27, 2007, we adopted, as approved by our shareholders, the 2007 Long-Term Incentive Plan, or the 2007 Plan, that affords more flexibility to our Compensation Committee by allowing grants of a wide variety of equity awards to our key employees, directors and consultants, including non-qualified stock options, shares of restricted stock and other awards that are valued by reference to the fair market value of our common stock. This plan is designed to assist us in attracting, retaining, motivating and rewarding key employees, directors and consultants and providing long-term value for our stockholders by closely aligning the interests of these individuals with those of our stockholders. The 2007 Plan replaced our 2000 Equity Incentive Plan, or the 2000 Plan, and since the adoption of our 2007 Plan, no grants have been or will be made under the 2000 Plan. Except for the stock option award to Mr. Moffitt in connection with his entry into a new employment agreement with the Company on December 28, 2011, the Company did not grant any stock options to any other named executive officers in 2011. On February 14, 2012, the Compensation Committee awarded stock option grants to Messrs. Moody, Gibbons, McGarrity and Patno covering 250,000, 60,000, 250,000 and 250,000 shares, respectively. These stock option awards were issued in the ordinary course as general incentive compensation awards.

Restricted Stock Awards

We may grant restricted stock awards from time to time to provide our executive officers with restricted shares of our common stock. The shares of restricted stock may have a vesting period and may be subject to mandatory repurchase by us in connection with termination of employment. In 2011, the Company did not grant any restricted stock awards to any of the named executive officers.

Other Compensation

All of our executive officers are eligible for benefits offered to employees generally, including life, health, disability and dental insurance and participation in our 401(k) plan. We intend to continue to maintain our current benefits for our executive officers. The Compensation Committee in its discretion may revise, amend or add to the officer's executive benefits and perquisites if it deems it advisable. We do not believe it is necessary for the attraction or retention of management talent to provide executive officers with a substantial amount of compensation in the form of perquisites. In 2011, no such perquisites were provided.

Post-Employment Severance and Change in Control Benefits

Chief Executive Officer

On July 19, 2004, we entered into an employment agreement with Mr. Moffitt which expired on December 31, 2008. As of January 1, 2009, we entered into a new employment agreement with Mr. Moffitt which expired on December 31, 2011. On December 28, 2011, we entered into a new employment agreement with Mr. Moffitt which expires on December 31, 2012.

Mr. Moffitt's current employment agreement provides for severance pay should Mr. Moffitt incur a loss of employment or a significant change in employment during the term of the agreement. Under the terms of his employment agreement, Mr. Moffitt will have the right to receive a transaction bonus (the "Transaction Bonus") in an amount equal to 1% of the net proceeds of any transaction constituting a Change in Control (a "Change in Control") of the Company, which occurs during the term of his employment agreement or within six months thereafter, provided that no such payments may be made more than five years after the date of the Change in Control. A Change in Control means (i) the purchase or other acquisition by any person, entity or group of persons, within the meaning of Section 13(d) or 14(d) of the Securities Exchange Act of 1934 or any comparable successor provisions (other than stockholders (or affiliates thereof) of the Company as of July 19, 2004), of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of either the outstanding shares of common stock of the Company (on a fully-diluted basis) or the combined voting power of the Company's then outstanding voting securities entitled to vote generally in the election of directors of the Company; (ii) the consummation of a reorganization, merger or consolidation of the Company, in each case, with respect to which persons who were stockholders of the Company immediately prior to such reorganization, merger or consolidation do not, immediately thereafter, own more than 50% of the combined voting power entitled to vote generally in the election of directors of the reorganized, merged or consolidated company; or (iii) the sale of all or substantially all of the Company's assets, provided that, in each case, such event is considered either a change in the ownership of the Company, within the meaning of Treas. Reg. § 1.409A-3(i)(5)(v) or a change in the ownership of a substantial portion of the Company's assets, within the meaning of Treas. Reg. § 1.409A-3(i)(5)(vii).

Mr. Moffitt's current employment agreement further provides that if, prior to the expiration of the term, Mr. Moffitt's employment is terminated by the Company without cause or by Mr. Moffitt for good reason, which is defined as a Diminution in Responsibility, or if the employment agreement is not renewed, then in each such case Mr. Moffitt will be entitled, in addition to base salary, the Transaction Bonus, unreimbursed expenses and other entitlements to the date of termination, but not thereafter, to (i) $500,000, payable in installments at the rate of his base salary in effect on the termination date in accordance with the Company's customary payroll practices, and (ii) full and immediate vesting on the date of termination of all outstanding restricted stock awards granted to him on November 25, 2009. A Diminution in Responsibility is defined as any of (a) a material diminution in Mr. Moffitt's duties or responsibilities or the assignment to Mr. Moffitt of duties that are materially inconsistent with his duties as President and Chief Executive Officer of the Company or that materially impair Mr. Moffitt's ability to function in his position; (b) the Company's failure, during the Term, to cause the election of Mr. Moffitt to the Board; (c) a relocation of the Company's principal offices, without Mr. Moffitt's acquiescence or consent, to a location that is more than a 50 mile radius from its current location; (d) any material reduction in the compensation and benefit opportunities of Mr. Moffitt (measured in the aggregate); or (e) any breach by the Company of any material provision of Mr. Moffitt's employment agreement, provided that Mr. Moffitt has given the Company written notice of such breach and the Company has failed to cure such breach within a period that is reasonable under the circumstances.

Mr. Moffitt's employment agreement also provides for an excise tax gross-up payment if payments received by Mr. Moffitt under the Agreement and other payments received under other agreements or employee benefit plans in connection with a Change in Control result in the imposition of a golden parachute excise tax under Section 4999 of the Internal Revenue Code of 1986, as amended.

In the event Mr. Moffitt's employment is terminated due to death or disability during the course of employment, he (or his estate or designated beneficiary) will be entitled to all amounts of base salary, Transaction Bonus and unreimbursed expenses through the date of such death or disability as well as immediate and full vesting, on the date of termination, of all outstanding options and restricted stock awards, in which case the options shall remain exercisable for a period of one year following the date of termination.

Mr. Moody

In the event Mr. Moody is terminated for reasons other than cause, he will be entitled to a lump-sum severance payment equivalent to five months' base salary plus a prorated annual bonus. In the event the company is acquired and his employment is terminated without cause as a result of that acquisition or no job of similar status and compensation is offered to him, Mr. Moody will receive a lump-sum severance payment equivalent to ten months' base salary plus a prorated annual bonus.

Mr. Gibbons

In the event Mr. Gibbons is terminated for reasons other than for cause, he will be entitled to a lump sum severance payment equivalent to five months' base salary plus a prorated annual bonus.

Mr. McGarrity

In the event Mr. McGarrity is terminated for reasons other than for cause, he will be entitled to a lump sum severance payment equivalent to six months' base salary plus a prorated annual bonus.

Mr. Patno

Mr. Patno does not have any special severance arrangements. Accordingly, based on our standard policy, upon a termination for cause, without cause, in connection with a change in control or any other reason, Mr. Patno shall receive his accrued salary, earned bonus, unreimbursed expenses and other entitlements to the date of termination, unless we decide at that time to provide additional severance compensation or benefits.

The post-employment severance benefits for our executive officers are quantified in the "Estimate of Post-Employment Payments" table.

Accounting and Tax Considerations

Effective January 1, 2005, we adopted, on a prospective basis, the fair value provisions of SFAS 123(R), "Share-Based Payment," or SFAS 123(R). Under SFAS 123(R), the estimated fair value of options granted, net of forfeitures expected to occur during the vesting period is amortized as compensation expense on a straight line basis over the vesting period of the options.

We generally intend for our executive compensation program to comply with Section 162(m) of the Code, as well as Code Section 409A. The Compensation Committee intends for all compensation paid to the named executive officers to be tax deductible to us pursuant to Section 162(m) of the Code. Under Section 162(m) of the Code, compensation paid to the named executive officers in excess of $1,000,000 cannot be deducted by us for federal income tax purposes, unless such amounts satisfy the performance-based exception to the deduction disallowance.

Section 409A of the Code addresses certain non-qualified deferred compensation benefits payable to our executives and provides that if such benefits do not comply with Section 409A, they will be taxable in the first year they are not subject to a substantial risk of forfeiture. In such case, our executives would be subject to regular federal income tax, interest and an additional federal income tax of 20% of the benefit includible in income. We have generally designed our executive compensation plans and agreements in a manner that complies with Section 409A.

We have granted stock options as incentive stock options in accordance with Section 422 of the Code subject to the volume limitations contained in the Code. Generally, the exercise of an incentive stock option does not trigger any recognition of income or gain to the holder. If the stock is held until at least one year after the date of exercise (or two years from the date the option is granted, whichever is later), all of the gain on the sale of the stock, when recognized for income tax purposes will be capital gain, rather than ordinary income to the recipient. Consequently, we do not receive a tax deduction. For stock options that do not qualify as incentive stock options, we are entitled to a tax deduction in the year in which the stock options are exercised equal to the spread between the exercise price and the fair market value of the stock for which the stock option was exercised. The holders of the non-qualified stock options are generally taxed on this same amount in the year of exercise.

SUMMARY COMPENSATION TABLE

The following summary compensation table sets forth certain information with respect to compensation for the years ended December 31, 2009, 2010 and 2011 earned by or paid to our Chief Executive Officer, Chief Financial Officer and our three other most highly compensated executive officers, who are referred to as the named executive officers.

Name and Principal Position	Fiscal Year	Salary $	Bonus $	Stock Awards $	Option Awards $ (2)	Non-equity Incentive Plan Compensation $ (3)	Total $
William P. Moffitt, III President and Chief Executive Officer (1)	2011	$457,885	-----	-----	$428,061	-----	885,946
	2010	$440,274	-----	-----	-----	$132,082	$572,356
	2009	$427,450	-----	$757,500	$620,357	$192,353	$1,997,660
J. Roger Moody, Jr., Chief Financial Officer	2011	$303,966	-----	-----	-----	-----	$303,966
	2010	$292,275	-----	-----	-----	$51,148	$343,423
	2009	$283,762	-----	$681,750	$558,322	$74,488	$1,598,322
Winton G. Gibbons., Senior Vice President, Business Development	2011	$284,109	-----	-----	-----	-----	$284,109
	2010	$273,182	-----	-----	-----	$47,807	$320,989
	2009	$265,225	-----	$378,750	$310,179	$69,622	$1,023,776
Michael K. McGarrity, Chief Commercial Officer	2011	$298,453	-----	-----	-----	-----	$298,453
	2010	$286,974	-----	-----	-----	$50,220	$337,194
	2009	$278,615	-----	$545,400	$446,657	$73,136	$1,343,808
Timothy J. Patno, Chief Technology Officer	2011	$278,100	-----	-----	-----	-----	$278,100
	2010	$247,200	-----	-----	-----	$43,260	$290,460
	2009	$196,137	-----	$606,000	$816,394	$54,000	$1,672,531

(1) Mr. Moffitt also served as a director. A director who is an employee does not receive payment for service as a director.

(2) The fair values of our option awards reflect their fair value upon grant date from 2009 and 2011 using the Black-Scholes option pricing model with the following assumptions:

	2009	2011
Expected dividend yield	0%	0%
Expected volatility	97%	89%
Risk free interest rate	2.42	2.42
Weighted average expected option life	6.1 years	5.0 years
Estimated weighted average fair value on the date of grant based on the above assumptions	$4.59	$0.95
Estimated forfeiture rate for unvested options	4.4%	0.0%

Expected volatility is based on calculated stock volatilities for publicly traded companies in the same industry and general stage of development as us for 2009 and 2011. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of the grants for periods consistent with the expected

life of the option. The expected life of options granted is derived from the average of the vesting period and the term of the option as defined in the respective incentive plans, following the guidance in SEC Staff Accounting Bulletin No. 107, *Share-Based Payment.*

(3) Amounts shown in the "Non-Equity Incentive Plan Compensation" column reflect the annual incentive award granted and earned during the fiscal year listed on the corresponding row on the table. 2010 and 2009 amounts were paid in cash. These annual awards are described in further detail under "Compensation Discussion and Analysis for Named Executive Officers — Annual Cash Incentive Compensation" and are also reflected in the table "Grants of Plan-Based Awards" under the column "Estimated Future Payouts Under Non-Equity Incentive Plan Awards."

Grants of Plan-Based Awards

Pursuant to our management incentive bonus program we did not grant cash awards and granted one equity award during Fiscal Year 2011.

The following table shows information with respect to awards granted to the named executive officers during the Fiscal Year 2011 under the management incentive bonus plan.

Estimated Future Payouts Under Non-Equity Incentive Plan Awards:

Name	Estimated Future Payouts Under Non-Equity Incentive Plan Awards Target (1)
William P. Moffitt, III	$274,731
J. Roger Moody, Jr.	$106,388
Winton G. Gibbons	$99,438
Michael K. McGarrity	$104,458
Timothy J. Patno	$97,335

(1) Amounts shown in the "Estimated Future Payouts Under Non-Equity Incentive Plan Awards Target" column reflect the cash incentive awards payable under the management incentive bonus plan to the named executive officers, provided the executive officer achieves certain performance-based milestones.

The non-equity incentive plan compensation varies between the targets reported on the "Grants of Plan-Based Awards" table and the "Summary Compensation" table. The compensation committee established the management incentive bonus program, in which the compensation committee establishes performance targets for the named executive officers for the year, the results of which are substantially uncertain at the time they are established. The performance targets generally relate to product launches, development of additional products, the identification and pursuit of strategic partnerships, adherence to operating budgets and submission of FDA applications. For our chief executive officer, the compensation committee retains the right to modify performance targets or apply greater emphasis to some targets over others, in order to more closely align the chief executive officer's performance with the operation and strategic priorities of the Company, which can change from year to year and even during the course of any given year. At the end of the every fiscal year, the compensation

committee assesses the achievement of the performance targets and reports its findings and bonus recommendations to the board of directors. In its sole discretion, the board of directors may accept or reject, in whole or in part, the bonus recommendations of the compensation committee. For 2011, the board of directors reviewed and accepted the compensation committee's bonus recommendation with respect to Mr. Moffitt.

Outstanding Equity Awards at December 31, 2011

The following table sets forth certain information with respect to outstanding stock option and warrant awards of the named executive officers for the fiscal year ended December 31, 2011.

	Option/Warrant Awards				Stock Awards	
Name	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable	Option Exercise Price	Option Expiration Date (1)	Equity Incentive Plan Awards; Number of Unearned Shares That Have Not Vested	Equity Incentive Plan Awards; Market Value of Unearned Shares That Have Not Vested
William P. Moffitt, III	300,000(2)	-- (2)	$4.50	04/03/2017		
	75,000(3)	225,000(3)	$4.50	04/03/2017		
	75,000(2)	25,000(2)	$12.05	01/25/2018		
	7,250(2)	21,750(2)	$4.50	02/24/2019		
	25,000(3)	100,000(3)	$6.06	11/25/2019		
	450,000(4)	--(4)	$1.38	12/28/2021		
					62,500(5)	$91,875
J. Roger Moody, Jr.	90,000(2)	-- (2)	$4.50	05/16/2017		
	22,500(3)	67,500(3)	$4.50	05/16/2017		
	10,000(2)	-- (2)	$4.50	08/03/2017		
	2,500(3)	7,500(3)	$4.50	08/03/2017		
	5,500(2)	5,5000(2)	$4.50	02/10/2019		
	22,500(3)	90,000(3)	$6.06	11/25/2019		
					56,250(5)	$82,688
Winton G. Gibbons	100,000(2)	-- (2)	$4.50	05/31/2017		
	25,000(3)	75,000(3)	$4.50	05/31/2017		
	5,500(2)	5,500(2)	$4.50	02/10/2019		
	12,500(3)	50,000(3)	$6.06	11/25/2019		
					31,250(5)	$45,938
Michael K. McGarrity	20,000(2)	--(2)	$4.50	9/29/2015		
	12,000(3)	18,000(3)	$4.50	9/29/2015		
	12,000(3)	18,000(3)	$4.50	3/14/2016		
	92,000(2)	-- (2)	$4.50	04/03/2017		
	23,000(3)	69,000(3)	$4.50	04/03/2017		
	5,500(2)	5,500(2)	$4.50	02/10/2019		
	18,000(3)	72,000(3)	$6.06	11/25/2019		
					45,000(5)	$66,150
Timothy J. Patno	600(2)	--(2)	$36.75	1/1/2012		
	2,800(2)	--(2)	$7.50	1/15/2013		
	2,000(2)	--(2)	$7.50	1/5/2014		
	7,040(3)	10,560(3)	$4.50	5/12/2015		
	12,000(2)	-- (2)	$4.50	04/03/2017		
	3,000(3)	9,000(3)	$4.50	04/03/2017		
	30,000(2)	10,000(2)	$12.05	01/25/2018		
	1,400(2)	1,400(2)	$4.50	02/10/2019		
	7,500(2)	7,500(2)	$8.16	09/16/2019		
	12,500(2)	12,500(2)	$6.06	11/25/2019		
	25,000(3)	100,000(3)	$6.06	11/25/2019		
					50,000(5)	$73,500

(1) The expiration date of each incentive stock option occurs ten years after the date of grant.

(2) The incentive stock options vest in 25% increments beginning on the first anniversary of the date of grant and on each anniversary thereafter, and are subject to accelerated vesting under certain circumstances relating to corporate performance and events.

(3) The incentive stock options cliff vest on the seventh anniversary of the date of grant. Upon our achievement of certain performance-based milestones, vesting may be accelerated. See "Compensation Discussion and Analysis for Named Executive Officers — Stock Options" for details regarding the milestones.

(4) The incentive stock option vested immediately upon grant; provided, however, that Mr. Moffitt may not sell any shares acquired upon the exercise of the option until the earlier of the second anniversary of the grant date or the first anniversary of the date of termination of Mr. Moffitt's employment.

(5) The restricted stock grants vest in 50% increments bi-annually beginning on the second anniversary of the grant date.

Equity Compensation Plan Information

The following table provides information as of December 31, 2011 with respect to shares of Nanosphere common stock that may be issued under the 2007 Plan, which is the Company's only existing equity compensation plan under which grants can be made. Stockholders approved Nanosphere's 2007 Plan on March 27, 2007.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding awards (a)	Weighted Average exercise price of outstanding awards (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column(a)) (c)
Equity compensation plans approved by stockholders[1]	4,663,760	$5.09	1,725,806
Equity compensation plans not approved by stockholders	---	---	---
Total	4,663,760	$5.09	1,725,806

(1) This category consists solely of options.

Arrangements with Named Executive Officers

Mr. William P. Moffitt, III. We entered into an employment agreement dated July 19, 2004 with Mr. Moffitt (the "Initial Employment Agreement"), in connection with his employment as our President and Chief Executive Officer. The employment agreement provided an initial base salary of $350,000 per year, which was to be reviewed annually and could be increased, but not decreased below $350,000, by our board of directors. The agreement also provided Mr. Moffitt with a target bonus opportunity subject to the achievement of agreed goals and milestones, that for calendar years ended after 2005, could not be less than $150,000. In 2009, Mr. Moffitt's annual rate of salary was increased to $427,450 and the target amount of his performance bonus opportunity was set at $256,470.

Effective January 1, 2009, we entered into a new employment agreement with Mr. Moffitt for a term of three years. The terms of the new employment agreement are substantially the same as the terms in the Initial Employment Agreement with the exception of Mr. Moffitt's salary and bonus amounts which have been adjusted by the

board of directors to the amounts listed above under the heading "Compensation Discussion & Analysis - Annual Cash Compensation - Base Salary."

Effective December 28, 2011, we entered into a new employment agreement with Mr. Moffitt for a term of one year. The terms of the new employment agreement are substantially the same as the terms in the Initial Employment Agreement with the exception of Mr. Moffitt's salary and bonus amounts which have been adjusted by the board of directors to the amounts listed above under the heading "Compensation Discussion & Analysis - Annual Cash Compensation - Annual Incentive Compensation."

Mr. Moffitt's current employment agreement also provided for an award of options to purchase 450,000 shares of the Company's common stock to be issued to Mr. Moffitt under the Company's 2007 Long-Term Incentive Plan (the "Stock Options"). The Stock Options were fully vested upon issuance and have an exercise price per share of $1.38, which is the fair market value of the Company's common stock on the Effective Date. Any shares acquired by Mr. Moffitt upon exercise of these stock options may not be sold until the earlier of the second anniversary of the Effective Date, which is December 28, 2013, or the first anniversary of the date of termination of Mr. Moffitt's employment.

For a discussion of Mr. Moffitt's rights and severance benefits under his current employment agreement in the event of a termination or change in control of the Company, see "Compensation Discussion & Analysis - Post-Employment Severance and Change in Control Benefits."

J. Roger Moody, Jr. We entered into an employment agreement dated April 23, 2007 with Mr. Moody, in connection with his employment as our Chief Financial Officer. The employment agreement provides an initial base salary of $235,000 per year, or such greater amount as our board of directors may from time to time establish. The agreement also provides Mr. Moody with a performance bonus opportunity of $90,000 per year. In the event we terminate Mr. Moody's employment for reasons other than cause, Mr. Moody will be entitled to a severance payment equal to five months' base salary plus a prorated calculation of his annual bonus. In the event we are acquired and Mr. Moody is terminated without cause as a result of that acquisition or no job of similar status and compensation is offered to him, Mr. Moody will be entitled to a severance payment equal to ten months' base salary plus a prorated calculation of his annual bonus.

Winton G. Gibbons. We entered into an employment agreement dated June 18, 2007 with Mr. Gibbons, in connection with his employment as our Senior Vice President, Business Development. The employment agreement provides an initial base salary of $250,000 per year, or such greater amount as our board of directors may from time to time establish. The agreement also provides Mr. Gibbons with an initial performance bonus opportunity of $45,000 per year. In the event we terminate Mr. Gibbons' employment for reasons other than cause, Mr. Gibbons will be entitled to a severance payment equal to five months' base salary plus a prorated calculation of his annual bonus.

Michael K. McGarrity. We entered into an employment agreement dated September 8, 2005 with Mr. McGarrity, in connection with his employment as our Chief Marketing Officer. The employment agreement provides an initial base salary of $235,000 per year, or such greater amount as our board of directors may from time to time establish. The agreement also provides Mr. McGarrity with a performance bonus opportunity of $90,000 per year. In the event we terminate Mr. McGarrity's employment for reasons other than cause, Mr. McGarrity will be entitled to a severance payment equal to six months' base salary plus a prorated calculation of his annual bonus.

Timothy J. Patno. We entered into an employment agreement dated March 19, 2001 with Mr. Patno, in connection with his employment as a Systems Engineer. The employment agreement provides an initial base salary of $110,000 per year, or such greater amount as our board of directors may from time to time establish. Mr. Patno's employment agreement establishes an at-will employee relationship and does not provide for any severance arrangements. Accordingly, upon a termination for cause, without cause, change in control or any other reason, Mr. Patno shall receive his accrued salary, earned bonus, unreimbursed expenses and other entitlements to the date of termination, unless we decide at that time to provide additional severance payments. We have not entered into a new employment agreement with Mr. Patno in connection with his current position as Chief Technology Officer.

Each of our executive officers has entered into our standard employment agreement, some of which contain severance benefit provisions on which the table below is based, and which further include customary provisions relating to the handling of proprietary and confidential information, as well as restrictions on competition and solicitation during the period of employment and for one year after termination.

Estimate of Post-Employment Payments

(Assumes a December 31, 2011 Employment Termination Event.)

The following table sets forth the additional amounts that could have been realized by each named executive officer if termination of his employment were to occur as of December 31, 2011 under the following circumstances.

Name and Termination Event	Cash Value of Severance Benefits (1)	Excise Tax and Gross-Up	Total Termination Benefits
William P. Moffitt, III			
Without cause, good reason, or non-renewal of agreement by us	$ 500,000(2)	$ --	$ 500,000
Disability	$ --(3)	$ --	$ --
Death	$ --(3)	$ --	$ --
Involuntary or good reason after change in control	$ 500,000(2)	$ --(4)	$ 500,000
J. Roger Moody, Jr.			
Without cause or good reason	$ 233,041(5)	$ --	$ 233,041
Disability	$ --(3)	$ --	$ --
Death	$ --(3)	$ --	$ --
Involuntary or good reason after change in control	$ 359,693(6)	$ --	$ 359,693
Winton G. Gibbons			
Without cause or good reason	$ 217,817(7)	$ --	$ 217,817
Disability	$ --(3)	$ --	$ --

Death	$	--(3)	$	--	$	--				
Involuntary or good reason after change in control	$	217,817(7)	$	--	$	217,817				
Michael K. McGarrity										
Without cause or good reason	$	253,685(8)	$	--	$	253,685				
Disability	$	--(3)	$	--	$	--				
Death	$	--(3)	$	--	$	--				
Involuntary or good reason after change in control	$	253,685(8)	$	--	$	253,685				
Timothy J. Patno										
Without cause or good reason	$	--	$	--	$	--				
Disability	$	--	$	--	$	--				
Death	$	--	$	--	$	--				
Involuntary or good reason after change in control	$	--	$	--	$	--				

(1) Accrued salary, unreimbursed expenses and other entitlements to the date of termination, including continuation of life, health, disability and dental insurance (collectively, the "Entitlements").

(2) $500,000, payable in installments at the rate of his base salary in effect on the termination date in accordance with the Company's customary payroll practices, plus entitlements.

(3) Entitlements.

(4) No excise tax gross-up payment would be required because the total amount is less than the federal limit.

(5) Five months' salary ($126,653), plus a prorated calculation of annual bonus ($106,388), plus Entitlements.

(6) Ten months' salary ($253,305), plus a prorated calculation of annual bonus ($106,388), plus Entitlements.

(7) Five months' salary ($118,379), plus a prorated calculation of annual bonus ($99,438), plus Entitlements.

(8) Six months' salary ($149,226), plus a prorated calculation of annual bonus ($104,458), plus Entitlements.

Non-Employee Director Compensation Table

During Fiscal Year 2011, four directors earned cash fees for their services on the board of directors. The other directors did not receive any cash fees for their services on the board of directors, but were entitled to reimbursement of all reasonable out-of-pocket expenses incurred in connection with their attendance at board of directors and board committee meetings. Our non-employee directors were eligible to receive stock options under the 2007 Plan.

Name and Principal Position	Year	Fees Earned or Paid	Stock Awards	Option Awards (2)	Non-Equity Incentive Plan Compensation	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
Chad A. Mirkin, Ph.D.	2011	$40,000	----	$ 60,001	----	---	$ 59,996(1)	$159,997
André de Bruin	2011	$ 55,000	----	$ 60,001	----	---	---	$115,001
Lorin J. Randall	2011	$ 55,000	---	$ 60,001	----	---	---	$115,001
Sheli Z. Rosenberg	2011	$ 57,500	---	$ 60,001	----	---	---	$117,501
Mark Slezak	2011	---	---	---	---	---	---	---
Jeffrey R. Crisan	2011	---	---	---	---	---	---	---

(1) Dr. Mirkin received fees in his capacity as a consultant. See "Transactions With Related Persons, Promoters and Certain Control Persons."

(2) The fair value for awards is calculated for option awards, by using the Black-Scholes option pricing model. This value does not reflect estimated forfeitures or awards actually forfeited during the year. The actual value, if any, that will be realized upon the exercise of an option will depend upon the difference between the exercise price of the option and the market price of the common stock on the date the option is exercised.

On June 1, 2011, the board of directors granted options to four of the directors. Mr. de Bruin, Dr. Mirkin, Mr. Randall and Ms. Rosenberg each received options to purchase 39,060 shares of common stock at the price of $4.50 per share, a price the board of directors determined to be the fair market value of the shares on the date of grant, and vest monthly over a three years.

During 2008, the compensation committee recommended and the board of directors approved a director compensation plan. The director compensation plan applies to independent directors; however, Mr. Slezak and Mr. Crisan waived their eligibility to participate in the director compensation plan for Fiscal Year 2011. The director compensation plan generally compensates directors for their service as a member of the board of directors through an annual cash award of $40,000, payable quarterly in arrears, and the grants to each such director of options to purchase shares of common stock having an approximate Black-Scholes value of $60,000, which vest monthly over three years. In addition, each director receives a cash award of $7,500 for each year of service on the compensation committee and audit committee and a cash award of $5,000 for each year of service on the corporate governance and nominating committee. Committee chairs receive different cash rewards for each year of service in such capacity, as follows: The audit committee chair receives a cash award of $15,000 for each year of service; the compensation committee chair receives a cash award of $12,500 for each year of service, which was waived for Fiscal Year 2011 by Mr. Slezak; and the corporate governance and nominating committee chair receives $10,000 for each year of service. Additionally, directors are reimbursed for out-of-pocket expenses incurred in connection with their service as directors.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors, executive officers and 10% stockholders of a registered class of equity securities to file reports of ownership and reports of changes in ownership of our Common Stock and other equity securities with the SEC. Directors, executive officers and 10% stockholders are required to furnish us with copies of all Section 16(a) forms they file. Based on a review of the copies of such reports furnished to us, we believe that during the fiscal year ended December 31, 2011, our directors, executive officers and 10% stockholders timely filed all Section 16(a) reports applicable to them.

Report of the Compensation Committee

The material in this report is not "solicitation material," is not deemed filed with the Securities and Exchange Commission, and is not incorporated by reference in any filing of the company under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any filing.

Our Compensation Committee is responsible for reviewing and approving corporate goals and objectives relevant to the compensation of our chief executive officer, evaluating the chief executive officer's performance in light of those goals and objectives and, determining and approving the chief executive officer's compensation level based on this evaluation. Our Compensation Committee is also responsible for reviewing and approving the salaries and other compensation of our other executive officers. Each member of our Compensation Committee is independent under the NASDAQ Global Market listing requirements. The Compensation Committee's function is more fully described in its charter which has been approved by our board of directors. Our Compensation Committee's charter can be found on our website at http://www.nanosphere.us in the "Investor Relations/Media" section under the heading "Corporate Governance." Any amendments to this charter will be posted to the website promptly upon adoption by the Compensation Committee.

Our Compensation Committee has reviewed the Compensation Discussion & Analysis with senior management and, based on that review and their discussions, recommends to the board of directors that it be included in this proxy statement.

Compensation Committee

Mark Slezak (Chair)
Jeffrey R. Crisan
André de Bruin

Compensation Committee Interlocks and Insider Participation

None of the members of the compensation committee has been or is an officer or employee of ours. None of our executive officers serves on the board of directors or compensation committee of a company that has an executive officer that serves on our board or compensation committee. No member of our board is an executive officer of a company in which one of our executive officers serves as a member of the board of directors or compensation committee of that company. Lurie Investment Fund, LLC and Bain Capital Venture Fund 2005, L.P. each directly holds more than 5% of our capital stock. Mr. Slezak, chairman of our board of directors, is an affiliate of Lurie Investment Fund, LLC, Lurie Investments, Inc., AOQ Trust, Alfa-Tech, LLC and Anda-Proquest, LLC. Mr. Crisan, a member of our board of directors and the compensation committee, is an affiliate of Bain Capital Venture Fund 2005, L.P. These ownership interests are described under the captions "Election of Directors - Information about the Nominees" and "Security Ownership of Certain Beneficial Owners, Directors and Management."

Security Ownership of Certain Beneficial Owners, Directors and Management

Unless otherwise indicated, the following table sets forth, as of April 9, 2012, certain information regarding the beneficial ownership (as defined in Rule 13d-3 under the Exchange Act) of our Common Stock based upon the most recent information available to us for (i) each person known by us to own beneficially more than five (5%) percent of our outstanding Common Stock, (ii) each current director and director nominee Mr. White, (iii) each person listed in the "Summary Compensation Table" above and (iv) all executive officers and directors as a group. Except as otherwise indicated, each listed stockholder directly owned his or her shares and had sole voting and investment power. Unless otherwise noted, the address for each person listed below is Nanosphere, Inc., 4088 Commercial Avenue, Northbrook, Illinois 60062.

In computing the number of shares of Common Stock beneficially owned by a person and the percentage ownership of that person, we have deemed outstanding shares of Common Stock subject to options held by that person that are exercisable within 60 days of April 9, 2012. We have not deemed these shares outstanding for the purpose of computing the percentage ownership of any other person.

Name and Address of Beneficial Owner	Number of Shares of Common Stock Beneficially Owned	Percentage of Outstanding Shares of Common Stock
5% Stockholders		
Alfa-Tech LLC (1)	2,902,407	6.59%
Brookside Capital Trading Fund, L.P. and related entities (3)	3,580,180	8.12%
Lurie Investment Fund, LLC (1)(4)	4,006,136	9.09%
Sectoral Asset Management Inc. (5)	2,676,744	6.07%
Directors and Named Executive Officers		
William P. Moffitt, III (6)	1,512,659	3.36%
J. Roger Moody, Jr. (7)	269,100	*
Winton G. Gibbons (8)	177,000	*
Michael K. McGarrity (9)	261,098	*
Timothy J. Patno (10)	174,500	*
Mark Slezak (1)	11,639,871	26.41%
Jeffrey R. Crisan (2)(11)	2,052,006	4.66%
André de Bruin (12)	117,741	*
Chad A. Mirkin, Ph.D. (13)	865,790	1.94%
Lorin J. Randall (14)	88,741	*
Sheli Z. Rosenberg (15)	187,437	*
William T. White III	54,729	*
All executive officers and current directors as a group (11 persons) (16)	17,345,943	37.28%

* Represents less than 1% of the outstanding shares of common stock.

(1) Mark Slezak is (i) a trustee of AOQ Trust, (ii) managing member of Eagle Capital Management, LLC, which is executive managing member of Lurie Investment Fund, LLC and is the managing member of Alfa-Tech, LLC, (iii) investment manager of LFT Partnership, (iv) chief executive officer of Lurie Investments, Inc.; (v) vice president and a director of the Ann and Robert H. Lurie Foundation; (vi) managing member of WASK Investments, LLC, and (vii) the managing member of Anda-Proquest, LLC. Mr. Slezak may be deemed to indirectly beneficially own shares of the Company's common stock that are directly beneficially owned by each of AOQ Trust, Eagle Capital Management, LLC, Lurie Investment Fund, LLC, Alfa-Tech, LLC, LFT Partnership, Lurie Investments, Inc., Ann and Robert H. Lurie Foundation, WASK Investments, LLC and Anda-Proquest, LLC and such shares are included in the number of shares owned by Mr. Slezak in the table above. Mr. Slezak disclaims beneficial ownership of the shares held by the foregoing entities, except to the extent of his pecuniary interest therein. The address for each of the foregoing entities is c/o Lurie Investments, Inc., 440 W. Ontario Street, Chicago, Illinois 60654.

(2) Share information is furnished in reliance on the Schedule 13G/A of Bain Capital Venture Fund 2005, L.P. ("Fund 2005") filed with the SEC on February 14, 2012, which represents holdings as of December 31, 2011. Includes (i) 1,791,601 shares of common stock held by Fund 2005, (ii) 254,815 shares of common stock held by BCIP Associates III, LLC ("BCIP III") and (iii) 5,590 shares of common stock held by BCIP Associates III-B, LLC ("BCIP III-B"). Jeffrey Crisan, a current director of the Company, and James Nahirny, a former director of the Company, are managing directors of Bain Capital Venture Investors, LLC ("BCVI") which is the general partner of Bain Capital Venture Partners 2005, L.P. which is the general partner of Fund 2005. Bain Capital Investors, LLC is the managing partner of each of BCIP Associates III and BCIP Associates III-B, which are the managers and sole members of BCIP III and BCIP III-B, respectively. BCVI is the attorney-in-fact for Bain Capital Investors, LLC. By virtue of the relationships described above, Mr. Crisan and Mr. Nahirny may be deemed to have beneficial ownership of shares held by Fund 2005, BCIP III and BCIP III-B, and they each disclaim beneficial ownership of all such shares except to the extent of their pecuniary interest therein. The address of Fund 2005, BCIP III, BCIP III-B and BCVI is c/o Bain Capital, LLC, 111 Huntington Avenue, Boston, MA 02199.

(3) Share information is furnished in reliance on the Schedule 13D/A of Brookside Capital Partners Fund, L.P. filed with the SEC on March 6, 2012, which represents holdings as of July 28, 2011 and includes (i) 3,580,180 shares of common stock held by Brookside Capital Partners Fund, L.P. (the "Brookside Fund"). Brookside Capital Management, LLC ("Brookside Management") is the sole general partner of Brookside Capital Investors, L.P., which is the sole general partner of the Brookside Fund. In addition, Brookside Management is the sole general partner of Brookside Capital Investors II, L.P. which is the sole general partner of the Trading Fund. Mr. Domenic J. Ferrante is the sole managing member of Brookside Management and as a result may be deemed to have beneficial ownership of shares held by the Brookside Fund and the Trading Fund and Mr. Ferrante disclaims beneficial ownership of all such shares except to the extent of his pecuniary interest therein.

(4) Eagle Capital Management, LLC, as the executive managing member of Lurie Investment Fund, LLC, may be deemed to share the beneficial ownership of the shares and warrants held by Lurie Investment Fund, LLC with Mr. Slezak who is the managing member of Eagle Capital Management, LLC. Slezak disclaims beneficial ownership of the shares held by that entity, except to the extent of his pecuniary interest therein.

(5) Share information is furnished in reliance on the Schedule 13G/A of Sectoral Asset Management Inc. ("Sectoral") filed with the SEC on February 14, 2012, which represents holdings as of December 31, 2011 and includes shares held by New Emerging Medical Opportunities Fund LP, a Cayman Island exempt LP. Jérôme G. Pfund and Michael L. Sjöström, together, hold majority of shares of Sectoral and may be deemed to have beneficial ownership of the shares held by Sectoral. Sectoral and Messrs. Pfund and Sjöström disclaim beneficial ownership of the Company's common stock held by Sectoral Asset Management Inc. The address of Sectoral's principal office is 2120-1000 Sherbrooke St. West Montreal PQ H3A 3G4 Canada.

(6) Includes options to purchase 971,750 shares of common stock that are exercisable within 60 days

(7) Includes options to purchase 155,750 shares of common stock that are exercisable within 60 days.

(8) Includes options to purchase 145,750 shares of common stock that are exercisable within 60 days.

(9) Includes options to purchase 185,250 shares of common stock that are exercisable within 60 days.

(10) Includes options to purchase 124,500 shares of common stock that are exercisable within 60 days.

(11) Mr. Crisan is a general partner of BCIP Associates III-B which is the manager and sole member of BCIP Associates III-B, LLC. Mr. Crisan may be deemed to have beneficial ownership of shares held by BCIP Associates III-B, LLC. Mr. Crisan disclaims beneficial ownership of all such shares except to the extent of his pecuniary interest therein.

(12) Includes options to purchase 117,741 shares of common stock that are exercisable within 60 days.

(13) Includes options to purchase 593,020 shares of common stock that are exercisable within 60 days.

(14) Includes options to purchase 88,741 shares of common stock that are exercisable within 60 days.

(15) Includes options to purchase 82,075 shares of common stock that are exercisable within 60 days.

(16) Includes options to purchase 2,464,577 shares of common stock exercisable within 60 days.

Transactions With Related Persons, Promoters and Certain Control Persons

Northwestern License Agreement

We entered into a license agreement with Northwestern University dated May 10, 2000, or the Original License Agreement, pursuant to which we received an exclusive license to all technology developed in the laboratories of Dr. Chad A. Mirkin or Dr. Robert Letsinger of Northwestern University, to the extent that such technology relates to biological diagnostics involving nanoparticles. Dr. Mirkin has been a member of our board of directors since 2000.

We entered into a new license agreement with Northwestern University dated January 1, 2006, or the New License Agreement, which supersedes the Original License Agreement. Under the New License Agreement, we have an exclusive license to certain patents and patent applications owned by Northwestern that are related to (1) nanotechnology, which technology involves a particle where no single dimension is greater than 100 nanometers, or Nanotechnology, and (2) biobarcode technology, which is analysis where oligonucleotides act as surrogate targets or reporter molecules, or Biobarcode Technology. The license is limited to the "Biodiagnostics Field" defined as qualitative or quantitative in vitro analysis, testing, measurement, or detection of various biodiagnostics field subjects and target combinations.

The New License Agreement includes licenses to patents and patent applications based on existing inventions and future inventions developed in the laboratory of Dr. Mirkin or Dr. Letsinger, by or under their direct supervision, and conceived prior to January 1, 2013 that are Nanotechnology or Biobarcode Technology referred to herein as Licensed Patents. We have an obligation to use commercially reasonable efforts to bring the subject inventions of the Licensed Patents to market. If the parties disagree as to whether we are meeting this diligence requirement, an arbitrator may require us to comply with a timeline for cure or convert our exclusive license to a non-exclusive

license; Northwestern does not have the right to revoke any license to the Licensed Patents already granted to us.

We also have the first right to negotiate an exclusive license to inventions developed in the laboratory of Dr. Mirkin or Dr. Letsinger, by or under their direct supervision, and (1) conceived after January 1, 2013 that are Nanotechnology or Biobarcode Technology and (2) that are not Nanotechnology or Biobarcode Technology, but otherwise within the Biodiagnostics Field, conceived prior to January 1, 2013. Both (1) and (2) are herein referred to as Future Inventions. If the parties cannot agree on the terms of the license for the Future Inventions, the parties shall submit to arbitration to determine reasonable terms. For inventions conceived after January 1, 2013 that are not Nanotechnology or Biobarcode Technology, but otherwise within the Biodiagnostics Field, we have the right to negotiate a license if Northwestern offers such inventions to third parties. If we have a license based on Future Inventions, Northwestern has the right to terminate the license upon any material breach that we do not cure or upon our bankruptcy.

We have an obligation to pay Northwestern a royalty at a rate that is a percentage of the gross profits of licensed products, subject to certain adjustments. We paid Northwestern $2,455, $4,739 and $5,974 for the years ended December 31, 2009, 2010 and 2011 respectively, in connection with the New License Agreement.

We have entered into various research subcontracting agreements with Northwestern, pursuant to which we collaborate with it on focused research projects. We have received $29,151, $960 and $13,650 for the years ended December 31, 2009, 2010 and 2011 from Northwestern in connection with these agreements and products sales.

Mirkin Consulting Agreement

We entered into a Consulting and Non-Competition Agreement with Dr. Mirkin dated as of October 31, 2002, as amended as of February 23, 2004. Pursuant to the terms of this agreement, we have engaged Dr. Mirkin (1) to provide scientific advice and counsel to us with regard to our technology, (2) to represent and promote us and our technology at scientific meetings and other public forums, (3) to participate, either individually or with one of our representatives, at meetings and presentations on our behalf, and (4) to participate in capital-raising activities on our behalf. The term of the agreement extends through October 31, 2012 and is automatically renewed for successive one year periods unless either party gives the other party 60 days' prior written notice of non-renewal. We pay Dr. Mirkin $100,000 per annum as compensation for his services, including $40,000 per annum that is deemed to be his cash fee for service on the board as a non-employee director. We paid Dr. Mirkin $99,996 in each of the years ended December 31, 2009, 2010, and 2011. If the consulting agreement is terminated for any reason before October 31, 2012, Dr. Mirkin shall continue to provide patent prosecution support and similar services as we shall reasonably request or as shall be required under any other agreement directly or indirectly applicable to Dr. Mirkin and as compensation therefore, Dr. Mirkin shall be paid at such hourly market rate as we and Dr. Mirkin shall agree to in good faith and absent such agreement, at the rate of $300.00 per hour. The

consulting agreement may be terminated by mutual agreement of the parties. Dr. Mirkin has also agreed not to engage in a competing business in the continental United States during the term of the consulting agreement and for a period of two years after termination for any reason.

Registration Rights

Pursuant to an agreement between us and certain of our stockholders, we have granted the following demand registration rights to Mr. Mark Slezak and Ms. Sheli Rosenberg, who are members of our board of directors, AOQ Trust, Alfa-Tech, LLC, Lurie Investment Fund, LLC, Lurie Investments, Inc. and their respective affiliates, and Bain Capital Venture Fund 2005, L.P., Brookside Capital Partners Fund, L.P., and their respective affiliates and other stockholders. Mr. William P. Moffitt, III, our chief executive officer and a member of our board of directors, and Dr. Chad Mirkin, a member of our board of directors, are parties to the this agreement, but do not have the right to demand registration. At any time after the earlier to occur of (1) 120 days after the closing of our initial public offering, which occurred on November 6, 2007, or (2) April 1, 2010:

- *Long-Form Registrations.* Stockholders holding at least 20% of the then outstanding shares of our common stock that are subject to the registration rights agreement, which we refer to as registrable securities, have the right to demand that we file a registration statement under the Securities Act on Form S-1 or any similar long-form registration covering their registrable securities. However, we are not obligated to file a long-form registration statement on more than three occasions upon the request of our stockholders.

- *Short-Form Registrations.* Stockholders holding at least 10% of the then outstanding registrable securities have the right to demand that we file a registration statement on Form S-3 or any similar short-form registration covering their registrable securities, provided that such short-form registration is then available to us under applicable law. Such stockholders are entitled to request an unlimited number of short-form registrations.

If our board of directors believes in its reasonable good faith that any demand registration would require premature disclosure of a proposal or plan that we intend to undertake, and such disclosure would have a material adverse effect on us, then we may delay the registration once in any twelve month period for up to 90 days. Moreover, if the demand registration is an underwritten offering, we may reduce the number of shares of our registrable securities to be registered upon the advice of the underwriters that such offering exceeds the number of securities that can be sold in an orderly manner within an acceptable price range. If shares of our stock requested to be included in a registration must be excluded pursuant to the underwriters' advice, we will generally register a pro rata portion of the shares requested to be registered.

Under the piggyback registration provisions, if we propose to register any securities under the Securities Act, other than pursuant to a demand registration, and the registration form to be used may be used for the registration of registrable securities, stockholders holding such registrable securities have the right to include their shares in the registration statement. However, if the registration is an underwritten offering, we may reduce the number of shares to be registered under the piggyback registration provisions upon the advice of the underwriters that such offering exceeds the number of securities that can be sold in an orderly manner within an acceptable price range. If shares of our stock requested to be included in a registration must be excluded pursuant to the underwriters' advice, we will generally register a pro rata portion of the shares requested to be registered under the piggyback registration provisions. The piggyback registration rights granted under the registration rights agreement have no expiration date. All of these piggyback registration rights have been waived in connection with the filing of the registration statement of which this prospectus is a part.

Expenses of Registration. We will generally pay all registration expenses in connection with the demand and piggyback registrations described above, including all registration and filing fees, expenses and fees of compliance with securities laws, and fees and disbursements of all counsel, independent certified public accountants, underwriters (excluding discounts and commissions) and other persons retained by us. We will also pay the reasonable fees and disbursements of one counsel chosen by the selling stockholders in each demand or piggyback registration.

Transferability. The demand and piggyback registration rights described above are generally transferable to any subsequent holder of registrable securities.

PROPOSAL NO. 2

NON-BINDING ADVISORY VOTE ON EXECUTIVE COMPENSATION

The following proposal gives our stockholders the opportunity to vote to approve or not approve, on an advisory basis, the compensation of our named executive officers as disclosed in the "Compensation Discussion and Analysis" section of this proxy statement. This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and our compensation philosophy, policies and practices with respect to our named executive officers. We are providing this vote as required by Section 14A of the Securities Exchange Act of 1934, as amended. Accordingly, we are asking our stockholders to vote "FOR" the adoption of the following resolution:

"RESOLVED, that the stockholders advise that they approve the compensation of the named executive officers of the Company, as disclosed in the "Compensation Discussion and Analysis" and "Executive Compensation" sections of this proxy statement pursuant to the compensation disclosure rules of the Securities and Exchange Commission (which disclosure shall include the Compensation Discussion and Analysis, the compensation tables, and any related material)."

Although the vote is non-binding, the Board of Directors and the Compensation Committee will review the voting results in connection with their ongoing evaluation of the Company's executive compensation program. Broker non-votes (as described under the "*Information about the Annual Meeting*" section beginning on page 2 of this proxy statement) are not entitled to vote on these proposals and will not be counted in evaluating the results of such vote.

THE BOARD UNANIMOUSLY RECOMMENDS THAT YOU VOTE *FOR* ADVISORY APPROVAL OF THE RESOLUTION SET FORTH ABOVE.

PROPOSAL NO. 3

RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Our audit committee has appointed the firm of Deloitte & Touche LLP, an independent registered public accounting firm, to be our independent auditors for the fiscal year ending December 31, 2012 and the board of directors recommends the stockholders vote for ratification of that appointment. Deloitte & Touche LLP served in this capacity for the fiscal year ended December 31, 2011 and has been our independent auditor since 2003.

The audit committee appoints our independent auditors annually and the board of directors subsequently requests ratification of such appointment by the stockholders at the Company's annual meeting. The audit committee reviews and approves in advance the scope of the audit, the types of non-audit services that we will need and the estimated fees for the coming year. The audit committee also reviews and approves any non-audit services provided by our independent auditors to ensure that any such services will not impair the independence of the auditors. To the extent that our management believes that a new service or the expansion of a current service provided by our accountants is necessary, such new or expanded service is presented to the audit committee or one of its members for review and approval.

Before making its selection, the audit committee carefully considered Deloitte & Touche LLP's qualifications as independent auditors, which included a review of Deloitte & Touche LLP's performance in prior years, as well as its reputation for integrity and competence in the fields of accounting and auditing. The audit committee expressed its satisfaction with Deloitte & Touche LLP in these respects.

Stockholder ratification of the audit committee's selection of Deloitte & Touche LLP as the Company's independent auditors is not required by law, the Company's bylaws or otherwise. However, the board of directors is submitting the audit committee's selection of Deloitte & Touche LLP to the stockholders for ratification as a matter of good corporate governance. If the stockholders fail to ratify the selection, the audit committee will reconsider whether or not to retain that firm. Even if the selection is ratified, the audit committee in its discretion may direct the appointment of different independent auditors at any time during the year if it determines that such change would be in the best interests of the Company and its stockholders.

Vote Required for Approval

The affirmative vote of a majority of the shares present in person or represented by proxy at the meeting and entitled to vote is required to approve the ratification of the appointment of Deloitte & Touche LLP as the Company's independent registered public accounting firm.

THE BOARD UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR THE APPROVAL OF THIS PROPOSAL NO. 3

Independent Registered Public Accounting Firm

Deloitte & Touche LLP served as our independent auditors for the fiscal years ended December 31, 2000 through December 31, 2011 and has been selected by the audit committee to continue for the fiscal year ending December 31, 2012. A representative of Deloitte & Touche LLP will be present at the annual meeting, with the opportunity to make a statement should the representative desire to do so, and be available to respond to appropriate questions.

The following table presents the aggregate fees billed for professional services rendered by Deloitte & Touche LLP in fiscal years 2010 and 2011. Other than as set forth below, no professional services were rendered or fees billed by Deloitte & Touche LLP during the years ended December 31, 2010 or 2011.

	Fiscal Year 2011	Fiscal Year 2010
Audit Fees	$318,110	$308,000
Audit-Related Fees	---	---
Tax Fees	---	$45,000
All Other Fees	---	---
Total Fees	$318,110	$353,000

All work performed by Deloitte & Touche LLP as described above has been approved by the audit committee prior to Deloitte & Touche LLP's engagement to perform such service. The audit committee pre-approves on an annual basis the audit, audit-related, tax and other services to be rendered by Deloitte & Touche LLP based on historical information and anticipated requirements for the following fiscal year. To the extent that our management believes that a new service or the expansion of a current service provided by Deloitte & Touche LLP is necessary, such new or expanded service is presented to the audit committee or one of its members for review and approval.

Audit Committee Report

The material in this report is not "solicitation material," is not deemed filed with the Securities and Exchange Commission, and is not incorporated by reference in any filing of the company under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any filing.

The members of the Audit Committee have been appointed by the board of directors. The Audit Committee is governed by a charter, which has been approved and adopted by the board of directors and which will be reviewed and reassessed annually by the Audit Committee. Each member of the Audit Committee is an independent director under applicable Exchange Act rules and regulations.

The Audit Committee assists the board of directors in fulfilling its oversight responsibilities by reviewing (i) the financial reports and other financial information provided by the Company to any governmental body or to the public, (ii) the Company's systems of internal controls regarding finance, accounting, legal compliance and ethics and (iii) the Company's auditing, accounting and financial reporting processes.

In this context, the audit committee hereby reports as follows:

1. We have reviewed and discussed the audited financial statements as of and for the year ended December 31, 2011 with management and the Company's independent registered public accounting firm.

2. The Audit Committee discussed with its independent auditors the matters required to be discussed by Statement on Auditing Standards No. 114 (AICPA, Professional Standards, Vol. 1, AU section 380), as may be modified or supplemented.

3. The Audit Committee has received the written disclosures and the letter from the Company's independent registered public accounting firm required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent registered public accounting firm's communications with the audit committee concerning independence, and has discussed with the Company's independent registered public accounting firm the independent registered public accounting firm's independence from management and the Company; and

4. Based on the review and discussions referred to in paragraphs (1) through (3) above, the Audit Committee recommended to the board of directors (and the board of directors has approved) that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2011, for filing with the SEC.

Respectfully submitted,

Nanosphere, Inc. Audit Committee

Lorin J. Randall (Chair)
André de Bruin
Sheli Z. Rosenberg

Annual Report and Financial Statements

A copy of our annual report on Form 10-K for the fiscal year ended December 31, 2011, including audited financial statements, accompanies this notice of annual meeting and proxy statement. No portion of the annual report on Form 10-K is incorporated herein or is considered to be proxy-soliciting material.

We will provide without charge additional copies of our Annual Report on Form 10-K for the fiscal year ended December 31, 2011, to any stockholder upon written request. Requests should be directed to Nanosphere, Inc., 4088 Commercial Avenue, Northbrook, Illinois 60062, Attention: J. Roger Moody, Jr. In addition, copies of all of our filings with the SEC can be found on our website at http://www.nanosphere.us in the "Investor Relations/Media" section under the heading "SEC Filings."

Solicitation of Proxies

Our officers, directors and employees may solicit proxies from stockholders. We pay no additional compensation to our officers, directors or employees for such solicitation. Solicitations may be made personally, or by mail, facsimile or other electronic means, telephone, or messenger. We may reimburse brokers and other persons holding shares in their names or in the names of nominees for expenses in sending proxy materials to beneficial owners and obtaining proxies from such owners.

Householding of Proxy Materials

The SEC has adopted rules that permit companies and intermediaries (*e.g.*, brokers) to satisfy the delivery requirements for proxy statements and annual reports with respect to two or more stockholders sharing the same address by delivering a single proxy statement addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Nanosphere stockholders will be "householding" our proxy materials. A single proxy statement may be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that it will be "householding" communications to your address, "householding" will continue until you are notified otherwise or until you notify your broker or the Company that you no longer wish to participate in "householding." If, at any time, you no longer wish to participate in "householding" and would prefer to receive a separate proxy statement and annual report in the future you may (1) notify your broker, (2) direct your

written request to: Secretary, Nanosphere, Inc., 4088 Commercial Avenue, Northbrook, Illinois 60062 or (3) contact J. Roger Moody, Jr., at (847) 400-9000. Upon a written or oral request to the address or telephone number above, Nanosphere will promptly deliver a separate copy of the annual report and proxy statement to a stockholder at a shared address to which a single copy of the documents was delivered. Stockholders who currently receive multiple copies of the proxy statement at their address and would like to request "householding" of their communications should contact their broker.

Other Matters

The board does not intend to bring any other business before the meeting, and the board is not currently aware of any other matters to be voted on at the annual meeting except as disclosed in the notice of annual meeting of stockholders. However, if any other matters are properly presented at the annual meeting, those proxies granting such authority will be voted in respect thereof in accordance with the judgment of stockholders' your proxy (one of the individuals named on your proxy card).

Stockholder Proposals for Next Annual Meeting

Any proposals of stockholders intended to be included in the proxy statement for the annual meeting of stockholders to be held in 2013 pursuant to Rule 14a-8 under the Exchange Act must be received by us not later than December 31, 2012 and must otherwise comply with applicable requirements and laws. However, if Nanosphere changes the date of the 2013 annual meeting of stockholders by more than 30 days from the anniversary of the date of the Annual Meeting (i.e., May 30, 2013), then stockholders will have a reasonable time before Nanosphere begins to print and mail its proxy materials for the 2013 annual meeting of stockholders to submit a proposal pursuant to Rule 14a-8. All notices or proposals, whether or not to be included in our proxy materials, must be sent to our principal executive offices at 4088 Commercial Avenue, Northbrook, Illinois 60062, Attention: J. Roger Moody, Jr.

If a stockholder intends to submit a proposal at the annual meeting of stockholders to be held in 2013, which proposal is not intended to be included in Nanosphere's proxy statement and form of proxy relating to that meeting, the stockholder must give appropriate notice to the Secretary of Nanosphere at the address in the preceding paragraph not later than March 1, 2013 and no earlier than January 30, 2013.

Stockholders may contact Nanosphere's Secretary for requirements for making stockholder proposals and nominating director candidates.

Stockholders are urged to complete, sign, date and mail the proxy in the enclosed envelope, postage for which has been provided for mailing in the United States. Your prompt response is appreciated.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2011

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission File Number 001-33775

Nanosphere, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**36-4339870**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
4088 Commercial Avenue	**Northbrook, Illinois 60062**
(Address of principal executive offices)	*(Zip Code)*

Registrant's telephone number, including area code: **(847) 400-9000**

Securities registered pursuant to Section 12(b) of the Act:

(Title of Each Class)	(Name of Each Exchange on Which Registered)
Common Stock, par value $0.01	**NASDAQ Global Market**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

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 definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of June 30, 2011, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the common stock held by non-affiliates of the registrant was approximately $53,452,455 based on the closing sale price for the registrant's common stock on the NASDAQ Global Market on that date of $1.81 per share. This number is provided only for the purpose of this report on Form 10-K and does not represent an admission by either the registrant or any such person as to the status of such person.

As of February 15, 2012, there were 44,070,437 outstanding shares of common stock. The common stock is listed on the NASDAQ Global Market (trading symbol "NSPH").

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for fiscal year ended December 31, 2011 to be issued in conjunction with the registrant's annual meeting of shareholders expected to be held on May 30, 2012 are incorporated by reference in Part III of this Form 10-K. The definitive proxy statement will be filed by the registrant with the SEC not later than 120 days from the end of the registrant's fiscal year ended December 31, 2011. Except as specifically incorporated herein by reference, the above mentioned Proxy Statement is not deemed filed as part of this report.

NANOSPHERE, INC.

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Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements about us and our industry that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this Annual Report on Form 10-K regarding our strategy, future operations, future financial position, future net sales, projected expenses, prospects and plans and objectives of management are forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievement to be materially different from those expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "anticipate," "believe," "estimate," "expect," "intend," "may," "might," "plan," "project," "will," "would," "should," "could," "can," "predict," "potential," "continue," "objective," or the negative of these terms, and similar expressions intended to identify forward-looking statements. However, not all forward-looking statements contain these identifying words. These forward-looking statements reflect our current views about future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Actual events or results could differ materially from those expressed or implied by these forward-looking statements as a result of various factors.

These forward-looking statements represent our estimates and assumptions only as of the date of this Annual Report on Form 10-K. Unless required by U.S. federal securities laws, we do not intend to update any of these forward-looking statements to reflect circumstances or events that occur after the statement is made or to conform these statements to actual results. The following discussion should be read in conjunction with the consolidated financial statements and notes thereto appearing elsewhere in this Annual Report on Form 10-K. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Item 1A - Risk Factors" and elsewhere in this Annual Report on Form 10-K.

PART I.

Item 1. Business.

References herein to "we," "us," "our" or "the Company" refer to Nanosphere, Inc. unless the context specifically requires otherwise.

Overview

We develop, manufacture and market an advanced molecular diagnostics platform, the Verigene System, that enables simple, low cost and highly sensitive genomic and protein testing on a single platform. Our proprietary nanoparticle technology provides the ability to run multiple tests simultaneously on the same sample. The Verigene System includes a bench-top molecular diagnostics workstation that is a universal platform for genomic and protein testing. While many systems currently available on the market provide a diagnostic result for one test or a few tests within a specific market niche, the Verigene System provides for multiple tests to be performed on a single platform, including both genomic and protein assays, from a single sample.

The Verigene System is differentiated by its ease of use, rapid turnaround times and ability to detect many targets on a single test, referred to as "multiplexing." It provides lower cost for laboratories already performing molecular diagnostic testing and enables smaller laboratories and hospitals without advanced diagnostic capabilities to perform genetic testing. Our ability to detect proteins, which can be as much as 100 times more sensitive than current technologies for certain targets, may enable earlier detection of and intervention in diseases associated with known biomarkers as well as the introduction of tests for new biomarkers that exist in concentrations too low to be detected by current technologies. We are focused on the clinical diagnostics market.

Our test menu is designed to fulfill the following unmet hospital laboratory needs:

1) the conversion of microbiology to molecular methods to more rapidly pinpoint infectious diseases;

2) point-of-care pharmacogenetics to ensure that appropriate therapies are prescribed; and

3) earlier detection of life threatening disease through ultra-sensitive protein assays.

The Verigene System is comprised of a microfluidics processor, a touchscreen reader and disposable test cartridges. Certain assays, such as the Warfarin metabolism and hyper-coagulation tests, were cleared by the U.S. Food and Drug Administration ("FDA") for use with the original Verigene System processor (the "Original Processor"). Subsequently, we developed and launched a second generation Verigene System processor (the "Processor *SP*") that handles the same processing steps as the Original Processor and incorporates sample preparation. Some of our current customers continue to use the Original Processor for hyper-coagulation testing and Warfarin metabolism testing. Our development plans are focused on expanding the menu of tests that will run on the Processor *SP*, and we plan to develop and seek regulatory approval of all future assays on the Processor *SP*.

Our Applications

The following table summarizes the FDA and CE In-Vitro Diagnostic Mark ("CE IVD Mark") regulatory status of our near-term genomic and protein assays on the Verigene System:

Assay	FDA Status[1]	CE IVD Mark Status[2]
Infectious Disease Assays		
Respiratory Virus with Sub-Typing	510(k) cleared	CE IVD Marked
Blood Infection Panels		
• Blood Culture – Staphylococcus (BC-S)	510(k) cleared	Part of BC-GP
• Blood Culture – Gram Positive (BC-GP)	510k) pending	CE IVD Marked
• Blood Culture – Gram Negative (BC-GN)	In development	In development
• Blood Culture – Fungal (BC-F)	In development	In development
C. difficile	In development	In development
Enteric Panel	In development	In development
Human and Pharmacogenetic Assays		
Warfarin Metabolism	510(k) cleared[3]	CE IVD Marked
Hyper-Coagulation	510(k) cleared[3]	CE IVD Marked
Plavix® Metabolism (2C19)	510(k) and PMA pending	CE IVD Marked
Ultra-Sensitive Protein Assays		
Cardiac Troponin I	In development	In development
Prostate-Specific Antigen (PSA)	Research use only	

(1) For further description of our FDA regulatory requirements, please refer to the section ***"Regulation by the United States Food and Drug Administration"*** beginning on page 10 of this Annual Report on Form 10-K for the year ended December 31, 2011.
(2) For further description of our CE IVD Mark regulatory requirements, please refer to the section ***"Foreign Government Regulation"*** beginning on page 13 of this Annual Report on Form 10-K for the year ended December 31, 2011.
(3) Currently cleared only for use with the Original Processor.

Infectious Disease Assays

The conversion of microbiology to molecular methods is driven by the need to identify infectious diseases more quickly, allowing a more rapid commencement of clinical intervention. Microbiology labs need tests that can rapidly detect a wide range of potential infectious agents in an automated system. The Verigene System provides the multiplexing, rapid turnaround and ease-of-use needed by these labs. Our infectious disease menu and the Processor *SP* provide microbiology labs with a compelling solution for conversion to molecular testing.

We have received 510(k) clearance from the FDA for our respiratory panel that detects the presence of influenza A and B as well as respiratory syncytial virus ("RSV") A and B. Influenza is commonly known as the seasonal flu and RSV is a respiratory virus that infects the lungs and breathing passages. RSV is the most common cause of bronchitis and pneumonia in children under the age of one year and has become a significant concern for older adults. Our respiratory panel provides physicians with a highly accurate and fast determination of which virus is present. This test result guides the most appropriate treatment therapy.

In the fourth quarter of 2009, we received 510(k) clearance from the FDA for our respiratory panel on the Processor *SP*. We believe that our respiratory assay on the Processor *SP* offers a simple-to-use molecular test for diagnosing respiratory infections and the flu, while providing improved sensitivity over currently available rapid tests. We have received clearance for a package insert change for this assay confirming that the novel H1N1 virus is detected as a positive Influenza A when using our respiratory assay and the Processor *SP*.

In the first quarter of 2011, we received 510(k) clearance from the FDA and CE IVD Mark for our respiratory assay that includes subtyping for seasonal H1 virus, seasonal H3 virus, and the 2009 novel H1N1 virus, commonly known as swine flu, as well as the targets on our previously cleared respiratory assay. We believe this is the first sample-to-result molecular respiratory test to include all of these viruses, thus lowering the cost of molecular respiratory testing for hospitals and demonstrating the multiplexing capability of the Verigene System. The demand for this test will be highly dependent upon the seasonality and prevalence of respiratory viruses.

We are developing blood stream infection panels for the earlier detection of specific bacteria and resistance markers within patients with blood stream infections. These panels include gram positive, gram negative and fungal pathogens and resistance markers. These assays are designed to enable physicians to pinpoint bacterial strains infecting patients and thus prescribe the most appropriate antibiotic regimen within 24 hours rather than after several days. Treatment is sometimes begun before assays are complete and we believe that this early detection capability will allow patients to avoid unnecessary treatments that may expose them to serious side effects. The first blood stream infection panel developed was the gram positive that represents approximately 65% of blood stream infections. In the fourth quarter of 2011 we received CE IVD Mark for the BC-GP and FDA clearance of BC-S, a subset of the BC-GP panel. The full BC-GP panel is pending FDA 510(k) clearance and BC-GN and BC-F panels are in development.

Our development efforts also include a *C. difficile* test and an enteric bacteria test. *C. difficile* is a bacterium that can cause symptoms ranging from diarrhea to life-threatening inflammation of the colon. Our enteric bacteria assay is being developed to detect and identify the *Enterobacteriaceae* species that most often result from food poisoning. The enteric assay tests for a wide spectrum of bacteria that are treated with various antibiotics and other anti-bacterial drug therapies. These assays also will require regulatory submission to the FDA and corresponding foreign regulatory bodies. We have begun clinical trials for the *C. difficile* test that we believe are necessary to secure regulatory approval.

Human and Pharmacogenetic Assays

Hospitals need faster, less expensive and easier-to-use human and pharmacogenetic tests that can be run for a single patient at the point-of-care. Our Verigene System and human and pharmacogenetic test menu addresses these hospital needs. Pharmacogenomics is an emerging subset of human genetic testing that correlates gene variation with a drug's efficacy or toxicity. These tests play a key role in the advancement of personalized medicine where drug therapies and dosing are guided by each patient's genetic makeup. There is a growing demand on laboratories to implement molecular diagnostic testing, but the cost and complexity of existing technologies and the need for specialized personnel and facilities have limited the number of laboratories with these capabilities. The ease-of-use and reduced complexity of the Verigene System enables any hospital to perform these testing needs.

We have received 510(k) clearance from the FDA for a warfarin metabolism assay performed on our Original Processor. This is a pharmacogenetic test to determine the existence of certain genetic mutations that affect the metabolism of warfarin-based drugs, including Coumadin®, the most-prescribed oral anticoagulant. This assay has been CE IVD Marked during the first quarter of 2011, and we plan to submit an FDA application for this assay to allow its use on the Processor *SP*.

In the third quarter of 2010, we filed a pre-market approval application ("PMA") with the FDA for our cytochrome P-450 2C19 assay that detects genetic mutations associated with deficient metabolism of clopidogrel, more commonly known by the trade name Plavix. On June 9, 2011, we received a "not approvable" letter from the FDA with respect to our PMA submission in which the FDA stated that it will not approve the Plavix metabolism test for commercial use in the United States until the PMA is amended. The FDA cited several deficiencies in our submission that necessitate we perform additional analytical studies and address manufacturing questions. We have completed the analytical studies required by the FDA and have submitted this data in a 510(k) application. If and when we receive 510(k) clearance for this product, we expect it will be indicated for the detection of certain 2C19 genetic variances. Our intent is to use the analytical data submitted in the 510(k) application to support a response to the pending PMA, which, if approved, would likely be indicated for the use or avoidance of Plavix. This assay was CE IVD Marked during the first quarter of 2011.

Clopidogrel inhibits platelet function and is a standard treatment to reduce the risk of thrombolytic events for patients undergoing percutaneous coronary interventions. Clopidogrel metabolism is affected by the cytochrome P-450 family of genes. Up to 50% of the population possess variations in these genes and abnormally metabolize this drug, thus increasing the risk of adverse events. Our 2C19 assay is designed to identify patients possessing certain of these variations so that alternative therapeutic approaches can be prescribed to reduce clotting that can result in heart attack or stroke.

We have also received 510(k) clearance from the FDA for a hyper-coagulation assay on the Original Processor that determines an individual's risk, based upon genetic information, for the development of blood clots that can lead to pulmonary embolism and deep vein thrombosis. This assay has been CE IVD Marked during the fourth quarter of 2011, and we plan to submit an FDA application for this assay to allow its use on the Processor *SP*.

Ultra-Sensitive Protein Assays

Our ability to detect proteins at sensitivity levels that can be 100 times greater than current technologies may enable earlier detection of and intervention in diseases as well as enable the introduction of tests for new biomarkers that exist in concentrations too low to be detected by current technologies. We have developed or are currently developing diagnostic tests for markers that reveal the existence of a variety of medical conditions including cardiovascular, respiratory, cancer, autoimmune, neurodegenerative and other diseases.

The first ultra-sensitive protein test we plan to commercialize is for cardiac troponin I ("cTnI"), which is the gold standard biomarker for diagnosis of myocardial infarction, or heart attack, and identification of patients with acute coronary syndromes at risk for subsequent cardiovascular events. We previously submitted a 510(k) application to the FDA to obtain clearance for the cardiac troponin assay on the Original Processor. We have withdrawn this application and plan to submit a new 510(k) application to obtain clearance for this assay on the Processor *SP*. We have completed accruing samples and one year clinical follow up for our international pivotal trial named FAST-TRAC. We plan to use the patient samples from this clinical trial to run the tests needed to submit a 510(k) application for this assay. The FAST-TRAC clinical study is designed to further demonstrate the clinical utility of ultra-sensitive cTnI measurements as a diagnostic tool for use in the management of both acute and chronic cardiac disease.

In addition to the cardiac troponin I assay, we are developing an ultra-sensitive prostate-specific antigen ("PSA") test for early diagnosis of recurrent prostate cancer. Early testing data suggest this assay may serve as a more specific test for PSA screening. We are also working on a multiplexed protein-based connective-tissue panel for the detection of rheumatoid arthritis, lupus and other related diseases. Finally, we are investigating new biomarkers where our ultra-sensitive protein detection technology may enable earlier detection of a broad range of diseases, such as cancer.

The Verigene System

The Verigene System is comprised of a microfluidics processor, a touchscreen reader and disposable test cartridges. The microfluidics processor interacts with and manipulates various functional components of the test cartridge, accomplishing a number of necessary steps including target binding to the nucleic acid or protein array, nanoparticle probe hybridization, intermediate washes and signal amplification. The reader houses the optical detection module that illuminates the test slide and automated spot recognition software that analyzes the resulting signal intensities and provides the test results. The reader also serves as the control station for the Verigene System and features a simple and intuitive touchscreen interface that allows users to track samples and test cartridges, initiate and monitor test processing, analyze results and generate reports. The reader is web-enabled to allow remote access to results and reports.

To perform a test, the operator adds a prepared sample to a designated port in the test cartridge, enters sample identification and test cartridge information into the reader using the touchscreen keyboard or via the barcode wand, and inserts the test cartridge into the processor. The processor assimilates information received from the reader and matches it to the inserted test cartridge and initiates the specified test protocol. Once the assay process is complete the test array is introduced into the reader for image analysis and result reporting.

Our Technology

We believe our technology will drive greater usage of ultra-sensitive and multiplexed protein and genomic diagnostics in routine clinical laboratories, much as enzyme-linked immunosorbent assay, or ELISA, accelerated the use of protein testing in the 1970s and 1980s and PCR catalyzed the emergence of nucleic acid diagnostics in the 1990s.

Our Gold Nanoparticle Molecular Probes

At the core of our technology are gold nanoparticles which offer a unique set of physical properties that can be exploited in the detection of biological molecules. In 1998, Dr. Chad Mirkin, a director of the Company, and Dr. Robert Letsinger at Northwestern University ("Northwestern") developed a novel process to prepare stable probes by covalently attaching oligonucleotides to gold nanoparticles. This method, protected by patents, is exclusively assigned to or owned by us. We have refined the synthesis methods to enable highly reproducible production of nanoparticle probes with diameters in the 13-50 nanometer range required for highly sensitive biomedical analysis. Subsequently, we have also developed methods for attaching antibodies to gold nanoparticles, thereby producing highly stable probes for ultra-sensitive detection of proteins.

The properties of nanoparticle probes can be tailored by controlling the size of the particles, the density of recognition-oligomers or antibodies on the nanoparticles, the use of diluent oligonucleotides, the use of spacer oligonucleotides and the salt concentration. Combined, the optimization of these properties enables us to deliver superior analytical performance characteristics versus other methods, for example:

- *High Signal-to-Noise Ratio.* Our nanoparticle probes deliver significantly stronger signals than the fluorescent probes, or fluorophores, used in most diagnostic platforms today. Nanoparticles are typically 10-100 nm in diameter and therefore significantly larger than conventional fluorophores. This size difference enables nanoparticles to produce up to 10,000 times more signal via light scattering than a fluorophore. A single nanoparticle can be detected with simple optical instrumentation with very high sensitivity, thus eliminating the need to employ our amplification techniques.

- *Orders of Magnitude Greater Sensitivity and Lower Detection Limits.* The sensitivity and limits of detection of our technology are further enhanced by a silver-staining step, which effectively amplifies the signal from each nanoparticle bound to a target molecule. In this process, silver is coated onto the gold nanoparticle surface, producing larger particles with enhanced optical properties. Whereas the leading technologies today can detect molecules at the picomolar range (10^{-12}), our technology is capable of up to a million times higher sensitivity at the attomolar (10^{-18}) range, enabling the unprecedented analysis of rarely expressed genes or low abundance proteins for early disease detection and diagnosis.

- *Unparalleled Specificity.* A key property of the oligonucleotide-linked gold nanoparticle is an extremely sharp melting curve. The melting curve is the temperature range during which the capture oligonucleotide dissociates with the complementary target oligonucleotide in the sample. Our nanoparticles exhibit dissociation transitions of less than one degree in Celsius temperature, whereas most alternative products are based on polymerase chain reaction, or PCR, which exhibits melt transitions typically in the 15-30 degree range. The narrow band of temperature in which binding and dissociation occurs, creates a significantly higher signal to noise ratio resulting in greater specificity. These qualities eliminate errors caused by mismatched nucleotide pairs, thereby allowing genomic targets differing by a single nucleotide (base pair) to be distinguished with unprecedented selectivity. Sharp melting curves are a proprietary feature of our nanoparticles and our patent portfolio includes issued patents protecting the methods and product performance related to melt transition curves.

- *High Count Multiplexing.* Our core technology enables high count multiplexing, or simultaneous multiple target identification in a single sample, using a simple low-density microarray. A sample and probe mixture is introduced simultaneously into a single self-contained reaction chamber pre-printed with multiple reaction spots, each containing capture strand oligonucleotides or proteins that are complementary to a specific target molecule of interest. By

utilizing the sharp melt transition of the nanoparticle probes, multiple targets can be discretely identified in a single sample. This methodology eliminates the need for complex and costly means of physically isolating individual target molecules.

- *Detection of Genomic and Protein Molecules Simultaneously.* We are able to synthesize our gold nanoparticle probes for the simultaneous multiplexed detection of both protein and genomic targets in the same assay.

- *Superior Reaction Kinetics.* The sharp melt transition curves in our gold nanoparticles increase binding affinity thereby leading to improved assay kinetics and efficiency.

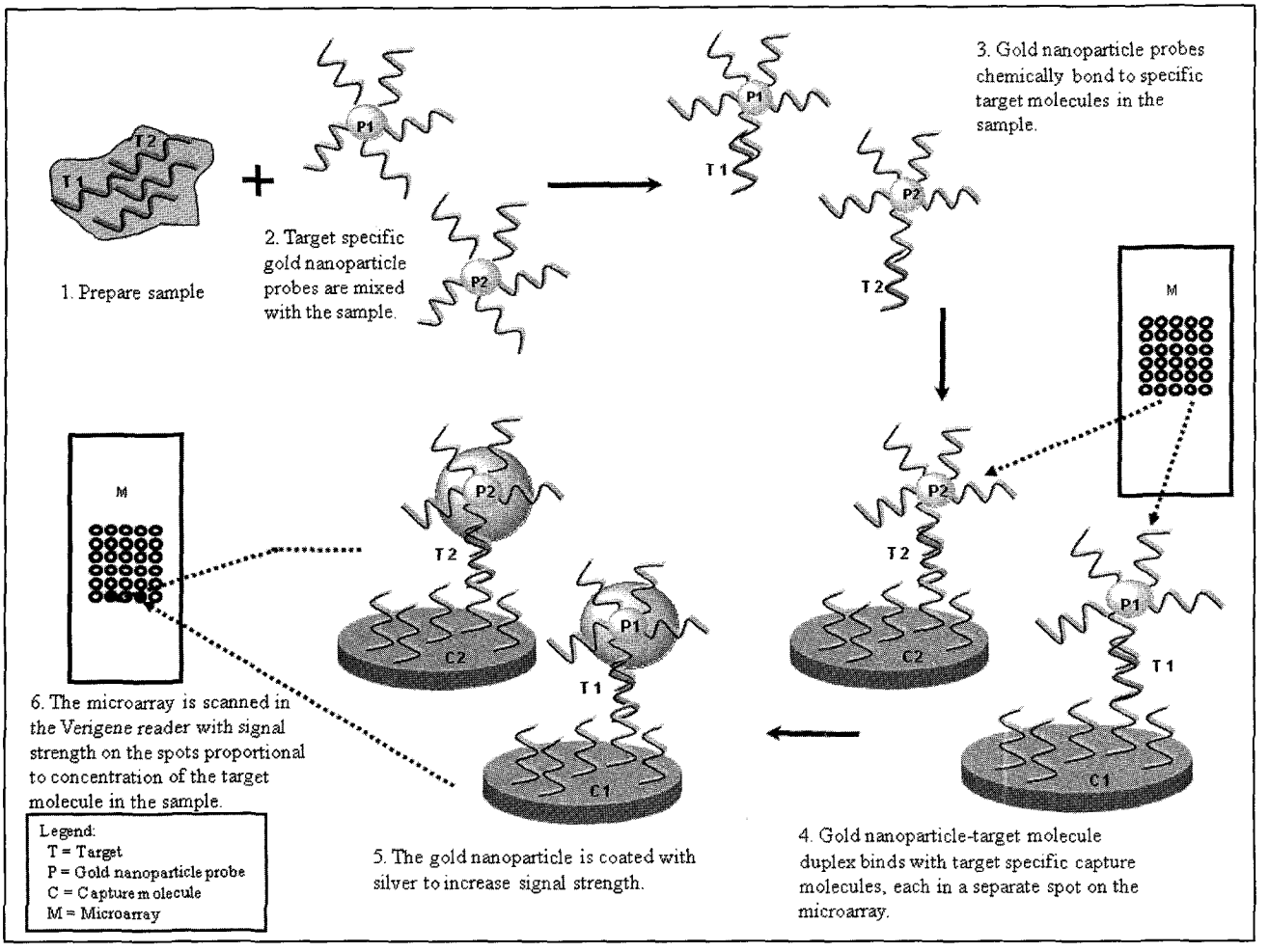
- *Long-Term Stability.* The high density of oligonucleotides per nanoparticle, serves both as a protective and recognition layer on the nanoparticle surface and ensures the long-term stability of our nanoparticles. We have patented approaches using localized salt and buffer concentrations that deliver long-shelf life for our technology and reagent set.

Assay Format

Our silver-enhanced gold nanoparticles and related optical detection technology are used for diagnostic assays which detect genomic and proteomic targets captured onto microarrays as shown in the "Schematic of Microarray Based Detection Using Nanoparticle Probes" below. The microarray format enables high count multiplexing of assay targets, facilitating the development of a broad menu of tests, including for complex diseases where multiple targets must be evaluated to provide a diagnosis, in a simple, scalable format.

Two probe types can be used in a single assay. Oligonucleotide probes are used for genomic assays and antibodies for protein assays. One probe, complementary to a specific site on the target molecule, is attached to a surface such as a glass slide and the other probe, complementary to a different site on the target molecule, is attached to the surface of gold nanoparticles. In the presence of the target molecule of interest, the probes and target form a three dimensional, cross-linked aggregate. After silver coating the gold nanoparticles, light scatter is measured on the surface of the microarray slide. The silver-enhanced gold nanoparticle probes located on the slide surface scatter light in proportion to the concentration of the target in the sample, which is detected through optical imaging and translated into clinical results via our proprietary software algorithms.

Schematic of Microarray Based Detection Using Nanoparticle Probes



The above graphic depicts a genomic or proteomic assay utilizing a molecule attached to a gold nanoparticle. In the case of a genomic assay, the molecule represents an oligonucleotide. In the case of a proteomic assay, the molecule represents an antibody.

Intellectual Property

As of December 31, 2011, our patent portfolio is comprised, on a worldwide basis, of 172 issued patents and 26 pending patent applications which we own directly or for which we are the exclusive licensee. Some of these patents and patent applications derive from a common parent patent application or are foreign counterpart patent applications and relate to similar or identical technological claims. The issued patents cover approximately 11 different technological claims and the pending patent applications cover approximately four additional technological claims.

Many of our issued and pending patents were exclusively licensed from the International Institute for Nanotechnology at Northwestern University ("Northwestern") in May 2000, and they generally cover our core technology, including nanotechnology-based biodiagnostics and biobarcode technology. Our issued patents expire between 2017 and 2025. We believe our patent portfolio provides protection against other companies offering products employing the same technologies and methods as we have patented. While we believe our patent portfolio establishes a proprietary position, there are many competitive products utilizing other technologies that do not infringe on our patents.

In addition, as of December 31, 2011, we have non-exclusive licenses for at least 47 U.S. patents that cover 12 different technological claims from various third parties. Most of these license agreements require us to pay the licensor royalty fees that typically expire upon the patent expiration dates, which range from 2012 to 2027. These license agreements are non-exclusive and do not create a proprietary position. The expiration of these non-exclusive licenses will result in the termination of certain royalty payments by us to the licensors.

Research and Development

Our research and development efforts are focused on:

- *Expanding and Enhancing the Capabilities of Our Instrument Platform.* Design elements and components of our current instrument platform will serve as the foundation for future generation development. The Processor *SP* incorporates sample preparation into our system. By adding this step, labs can now process a raw sample material, in most cases whole blood, in a single step. This feature is critical for analyzing infectious diseases and will further simplify the processing of clinical samples from swab, cerebrospinal fluid and serum.

  We are also developing a fully automated instrument with increased high throughput and sample preparation for both infectious disease and human genetic tests for larger hospital based laboratories. By basing future generations of our instrument platform on existing design elements, each new generation of development will process assays developed for previous generations.

- *Developing Additional Genomic and Protein Assays.* We are in various phases of developing and commercializing new assays for detecting protein biomarkers, infectious diseases and human genetic markers. Currently, we are researching additional human genetic, infectious disease and ultra-sensitive protein assays.

- *Validating and Commercializing New Biomarkers.* We have a dedicated team of protein scientists and assay developers who conduct assay development to support feasibility testing and new protein biomarker validation. This team is collaborating with clinical researchers in academic and private settings to apply our ultra-sensitive protein detection technology to the researchers' efforts to create diagnostic methods with greater clinical sensitivity and specificity. We are also applying our ultra-sensitivity methods to the development of established protein biomarkers that may lead to earlier detection of medical conditions including cancer, neurodegenerative disorders including Alzheimer's disease, sepsis and mad cow disease, as well as for blood screening and veterinary applications.

- *Enhancing Performance of Established Product Systems and Developing New Applications.* Our license agreement with Northwestern provides us with an exclusive license to certain patents and patent applications related to the application of nanotechnology to biodiagnostics and to biobarcode technology. This license covers all discoveries from the International Institute for Nanotechnology at Northwestern in the field of biodiagnostics through January 1, 2013. Nanosphere also has the right of first negotiation for an exclusive license on inventions after such date. Our research team utilizes the research and patents developed at Northwestern to develop diagnostic applications including additional genomic and protein testing assays for use in the Verigene System.

Employees

As of December 31, 2011, we had 131 full-time employees. Of these employees, 45 were in research and development, 39 were in manufacturing (in support of both product sales and the research and development function), 30 were in sales and marketing and 17 were in general and administrative functions. We have never had a work stoppage and none of our employees are covered by collective bargaining agreements or represented by a labor union. We believe our employee relations are good.

Government Grants and Contracts

We have received grants over the last five years that have allowed for the evaluation and development of new technologies and also allowed for development of market specific diagnostic products.

We have benefited from Small Business Innovation Research grants to prove feasibility of gold nanoparticle based detection technology as well as evaluate potential new technologies and medical diagnostic applications.

We have received government contracts for the development of automated biological agent detection systems using nanoparticle probes that are capable of rapidly detecting biological warfare agents and biological toxins. These products have potential applications

for both government contractors and civilian first responders. Since inception, we have recorded revenue of approximately $9 million under these grants and contracts.

Manufacturing

We assemble and package all our finished products at our corporate headquarters in Northbrook, Illinois. Our manufacturing facility occupies approximately 12,000 square feet of the 40,945 square feet, which we lease at our Northbrook facility. There, we manufacture our proprietary nanoparticle probes, assay reagents, test cartridges and instrumentation. We outsource much of the disposable component molding. Reagent manufacturing and cartridge filling is performed under the current Good Manufacturing Practice — Quality System Regulation as required by the FDA for the manufacture of in vitro diagnostic products. These regulations carefully control the manufacture, testing and release of diagnostics products as well as raw material receipt and control.

We have controlled methods for the consistent manufacturing of our proprietary nanoparticles and production oligonucleotides at very high purity (greater than 95%). We also manufacture at our Northbrook facility a proprietary linker to ensure stable bonding of the oligonucleotide to the gold nanoparticle.

All quality control tests are validated to ensure product quality measurements are accurate. Manufacturing of the Verigene System, including test cartridges, is tightly controlled with the use of manufacturing batch records. These records control which product is produced and ensure that each batch of product is manufactured consistently and according to the intended design.

We plan to continue to manufacture components that we determine are highly proprietary or difficult to produce consistently while outsourcing commodity components. As we continue to execute on our sales and market plans, we have ramped-up our manufacturing operations to meet demand. We are likely to establish additional outsourcing partnerships as we manufacture additional products. While we believe our current facilities and expansion rights are adequate to meet our manufacturing needs for at least the next three years, we may need to lease additional space. Our recently revised facilities lease includes a right of first offer on additional available space in our building. While we do not need to expand our facilities to meet anticipated demand for 2012, we will likely require expanded facilities to meet anticipated demand beyond 2012.

Sales and Marketing

As a part of our business strategy, we have a direct sales and marketing organization to support the sales of the Verigene System and its initial menu of tests in the United States. This organization comprises geographically dispersed sales representatives and clinical support specialists as well as a centralized staff of market and product managers. We believe that the primary market for our diagnostic applications will be hospital-based laboratories and academic research institutions in the United States. A customer may purchase the Verigene System instruments, lease them from a third party or enter into a reagent rental agreement. Our reagent rental agreements include customer commitments to purchase a certain minimum volume of cartridges over the term of the agreement. As part of these agreements, a portion of the charge for each cartridge is a rental fee for use of the equipment.

Our sales and marketing organization provides customer service related to order fulfillment, technical service and product support, and distribution logistics.

We believe that the primary international customers for our diagnostic applications will be hospital-based laboratories and academic research institutions. We have obtained CE IVD Mark approval for sale of the Verigene System in European Union countries and will do so for each assay we plan to market in Europe. Outside the United States, we initiate sales through marketing partners and distributors. As of the end of 2011 we have entered into 11 international distribution partnerships. A distribution strategy is being developed for each relevant international market. We support our distribution partners with specialists who train our partners' sales forces and provide technical support.

Competition

We primarily face competition in the nucleic acid based testing market from companies that provide PCR-based technologies. We believe that, over time, the Verigene System will compete with these companies primarily on the following factors: (1) cost effectiveness; (2) ease of use; (3) multiplexing capability; (4) range of tests offered; (5) immediacy of results; and (6) reliability.

We also face competition in the protein detection market from companies that provide mass spectrometry systems. Although mass spectrometry systems offer high sensitivity, they are extremely costly, require significant time and effort by sophisticated staff and

cannot detect many complex, disease-causing proteins. Due to these significant limitations we consider mass spectrometry systems to be a lower competitive threat within commercial protein diagnostics laboratories.

The protein detection market also includes companies that provide ELISA-based testing systems. We believe that our technology, which is at least 100 times more sensitive than ELISA-based technologies provides a significant advantage because it can detect proteins at lower concentrations equating to earlier detection of disease. This sensitivity will create new value for existing biomarkers and allow the discovery of novel biomarkers for the treatment and monitoring of disease where none exist today.

Regulation by the United States Food and Drug Administration

In the United States, the FDA regulates the sale and distribution, in interstate commerce, of medical devices, including in vitro diagnostic test kits. Pursuant to the federal Food, Drug, and Cosmetic Act, the FDA regulates the preclinical and clinical design, testing, manufacture, labeling, distribution and promotion of medical devices. We will not be able to commence marketing or commercial sales in the United States of new medical devices under development that fall within the FDA's jurisdiction until we receive clearance or approval from the FDA.

In the United States, medical devices are classified into one of three classes (i.e., Class I, II or III) on the basis of the controls deemed necessary by the FDA to reasonably ensure their safety and effectiveness. Class I devices are subject to general controls (e.g., establishment registration, medical device listing, labeling regulations, possible premarket notification and adherence to current Good Manufacturing Practice/Quality System Regulations(QSR)). However, most Class I devices are exempt from premarket notification (510(k) clearance). Class II devices are subject to general and special controls (e.g., special labeling requirements, mandatory performance standards, premarket notification (510(k) clearance) often with guidance from an FDA special control guideline, adherence to current Good Manufacturing Practice/QSR, possible post-market surveillance). Generally, Class III devices are subject to general and special controls and must receive premarket approval, or PMA, by the FDA to ensure their safety and effectiveness (e.g., new devices for which insufficient information exists to assure safety and effectiveness through general and special controls; often such devices are life-sustaining, life-supporting and implantable). Many devices that have been approved by way of premarket approval are required to perform post-market surveillance.

510(k) Clearance

The FDA will grant 510(k) clearance if the submitted information establishes that the proposed device is "substantially equivalent" to a legally marketed Class I or Class II medical device or a pre-amendment Class III medical device for which the FDA has not sought PMA. The FDA has recently been requiring more rigorous demonstration of substantial equivalence than in the past. In some cases, such as may be the case with our HFE and Cardiac Troponin I 510(k) submissions, the FDA may require additional clinical data than it would have required in the past. The FDA may determine that a proposed device is not substantially equivalent to a legally marketed device or that additional information is needed before a substantial equivalence determination can be made. A "not substantially equivalent" determination, or a request for additional information, could prevent or delay the market introduction of new products that fall into this category. For any devices that are cleared through the 510(k) process, modifications or enhancements that could significantly affect safety or effectiveness, or constitute a major change in the intended use of the device, require new 510(k) submissions and clearances.

Premarket Approval

A PMA application must be filed if a proposed device is a new device not substantially equivalent to a legally marketed Class I or Class II device, or if it is a pre-amendment Class III device for which the FDA has sought PMA. A PMA application must be supported by valid scientific evidence to demonstrate the safety and effectiveness of the device, typically including the results of clinical investigations, bench tests, and laboratory and animal studies. The PMA application must also contain a complete description of the device and its components and a detailed description of the method, facilities and controls used to manufacture the device. In addition, the submission must include the proposed labeling, advertising literature and any training materials. The PMA process can be expensive, uncertain and lengthy, and a number of devices for which FDA approval has been sought by other companies have never been approved for marketing.

Upon receipt of a PMA application, the FDA makes a threshold determination as to whether the application is sufficiently complete to permit a substantive review. If the FDA determines that the PMA application is complete, the FDA will accept the application for filing. Once the submission is accepted, the FDA begins an in-depth review of the PMA. The FDA's review of a PMA application generally takes one to three years from the date the application is accepted, but may take significantly longer. The review time is often

extended by the FDA asking for more information or clarification of information already provided in the submission. During the review period, an advisory committee, typically a panel of clinicians and subject matter experts, will likely be convened to review and evaluate the application and provide recommendations to the FDA as to whether the device should be approved. The FDA is not bound by the recommendation of the advisory panel. Toward the end of the PMA review process, the FDA generally will conduct an inspection of the manufacturer's facilities to ensure that the facilities are in compliance with applicable current Good Manufacturing Practices/QSR requirements.

If FDA evaluations of both the PMA application and the manufacturing facilities are favorable, the FDA may issue either an approval letter or an approvable letter, the latter of which contains a number of conditions that must be met in order to secure final approval of the PMA. When and if those conditions have been fulfilled to the satisfaction of the FDA, the agency will issue a premarket approval letter, authorizing commercial marketing of the device for certain indications. If the FDA's evaluation of the PMA application or manufacturing facilities is not favorable, the FDA will deny approval of the PMA application and issue a non-approvable letter. The FDA may determine that additional clinical investigations are necessary, in which case the PMA may be delayed for one or more years while additional clinical investigations are conducted and submitted in an amendment to the PMA.

Modifications to a device that is the subject of an approved PMA, including its labeling or manufacturing process, may require approval by the FDA of PMA supplements or new PMAs. Supplements to an approved PMA often require the submission of the same type of information required for an initial 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. The FDA also has the authority to withdraw or temporarily suspend PMA approvals under specific circumstances.

Clinical Investigations

Before we can submit a medical device for 510(k) clearance, we may have to perform a short (i.e., months) method comparison study at external clinical sites to ensure that the test performs appropriately when conducted by end users. This is a study in a clinical environment and is considered a clinical trial. However, the clinical outcome information is most often not required. Alternatively, when we submit a PMA, we generally must conduct a longer (i.e., years) clinical trial of the device which supports the clinical utility of the device, demonstrating how the device will perform when used with patients in the test's intended use population.

Although clinical investigations of most devices are subject to the investigational device exemption, or IDE requirements, clinical investigations of in vitro diagnostic tests, including our products and products under development, are exempt from approval of an IDE application prior to initiation of the clinical study, provided the testing is non-invasive, does not require an invasive sampling procedure that presents a significant risk, does not intentionally introduce energy into the subject, and is not used as a diagnostic procedure without confirmation by another medically established test or procedure. In addition, our tests must be labeled "for research use only" or "for investigational use only," and distribution controls must be established to assure that our tests distributed for research, method comparisons or clinical trials are used only for those purposes.

Obtaining FDA Clearance for Our Products

We received 510(k) clearance from the FDA for commercial sale of the initial tests for use on the Original Processor in the second half of 2007. The first test is a warfarin metabolism assay, which is a pharmacogenomic test to determine the existence of certain genetic information believed to affect the metabolism of warfarin based drugs, including Coumadin, the most-prescribed oral anticoagulant in North America and Europe. The second test is a hyper-coagulation assay, one of the highest volume human genetic tests currently performed, to determine an individual's risk, based upon genetic information, for the development of blood clots, which can lead to stroke, pulmonary embolism and deep vein thrombosis.

The third test is our respiratory panel which detects the presence of influenza A and B as well as respiratory syncitial virus ("RSV") A and B. Influenza is commonly known as the seasonal flu and RSV is a respiratory virus that infects the lungs and breathing passages. RSV is the most common cause of bronchitis and pneumonia in children under the age of one year and has become a significant concern for older adults. Our respiratory panel provides physicians with a highly accurate, fast determination of which virus is present which helps guide the most appropriate treatment therapy. Most of the respiratory tests currently on the market take days to generate a result, because they depend on culturing, or do not provide a reliable result, because they are rapid tests which lack specificity. The fourth test is our cystic fibrosis test that enables molecular laboratories to perform prenatal screening and diagnostic confirmations through identification of the number of copies of each of the 23 most common gene mutations recognized by the American College of Obstetricians and Gynecologists as markers for cystic fibrosis.

Most of our tests have special control guidances for 510(k) clearance. Some of our future tests may be Class III devices. We also plan to conduct method comparison studies and clinical trials of our products currently under development, which we intend to distribute in the United States. Our future developments may not be exempt from IDE application approval requirements and may require us to obtain approval from the FDA through the PMA process rather than 510(k) clearance. In addition, any failure to maintain compliance with the IDE exemption requirements could result in, among other things, the loss of the IDE exemption or the imposition of other restrictions on the distribution of our products.

Regulation After FDA Approval or Clearance

Any devices we manufacture or distribute pursuant to clearance or approval by the FDA are subject to pervasive and continuing regulation by the FDA and certain state agencies. We are required to adhere to applicable regulations setting forth detailed current Good Manufacturing Practices/QSR requirements, which include testing, control, design and documentation requirements. Non-compliance with these standards can result in, among other things, fines, injunctions, civil penalties, recalls or seizures of products, total or partial suspension of production, failure of the government to grant 510(k) clearance PMA for devices, withdrawal of marketing approvals and criminal prosecutions. We have designed and implemented our manufacturing facilities under the current Good Manufacturing Practices/QSR requirements. Our manufacturing facility has been inspected by the FDA and will continue to be periodically audited by the FDA.

Because we are a manufacturer of medical devices, we must also comply with medical device reporting requirements by reporting to the FDA any incident in which our product may have caused or contributed to a death or serious injury. We must also report any incident in which our product malfunctioned if that malfunction would likely cause or contribute to a death or serious injury if it were to recur. Labeling and promotional activities are subject to scrutiny by the FDA and, in certain circumstances, by the Federal Trade Commission. Current FDA enforcement policy prohibits the marketing of approved medical devices for unapproved uses.

We are also subject to numerous federal, state and local laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control and disposal of hazardous or potentially hazardous substances. We have numerous policies and procedures in place to ensure compliance with these laws and to minimize the risk of occupational exposure to hazardous materials. In addition, we do not expect the operations of our products to produce significant quantities of hazardous or toxic waste that would require extraordinary disposal practices. Although the costs to comply with these applicable laws and regulations have not been material, we cannot predict the impact on our business of new or amended laws or regulations, or any changes in the way existing and future laws and regulations are interpreted or enforced. Moreover, as we develop toxin and pathogen detection products for the food and agriculture markets, we may be subject to the regulations of various food safety organizations, including the United States Department of Agriculture.

Export of Our Products

Export of products subject to the 510(k) notification requirements, but not yet cleared to market, are permitted with FDA authorization provided certain requirements are met. Unapproved products subject to the PMA requirements must be approved by the FDA for export. To obtain FDA export approval, we must meet certain requirements, including, with some exceptions, documentation demonstrating that the product is approved for import into the country to which it is to be imported and, in some instances, safety data for the devices.

Clinical Laboratory Improvement Amendments of 1988

The use of our products is also affected by the Clinical Laboratory Improvement Amendments of 1988, or CLIA, and related federal and state regulations, which provide for regulation of laboratory testing. These regulations mandate that clinical laboratories must be certified by the federal government, by a federally-approved accreditation agency or by a state that has been deemed exempt from the regulation's requirements. Moreover, these laboratories must meet quality assurance, quality control and personnel standards, and they must undergo proficiency testing and inspections. The CLIA standards applicable to clinical laboratories are based on the complexity of the method of testing performed by the laboratory, which range from "waived" to "moderately complex" to "highly complex." We expect that most of our products will be categorized as either "moderately complex" or "highly complex."

Foreign Government Regulation

We are beginning to market our products in certain foreign markets. CE IVD Mark is a mandatory conformance mark under the In-Vitro Diagnostic Directive 98/79/EC that addresses the essential requirements that an in-vitro diagnostic device must meet before being marketed within the European Union. We have obtained CE IVD Mark approval for sale of the Verigene System in European Union countries and will do so for any assay we plan to launch in Europe. Additional regulatory requirements exist in most foreign countries including, but not limited to, product standards, packaging requirements, labeling requirements and import restrictions on devices. Each country has its own tariff regulations, duties and tax requirements.

Other Information

Copies of the Company's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available free of charge through the investor relations section of the Company's website (www.nanosphere.us) as soon as reasonably practicable after the Company electronically files the material with, or furnishes it to, the Securities and Exchange Commission.

Item 1A. Risk Factors.

Our results from operations may be affected by the risk factors set forth below. All investors should consider the following risk factors before deciding to purchase securities of the Company. If any of the following events actually occur, our business, operating results, prospects or financial condition could be materially and adversely affected. This could cause the trading price of our common stock to decline and you may lose all or part of your investment. The risks described below are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also significantly impair our business operations and could result in a complete loss of your investment.

Risks Related to Our Business

We have a history of losses and we may never achieve or maintain profitability.

We have a limited operating history and have incurred significant losses in each fiscal year since our inception, including net losses of $35.4 million, $40.6 million and $33.9 million in the years ended December 31, 2011, 2010 and 2009, respectively. As of December 31, 2011, we had an accumulated deficit of approximately $315.3 million. Our losses resulted principally from costs incurred in our research and development programs and from our general and administrative expenses. In recent years, we have incurred significant costs in connection with the development of the Verigene System and its test menu. We expect our research and development expense levels to remain high for the foreseeable future as we seek to enhance our existing product and develop new products. These losses, among other things, have had and will continue to have an adverse effect on our working capital, total assets and stockholders' equity. Because of the numerous risks and uncertainties associated with our product development and commercialization efforts, we are unable to predict when we will become profitable, and we may never become profitable. If we fail to achieve profitability in the future, the market price of our common stock could decline.

Our financial results depend on commercial acceptance of the Verigene System, its array of tests, and the development of additional tests.

Our future depends on the success of the Verigene System, which depends primarily on its acceptance by hospitals, research institutions, and independent diagnostic laboratories as a reliable, accurate and cost-effective replacement for traditional molecular diagnostic measurement methods. Many hospitals and laboratories already use expensive molecular diagnostic testing instruments in their laboratories and may be reluctant to change their current procedures for performing such analyses.

The Verigene System currently does not process a sufficiently broad menu of tests for some hospitals and laboratories to consider adopting it. Although we continue to develop additional tests to respond to hospitals' and laboratories' needs, we cannot guarantee that we will be able to develop enough additional tests quickly enough or in a manner that is cost-effective or at all. The development of new or enhanced products is a complex and uncertain process requiring the accurate anticipation of technological and market trends, as well as precise technological execution. We are currently not able to estimate when or if we will be able to develop, commercialize or sell additional tests or enhance existing products. If we are unable to increase sales of the Verigene System and its tests or to successfully develop and commercialize other products or tests, our revenues and our ability to achieve profitability would be impaired.

The regulatory approval process is expensive, time consuming and uncertain and the failure to obtain such approvals will prevent us from commercializing our future products.

Our products are subject to approval or clearance by the FDA or foreign governmental entities prior to their marketing for commercial use. The 510(k) clearance and premarket approval processes as well as the foreign approvals required to initiate sales outside the United States can be expensive, time consuming and uncertain. It may take as long as eighteen months or longer from submission to obtain 510(k) clearance, and from one to three years from submission to obtain premarket approval; however, it may take longer, and 510(k) clearance or premarket approval may never be obtained. Delays in receipt of, or failure to obtain, clearances or approvals for future products, including tests that are currently in development, would result in delayed, or no, realization of revenues from such products and in substantial additional costs which could decrease our profitability. We have limited experience in filing FDA applications for 510(k) clearance and premarket approval. There are no assurances that we will obtain any required clearance or approval. Any such failure, or any material delay in obtaining the clearance or approval, could harm our business, financial condition and results of operations.

We and our customers are subject to various governmental regulations, and we may incur significant expenses to comply with, and experience delays in our product commercialization as a result of, these regulations.

The products we develop, manufacture and market are subject to regulation by the FDA and numerous other federal, state and foreign governmental authorities. We generally are prohibited from marketing our products in the United States unless we obtain either 510(k) clearance or premarket approval from the FDA.

In addition, we are required to continue to comply with applicable FDA and other regulatory requirements once we have obtained clearance or approval for a product. These requirements include the Quality System Regulation, labeling requirements, the FDA's general prohibition against promoting products for unapproved or "off-label" uses and adverse event reporting regulations. Failure to comply with applicable FDA product regulatory requirements could result in warning letters, fines, injunctions, civil penalties, repairs, replacements, refunds, recalls or seizures of products, total or partial suspension of production, the FDA's refusal to grant future pre-market clearances or approvals, withdrawals or suspensions of current product applications and criminal prosecution. Any of these actions, in combination or alone, could prevent us from selling our products and would likely harm our business.

Our manufacturing facilities are subject to periodic regulatory inspections by the FDA and other federal and state regulatory agencies. The use of our diagnostic products by our customers is also affected by the Clinical Laboratory Improvement Amendments of 1988, or CLIA, and related federal and state regulations that provide for regulation of laboratory testing. CLIA is intended to ensure the quality and reliability of clinical laboratories in the United States by mandating specific standards in the areas of personnel qualifications, administration, participation in proficiency testing, patient test management, quality and inspections. Current or future CLIA requirements or the promulgation of additional regulations affecting laboratory testing may prevent some laboratories from using some or all of our diagnostic products.

The FDA and foreign governmental regulators have made, and may continue to make, changes in approval requirements and processes. We cannot predict what these changes will be, how or when they will occur or what effect they will have on the regulation of our products. Any new regulations, including regulations specifically related to nanotechnology, may impose additional costs or lengthen review times of our products. Delays in receipt of or failure to receive regulatory approvals or clearances for our new products would have a material adverse effect on our business, financial condition and results of operations.

If third-party payors do not reimburse our customers for the use of our clinical diagnostic products or if they reduce reimbursement levels, our ability to sell our products will be harmed.

We intend to sell our products primarily to hospital-based laboratories and academic research institutions, substantially all of which receive reimbursement for the health care services they provide to their patients from third-party payors, such as Medicare, Medicaid and other domestic and international government programs, private insurance plans and managed care programs. Most of these third-party payors may deny reimbursement if they determine that a medical product was not used in accordance with cost-effective treatment methods, as determined by the third-party payor, or was used for an unapproved indication. Third-party payors also may refuse to reimburse for procedures and devices deemed to be experimental.

In the United States, the American Medical Association assigns specific Current Procedural Terminology, or CPT, codes, which are necessary for reimbursement of diagnostic tests. Once the CPT code is established, the Centers for Medicare and Medicaid Services establish reimbursement payment levels and coverage rules under Medicaid and Medicare, and private payors establish rates and coverage rules independently. Although the tests performed by our assays in development have previously assigned CPT Codes, we cannot guarantee that our assays are covered by such CPT codes and are therefore approved for reimbursement by Medicare and Medicaid as well as most third-party payors. Additionally, certain of our future products may not be approved for reimbursement. Third-party payors may choose to reimburse our customers on a per test basis, rather than on the basis of the number of results given by the test. This may result in reference laboratories, public health institutions and hospitals electing to use separate tests to screen for each disease so that they can receive reimbursement for each test they conduct. In that event, these entities likely would purchase separate tests for each disease, rather than products that multiplex.

Third-party payors are increasingly attempting to contain health care costs by limiting both coverage and the level of reimbursement for medical products and services. Increasingly, Medicare, Medicaid and other third-party payors are challenging the prices charged for medical services, including clinical diagnostic tests. Levels of reimbursement may decrease in the future, and future legislation, regulation or reimbursement policies of third-party payors may adversely affect the demand for and price levels of our products. If our customers are not reimbursed for our products, they may reduce or discontinue purchases of our products, which would cause our revenues to decline.

We may fail to receive positive clinical results from the diagnostic tests currently in development that require clinical trials, and even if we receive positive clinical results, we may still fail to receive the necessary clearances or approvals to market our products.

We are investing in the research and development of new products to expand the menu of testing options for the Verigene System. In order to commercialize our products, we are required to undertake time consuming and costly development activities, sometimes including clinical trials for which the outcome is uncertain. Products that appear promising during early development and preclinical studies may, nonetheless, fail to demonstrate the results needed to support regulatory approval. Even if we receive positive clinical results, we may still fail to obtain the necessary FDA clearance and approvals.

Our operating results may be variable and unpredictable.

The sales cycles for our products may be lengthy, which will make it difficult for us to accurately forecast revenues in a given period, and may cause revenues and operating results to vary significantly from period to period. In addition to its length, the sales cycle associated with our products is subject to a number of significant risks, including the budgetary constraints of our customers, their inventory management practices and possibly internal acceptance reviews, all of which are beyond our control. Sales of our products will also involve the purchasing decisions of large, medium and small hospitals and laboratories which can require many levels of pre-approvals, further lengthening sales time. As a result, we may expend considerable resources on unsuccessful sales efforts or we may not be able to complete transactions on the scheduled anticipated.

If we do not achieve significant product revenue, we may not be able to meet our cash requirements without obtaining additional capital from external sources, and if we are unable to do so, we may have to curtail or cease operations.

We expect capital outlays and operating expenditures to increase over the next few years as we expand our infrastructure, commercialization, manufacturing, and research and development activities. We anticipate that our current cash and cash equivalents, which include the net proceeds of our initial and secondary public offerings, will be sufficient to meet our estimated needs for at least twelve months. However, we operate in a market that makes our prospects difficult to evaluate, and we will need additional financing to execute on our current or future business strategies. The amount and the timing of the additional capital we will need to raise depends on many factors, including:

- the level of research and development investment required to maintain and improve our technology;
- the amount and growth rate, if any, of our revenues;
- changes in product development plans needed to address any difficulties in manufacturing or commercializing the Verigene System and enhancements to our system;
- the costs of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights;
- competing technological and market developments;
- our need or decision to acquire or license complementary technologies or acquire complementary businesses;
- the expansion of our sales force; and
- changes in regulatory policies, practices or laws that affect our operations, including clearance to market our products.

We cannot be certain that additional capital will be available when and as needed or that our actual cash requirements will not be greater than anticipated. If we require additional capital at a time when investment in diagnostics companies or in the marketplace in general is limited due to the then prevailing market or other conditions, we may not be able to raise such funds at the time that we desire or any time thereafter. In addition, if we raise additional funds through the issuance of common stock or convertible securities, the percentage ownership of our stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we obtain additional debt financing, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, and the terms of the debt securities issued could impose significant restrictions on our operations. If we raise additional funds through collaborations and

licensing arrangements, we might be required to relinquish significant rights to our technologies or products, or grant licenses on terms that are not favorable to us.

The adverse capital and credit market conditions could affect our liquidity.

Adverse capital and credit market conditions could affect our ability to meet liquidity needs, as well as our access to capital and cost of capital. The capital and credit markets have been experiencing extreme volatility and disruption for more than 12 months. Our results of operations, financial condition, cash flows and capital position could be materially adversely affected by continued disruptions in the capital and credit markets.

If our products do not perform as expected or the reliability of the technology on which our products are based is questioned, we could experience lost revenue, delayed or reduced market acceptance of our products, increased costs and damage to our reputation.

Our success depends on the market's confidence that we can provide reliable, high-quality diagnostics systems. We believe that customers in our target markets are likely to be particularly sensitive to product defects and errors.

Our reputation and the public image of our products or technologies may be impaired if our products fail to perform as expected or our products are perceived as difficult to use. Our products are complex and may develop or contain undetected defects or errors. Any defects or errors could lead to the filing of product liability claims, which could be costly and time-consuming to defend and result in substantial damages. If we experience a sustained material defect or error, this could result in loss or delay of revenues, delayed market acceptance, damaged reputation, diversion of development resources, legal claims, increased insurance costs or increased service and warranty costs, any of which could materially harm our business. We cannot assure you that our product liability insurance would protect our assets from the financial impact of defending a product liability claim. A product liability claim could have a serious adverse effect on our business, financial condition and results of operations.

We rely on third-party license agreements for patents and other technology related to our products, and the termination of these agreements could delay or prevent us from being able to commercialize our products.

As of December 31, 2011, our patent portfolio is comprised, on a worldwide basis, of 172 issued patents and 26 pending patent applications which we own directly or for which we are the exclusive licensee. Some of these patents and patent applications derive from a common parent patent application or are foreign counterpart patent applications and relate to similar or identical technological claims. The issued patents cover approximately 11 different technological claims and the pending patent applications cover approximately 4 additional technological claims.

Many of our issued and pending patents were exclusively licensed from Northwestern in May 2000 and they generally cover our core technology, including nanotechnology based biodiagnostics and biobarcode technology. Our issued patents expire between 2017 and 2025. Our patent portfolio provides protection against other companies offering products employing the same technologies and methods as we have patented. While we believe our patent portfolio establishes a proprietary position, there are many competitive products utilizing other technologies that do not infringe on our patents.

In addition, we have non-exclusive licenses for 47 patents that cover 12 different technological claims from various third parties. Most of these license agreements require us to pay the licensor royalty fees that typically expire upon the patent expiration dates which range from 2012 to 2027. These license agreements are nonexclusive and do not create a proprietary position. The expiration of these non-exclusive licenses will result in the termination of certain royalty payments by us to the licensors.

If we are unable to obtain, maintain and enforce intellectual property protection covering our products, others may be able to make, use, or sell our products, which could adversely affect our ability to compete in the market.

Our success is dependent in part on obtaining, maintaining and enforcing intellectual property rights, including patents. If we are unable to obtain, maintain and enforce intellectual property legal protection covering our products, others may be able to make, use or sell products that are substantially identical to ours without incurring the sizeable discovery, development and licensing costs that we have incurred, which would adversely affect our ability to compete in the market.

We seek to obtain and maintain patents and other intellectual property rights to restrict the ability of others to market products that compete with our products. As of December 31, 2011, our patent portfolio is comprised, on a worldwide basis, of 172 issued patents and 26 pending patent applications which, in either case, we own directly or for which we are the exclusive licensee. However, patents

may not be issued from any pending or future patent applications owned by or licensed to us, and moreover, issued patents owned or licensed to us now or in the future may be found by a court to be invalid or otherwise unenforceable. Also, even if our patents are determined by a court to be valid and enforceable, they may not be sufficiently broad to prevent others from marketing products similar to ours or designing around our patents, despite our patent rights, nor provide us with freedom to operate unimpeded by the patent rights of others.

Furthermore, we cannot be certain that we were the first to make the invention claimed in our United States issued patents or pending patent applications, or that we were the first to file for protection of the inventions claimed in our foreign issued patents or pending patent applications. We may become subject to interference proceedings conducted in the patent and trademark offices of various countries to determine our entitlement to patents, and these proceedings may conclude that other patents or patent applications have priority over our patents or patent applications. It is also possible that a competitor may successfully challenge our patents through various proceedings and those challenges may result in the elimination or narrowing of our patents, and therefore reduce our patent protection. Accordingly, rights under any of our issued patents, patent applications or future patents may not provide us with commercially meaningful protection for our products or afford us a commercial advantage against our competitors or their competitive products or processes.

We have a number of foreign patents and applications. However, the laws of some foreign jurisdictions do not protect intellectual property rights to the same extent as laws in the United States, and many companies have encountered significant difficulties in protecting and defending such rights in foreign jurisdictions. If we encounter such difficulties or we are otherwise precluded from effectively protecting our intellectual property rights in foreign jurisdictions, our business prospects could be substantially harmed.

We may initiate litigation to enforce our patent rights, which may prompt our adversaries in such litigation to challenge the validity, scope or enforceability of our patents. Patent litigation is complex and often difficult and expensive, and would consume the time of our management and other significant resources. In addition, the outcome of patent litigation is uncertain. If a court decides that our patents are not valid, not enforceable or of a limited scope, we may not have the right to stop others from using the subject matter covered by those patents.

We also rely on trade secret protection to protect our interests in proprietary know-how and for processes for which patents are difficult to obtain or enforce. We may not be able to protect our trade secrets adequately. In addition, we rely on non-disclosure and confidentiality agreements with our employees, consultants and other parties to protect, in part, our trade secrets and other proprietary technology. These agreements may be breached and we may not have adequate remedies for any breach. Moreover, others may independently develop equivalent proprietary information, and third parties may otherwise gain access to our trade secrets and proprietary knowledge. Any disclosure of confidential data into the public domain or to third parties could allow our competitors to learn our trade secrets and use the information in competition against us.

Our products could infringe patent rights of others, which may require costly litigation and, if we are not successful, could cause us to pay substantial damages or limit our ability to commercialize our products.

Our commercial success depends on our ability to operate without infringing the patents and other proprietary rights of third parties. We are aware of third party patents that may relate to our products and technology. There may also be other patents that relate to our products and technology of which we are not aware. We may unintentionally infringe upon valid patent rights of third parties. Although we are currently not involved in any material litigation involving patents, a third party patent holder could assert a claim of patent infringement against us in the future. Alternatively, we may initiate litigation against the third party patent holder to request that a court declare that we are not infringing the third party's patent and/or that the third party's patent is invalid or unenforceable. If a claim of infringement is asserted against us and is successful, and therefore we are found to infringe, we could be required to pay damages for infringement, including treble damages if it is determined that we knew or became aware of such a patent and we failed to exercise due care in determining whether or not we infringed the patent. If we have supplied infringing products to third parties or have licensed third parties to manufacture, use or market infringing products, we may be obligated to indemnify these third parties for damages they may be required to pay to the patent holder and for any losses they may sustain. We can also be prevented from selling or commercializing any of our products that use the infringing technology in the future, unless we obtain a license from such third party. A license may not be available from such third party on commercially reasonable terms, or may not be available at all. Any modification to include a non-infringing technology may not be possible or if possible may be difficult or time-consuming to develop, and require revalidation, which could delay our ability to commercialize our products.

Any infringement action asserted against us, even if we are ultimately successful in defending against such action, would likely delay the regulatory approval process of our products, harm our competitive position, be expensive and require the time and attention of our key management and technical personnel.

We have limited experience in sales and marketing and may be unable to successfully commercialize our Verigene System, or it may be difficult to build brand loyalty.

We have limited marketing, sales and distribution experience and capabilities. Our ability to achieve profitability depends on attracting customers for the Verigene System and building brand loyalty. To successfully perform sales, marketing, distribution and customer support functions ourselves, we will face a number of risks, including:

- our ability to attract and retain the skilled support team, marketing staff and sales force necessary to commercialize and gain market acceptance for our technology and our products;
- the ability of our sales and marketing team to identify and penetrate the potential customer base including hospitals, research institutions, and independent diagnostic laboratories;
- the time and cost of establishing a support team, marketing staff and sales force; and
- the difficulty of establishing brand recognition and loyalty for our products.

In addition, we may seek to enlist one or more third parties to assist with sales, distribution and customer support globally or in certain regions of the world. If we do seek to enter into such arrangements, we may not be successful in attracting desirable sales and distribution partners, or we may not be able to enter into such arrangements on favorable terms. If our sales and marketing efforts, or those of any third-party sales and distribution partners, are not successful, our technologies and products may not gain market acceptance, which would materially impact our business operations.

We may be unsuccessful in our long-term goal of expanding our product offerings outside the United States.

To the extent we begin to offer our products broadly outside the United States, we expect that we will be dependent on third-party distribution relationships. Distributors may not commit the necessary resources to market and sell our products to the level of our expectations. If distributors do not perform adequately, or we are unable to locate distributors in particular geographic areas, our ability to realize long-term international revenue growth would be materially adversely affected.

Additionally, our products may require regulatory clearances and approvals from jurisdictions outside the United States. These products may not be sold in these jurisdictions until the required clearances and approvals are obtained. We cannot assure you that we will be able to obtain these clearances or approvals on a timely basis, or at all.

Manufacturing risks and inefficiencies may adversely affect our ability to produce products.

We must manufacture or engage third parties to manufacture components of our products in sufficient quantities and on a timely basis, while maintaining product quality and acceptable manufacturing costs and complying with regulatory requirements. In determining the required quantities of our products and the manufacturing schedule, we must make significant judgments and estimates based on historical experience, inventory levels, current market trends and other related factors. Because of the inherent nature of estimates, there could be significant differences between our estimates and the actual amounts of products we require. Additionally, some of the components of the Verigene System are custom-made by only a few outside vendors, and we do not have long-term supply contracts for the materials or components supplied by any of our vendors. If we are unable to obtain from one or more of these vendors the needed materials or components that meet our specifications on commercially reasonable terms, or at all, we may not be able to meet the demand for our products. We have not arranged for alternate suppliers, and it may be difficult to find alternate suppliers in a timely manner and on terms acceptable to us.

We manufacture in one facility. If there were to be a significant disruption in our ability to use this facility, it would take significant time to setup and validate an alternative manufacturing facility. Disruptions due to lack of power, flooding, fire and environmental controls could adversely impact our ability to manufacture. In addition, we have been steadily increasing manufacturing capacity to meet demand for our products. A disruption of our manufacturing operations resulting from scale-up related challenges such as obtaining sufficient raw materials, hiring of qualified factory personnel, installation and efficient operation of new equipment, and management of our quality controls could cause us to cease, delay, or limit our manufacturing operations and consequently adversely impact our business, our results of operations and our financial condition.

We may experience unforeseen technical complications in the processes we use to develop, manufacture, customize or receive orders for our products. These complications could materially delay or limit the use of products we attempt to commercialize, substantially increase the anticipated cost of our products or prevent us from implementing our processes at appropriate quality and scale levels, thereby causing our business to suffer. In addition, our manufacturing operations use highly technical processes involving unique, proprietary techniques that our manufacturing personnel must continuously monitor and update, especially as we develop more products. In order to be profitable, we must manufacture greater quantities of products than we have to date and we must do this more efficiently than we have in the past. We may not be able to do so.

We will need to develop manufacturing capacity by ourselves or with third parties.

We will need to either continue to build internal manufacturing capacity or contract with one or more manufacturing partners, or both. We currently use a combination of outsourced and internal manufacturing activities. We may encounter difficulties in manufacturing our products and, due to the complexity of our technology and our manufacturing process, we cannot be sure we fully understand all of the factors that affect our manufacturing processes or product performance. We may not be able to build manufacturing capacity internally or find one or more suitable manufacturing partners, or both, to meet the volume and quality requirements necessary to be successful in the market. If our products do not consistently meet our customers' performance expectations, we may be unable to generate sufficient revenues to become profitable. Significant additional resources, implementation of additional manufacturing equipment and changes in our manufacturing processes and organization may be required for the scale-up of each new product prior to commercialization or to meet increasing customer demand once commercialization begins, and this work may not be successfully or efficiently completed. Any delay in establishing or inability to expand our manufacturing capacity could delay our ability to develop or sell our products, which would result in lost revenue and seriously harm our business, financial condition and results of operations.

Our business and future operating results may be adversely affected by events outside of our control.

We develop and manufacture the Verigene System instruments and assays in our facility located in Northbrook, Illinois. This facility and the manufacturing equipment we use would be costly to replace and could require substantial lead time to repair or replace. Our business and operating results may be harmed due to interruption of our manufacturing by events outside of our control, including earthquakes, tornadoes and fires. Other possible disruptions may include power loss and telecommunications failures. In the event of a disruption, we may lose customers and we may be unable to regain those customers thereafter. Our insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all.

We face intense competition from established and new companies in the molecular diagnostics field.

We compete with companies that design, manufacture and market already existing and new molecular diagnostics systems, and single target or low count multiplexing systems and assays are abundant. We anticipate that we will face increased competition in the future as new companies enter the market with new technologies and our competitors improve their current products. One or more of our competitors may offer technology superior to ours and render our technology obsolete or uneconomical. If a competitor were able to deliver a testing application that offers simplicity and ease of use, high count multiplexing and high throughput and fast turnaround, our ability to successfully market our products would be materially adversely affected. Most of our current competitors, as well as many of our potential competitors, have greater name recognition, more substantial intellectual property portfolios, longer operating histories, significantly greater resources to invest in new technologies and more substantial experience in new product development, regulatory expertise, manufacturing capabilities and the distribution channels to deliver products to customers. If we are not able to compete successfully, we may not generate sufficient revenue to become profitable.

Our success may depend upon how we and our competitors anticipate and adapt to market conditions.

The markets for our products are characterized by rapidly changing technology, evolving industry standards, changes in customer needs, emerging competition and new product introductions. The success of our products will depend on our ability to continue to increase their performance and decrease their price. New technologies, techniques or products could emerge with similar or better price-performance than our system and could exert pricing pressures on our products. It is critical to our success for us to anticipate changes in technology and customer requirements and to successfully introduce enhanced and competitive technology to meet our customers' and prospective customers' needs on a timely basis. We may not be able to maintain our technological advantages over emerging technologies in the future and we will need to respond to technological innovation in a rapidly changing industry. If we fail to keep pace with emerging technologies our system will become uncompetitive, our market share will decline and our business, revenue, financial condition and operating results could suffer materially.

We may not be able to manage our anticipated growth, and we may experience constraints or inefficiencies caused by unanticipated acceleration and deceleration of customer demand.

Demand for our respiratory products is directly proportionate to the size and duration of influenza and other respiratory illnesses. Unanticipated acceleration and deceleration of customer demand for our products may result in constraints or inefficiencies related to our manufacturing, sales force, implementation resources and administrative infrastructure. Such constraints or inefficiencies may adversely affect us as a result of delays, lost potential product sales or loss of current or potential customers due to their dissatisfaction. Similarly, over-expansion or investments in anticipation of growth that does not materialize, or develops more slowly than we expect, could harm our financial results and result in overcapacity.

To manage our anticipated future growth effectively, we must enhance our manufacturing capabilities and operations, information technology infrastructure, and financial and accounting systems and controls. Organizational growth and scale-up of operations could strain our existing managerial, operational, financial and other resources. Our growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of new products or enhancements of existing products. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our revenue could grow more slowly than expected and we may not be able to achieve our research and development and commercialization goals. Our failure to manage our anticipated growth effectively could have a material adverse effect on our business, operating results or financial condition.

We use hazardous chemicals, biological materials, and infectious diseases in our business. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.

Our research and development and manufacturing processes involve the controlled use of hazardous materials, including chemicals, biological materials and infectious diseases. Our operations produce hazardous waste products. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials, and our liability may exceed our insurance coverage and our total assets. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of these hazardous materials and specified waste products, as well as the discharge of pollutants into the environment and human health and safety matters. Compliance with environmental laws and regulations may be expensive, and may impair our research, development and production efforts. If we fail to comply with these requirements, we could incur substantial costs, including civil or criminal fines and penalties, clean-up costs, or capital expenditures for control equipment or operational changes necessary to achieve and maintain compliance. In addition, we cannot predict the impact on our business of new or amended environmental laws or regulations, or any changes in the way existing and future laws and regulations are interpreted and enforced.

If we are unable to recruit and retain key executives and scientists, we may be unable to achieve our goals.

Our performance is substantially dependent on the performance of our senior management and key scientific and technical personnel. The loss of the services of any member of our senior management or our scientific or technical staff could divert management's attention to transition matters and identification of suitable replacements, if any, and have a material adverse effect on our business, operating results and financial condition. Each of our executive officers and other key employees could terminate his or her relationship with us at any time. We do not maintain key man life insurance on any of our employees.

In addition, our product development and marketing efforts could be delayed or curtailed if we are unable to attract, train and retain highly skilled employees and scientific advisors, particularly our management team, senior scientists and engineers and sales and marketing personnel. To expand our research, product development and sales efforts we need additional people skilled in areas such as protein science, information services, manufacturing, sales, marketing and technical support. Because of the complex and technical nature of our system and the dynamic market in which we compete, any failure to attract and retain a sufficient number of qualified employees could materially harm our ability to develop and commercialize our technology. We may not be successful in hiring or retaining qualified personnel and our failure to do so could have a material adverse effect on our business, financial condition and results of operations.

Healthcare reform and restrictions on reimbursement may adversely affect our profitability.

In the United States, healthcare providers that purchase our products and other diagnostic products generally rely on third-party payors to reimburse all or part of the cost of the procedure. In international markets, reimbursement and healthcare payment systems vary significantly by country, and include both government-sponsored healthcare and private insurance. Third-party payors can affect the pricing or the relative attractiveness of our products by regulating the maximum amount of reimbursement provided by such payors for laboratory testing services. Lower-than-expected or decreases in reimbursement amounts for tests performed using our products may decrease amounts physicians and other practitioners are able to charge patients, which in turn may adversely affect the willingness of physicians and other practitioners to purchase our products at prices we target, or at all. If we were not able to sell our products at target prices, then we will suffer a decrease in expected profitability that would likely adversely affect our business, financial condition and results of operations.

In addition, political, economic and regulatory influences are subjecting the healthcare industry to potential fundamental changes that could substantially affect our results of operations. Government and private sector initiatives to limit the growth of healthcare costs, including price regulation, competitive pricing, coverage and payment policies, comparative effectiveness of therapies, technology assessments and managed-care arrangements, are continuing. These changes are causing the marketplace to put increased emphasis on the delivery of more cost-effective treatments. In addition, uncertainty remains regarding proposed significant reforms to the U.S. healthcare system, including the potential innovation tax on medical device companies.

Security breaches and other disruptions could compromise our information and expose us to liability, which would cause our business and reputation to suffer.

In the ordinary course of our business, we collect and store sensitive data, including intellectual property, our proprietary business information and that of our tenants and business partners, including personally identifiable information of our tenants and employees, in our data centers and on our networks. Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance or other disruptions. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, disrupt our operations, and damage our reputation, which could adversely affect our business.

Risks Related to Our Common Stock

The market price of our common stock may be volatile and fluctuate significantly, which could result in substantial losses for investors and subject us to securities class action litigation.

Market prices of diagnostics companies have been volatile. Among the factors that may cause the market price of our common stock to fluctuate are the risks described in this "Risk Factors" section and other factors, including:

- fluctuations in our quarterly operating results or the operating results of our competitors;
- changes in estimates of our financial results or recommendations by securities analysts;
- variance in our financial performance from the expectations of securities analysts;
- changes in the estimation of the future size and growth rate of our markets;
- changes in accounting principles or changes in interpretations of existing principles, which could affect our financial results;
- failure of our products to achieve or maintain market acceptance or commercial success;
- conditions and trends in the markets we serve;
- changes in general economic, industry and market conditions;
- success of competitive products and services;

- changes in market valuations or earnings of our competitors;
- changes in our pricing policies or the pricing policies of our competitors;
- announcements of significant new products, contracts, acquisitions or strategic alliances by us or our competitors;
- changes in legislation or regulatory policies, practices, or actions;
- the commencement or outcome of litigation involving our company, our general industry or both;
- recruitment or departure of key personnel;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- actual or expected sales of our common stock by our stockholders; and
- the trading volume of our common stock.

In addition, the stock market in general, the NASDAQ Global Market and the market for diagnostics companies in particular, may experience a loss of investor confidence. Such loss of investor confidence may result in extreme price and volume fluctuations in our common stock that are unrelated or disproportionate to the operating performance of our business, financial condition or results of operations. These broad market and industry factors may materially harm the market price of our common stock and expose us to securities class action litigation. Such litigation, even if unsuccessful, could be costly to defend and divert management's attention and resources, which could further materially harm our financial condition and results of operations.

If equity research analysts do not publish research or reports about our business or if they issue unfavorable commentary or downgrade our common stock, the price of our common stock could decline.

The liquidity of the trading market for our common stock may be affected in part by the research and reports that equity research analysts publish about us and our business. We do not control the opinions of these analysts. The price of our stock could decline if one or more equity analysts downgrade our stock or if those analysts issue other unfavorable commentary or cease publishing reports about us or our business.

Certain provisions of our corporate governing documents could make an acquisition of our company more difficult.

Certain provisions of our organizational documents could discourage potential acquisition proposals, delay or prevent a change in control of us or limit the price that investors may be willing to pay in the future for shares of our common stock. For example, our amended and restated certificate of incorporation and amended and restated by-laws:

- authorize the issuance of preferred stock that can be created and issued by our board of directors without prior stockholder approval, commonly referred to as "blank check" preferred stock, with rights senior to those of our common stock;
- limit the persons who can call special stockholder meetings;
- provide that a majority vote of our stockholders is required to amend our amended and restated certificate of incorporation and amended and restated by-laws;
- establish advance notice requirements to nominate persons for election to our board of directors or to propose matters that can be acted on by stockholders at stockholder meetings;
- do not provide for cumulative voting in the election of directors; and
- provide for the filling of vacancies on our board of directors by action of a majority of the directors and not by the stockholders.

These and other provisions in our organizational documents could allow our board of directors to affect your rights as a stockholder in a number of ways, including making it more difficult for stockholders to replace members of the board of directors. Because our board of directors is responsible for approving the appointment of members of our management team, these provisions could in turn affect any attempt to replace the current management team. These provisions could also limit the price that investors would be willing to pay in the future for shares of our common stock.

Our amended and restated articles of incorporation provide that Section 203 of the Delaware General Corporation Law, an anti-takeover law, will not apply to us. Section 203 generally prohibits an interested stockholder from engaging in certain types of business combinations with a Delaware corporation for three years after becoming an interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns 15% or more of the corporation.

Our 2007 Long-Term Incentive Plan includes an automatic share replenishment, or "evergreen," provision that, unless our board of directors takes action to the contrary, will automatically increase the number of shares of our common stock reserved for issuance under this plan each year. Issuances of awards under this Plan would cause further dilution to existing stockholders.

In March 2007 our board of directors adopted and our shareholders approved our 2007 Long-Term Incentive Plan (the "2007 Plan"). The 2007 Plan authorizes the grant of stock options, share appreciation rights, restricted shares, restricted share units, unrestricted shares, incentive stock options, deferred share units and performance awards. The total awards originally authorized under the 2007 Plan was 4,106,009 shares, plus up to an additional 773,591 shares of common stock that will become available in the event that awards made under our 2000 Equity Incentive Plan expire, are forfeited or cancelled, plus an annual increase in the number of shares pursuant to the evergreen provision equal to the least of: 900,000 shares of common stock; 4.0% of our outstanding shares of common stock as of fiscal year end; and an amount determined by the board of directors.

At December 31, 2011, there were 44,070,437 outstanding shares of our common stock. In addition, there were outstanding options to purchase 4,663,760 shares of our common stock (including 963,342 shares authorized pursuant to the evergreen provision of the Plan), of which 450,000 were in-the-money based on our December 31, 2011 closing stock price. Pursuant to the evergreen provision, an additional 900,000 shares of our common stock were authorized for issuance under the 2007 Plan as of January 1, 2012. Collectively, the outstanding shares as of December 31, 2011, the in-the-money options and warrants as of December 31, 2011 and the additional shares authorized on January 1, 2012 pursuant to the evergreen provision were 45,420,437 (the "Adjusted Outstanding Shares").

The evergreen provision expired following the final authorization increase on January 1, 2012. Since our initial public offering , this provision has eliminated the need for us to seek stockholders approval to authorize additional shares for issuance under the 2007 Plan or a new plan. Now that the evergreen provision has expired, factors such as, a material increase in the number of our award-eligible employees, or competitive conditions to attract or keep valuable employees, may affect the likelihood that we request stockholders to authorize additional shares under this plan or a new plan. The issuance, perception that issuance may occur, or exercise of these options may have a dilutive impact on other stockholders and could have a material negative effect on the market price of our common stock.

We do not currently intend to pay dividends on our capital stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our common stock, and we currently intend to invest our future earnings, if any, to fund the development and growth of our business. Therefore, we do not anticipate declaring or paying cash dividends on our common stock in the foreseeable future. The payment of dividends will be at the discretion of our board of directors and will depend on our results of operations, capital requirements, financial condition, future prospects, contractual arrangements, restrictions imposed by applicable law, any limitations on payments of dividends present in our current and future debt agreements, and other factors our board of directors may deem relevant. If we do not pay dividends, your ability to achieve a return on your investment in our company will depend on any future appreciation in the market price of our common stock. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders have purchased their shares.

We will continue to incur costs and demands upon management as a result of complying with the laws and regulations affecting public companies, which may adversely affect our operating results and failure to achieve and maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act could cause investors to lose confidence in our operating results and in the accuracy of our financial reports and could have a material adverse effect on our business and on the price of our common stock.

As a public company, we are required, pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting for our 2011 fiscal year. Management is responsible for implementing controls and other procedures designed to ensure that information required to be disclosed by us in the reports that we file with the SEC is disclosed accurately and is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. While we have implemented the internal controls that we feel are necessary to comply with Section 404 of the Sarbanes Oxley Act, these controls may become inadequate because of changes in conditions or the degree of compliance with these policies or procedures may deteriorate.

Furthermore, as a public company, changing laws, regulations and standards relating to corporate governance and public disclosure, including regulations implemented by the Securities and Exchange Commission and the NASDAQ may increase legal and financial compliance costs and make some activities more time consuming. These laws, regulations and standards are subject to varying interpretations and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If, notwithstanding our efforts to comply with new laws, regulations and standards, we fail to comply, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

Failure to comply with these rules might also make it more difficult for us to obtain certain types of insurance, including director and officer liability insurance, and we might be forced to accept reduced policy limits and coverage and/or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, on committees of our board of directors, or as executive officers.

Concentration of ownership among some of our stockholders, including directors and management may limit your ability to influence corporate matters.

As of February 15, 2012, approximately 40% of our common stock including the exercise of all outstanding warrants and exercisable options to purchase our common stock will be beneficially held by our directors, our executive officers, and greater than five percent stockholders and their respective affiliates. Lurie Investment Fund, L.L.C., Lurie Investments, Inc., AOQ Trust, Alfa-Tech, L.L.C., Anda-Proquest, L.L.C. and their respective affiliates, own 23% of our common stock, and Bain Capital Venture Fund 2005, L.P. and their respective affiliates own 4% of our common stock. Consequently, a small number of our stockholders may be able to substantially influence our management and affairs. If they choose to act together, they would be able to influence most matters requiring approval by our stockholders, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets and any other transaction. The concentration of ownership may also delay or prevent a change in control of us even if such changes might otherwise be beneficial to our stockholders. In addition the significant concentration of share ownership may adversely affect the trading price of our common stock because investors often perceive disadvantages in owning shares in companies with controlling stockholders.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our executive, research and development and manufacturing functions are all located at a 40,945 square foot leased facility in Northbrook, Illinois. The lease for our Northbrook facility expires in May 2014. Our facilities lease includes the right of first offer on additional available space in our building. While we do not need to expand our facilities to meet anticipated demand for 2012, we will likely require expanded facilities to meet anticipated demand beyond 2012.

We do not own any real property.

Item 3. Legal Proceedings.

We are from time to time subject to various claims and legal actions during the ordinary course of our business. We believe that there are currently no claims or legal actions that would, in management's judgment based on information currently available, have a material adverse effect on our results of operations, financial condition or cash flow.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities.

Market Information

Our common stock has been traded on the NASDAQ Global Market since November 1, 2007 under the symbol "NSPH". The following table sets forth the high and low sale prices for our common stock for each quarter of our two most recent fiscal years, as reported on the NASDAQ Global Market for the period indicated.

	High	Low
Fiscal year ended December 31, 2011		
First Quarter	$ 5.54	$ 2.97
Second Quarter	3.60	1.46
Third Quarter	2.41	0.91
Fourth Quarter	1.75	0.89
Fiscal year ended December 31, 2010		
First Quarter	$ 6.80	$ 3.15
Second Quarter	6.46	4.20
Third Quarter	5.09	2.91
Fourth Quarter	5.95	4.16

Stockholders

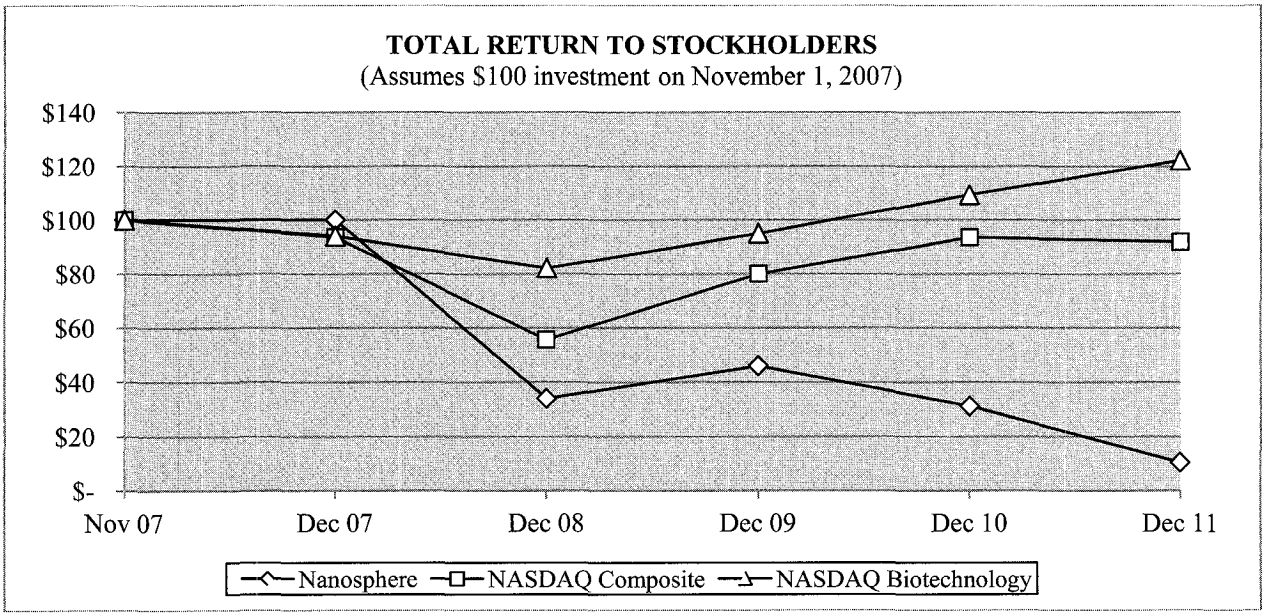
The last reported sale price of common stock on February 15, 2012 as reported on the NASDAQ Global Market was $1.79. As of February 15, 2012, there were 80 holders of record of our common stock.

Dividend Policy

We have never declared or paid any cash dividends on our common stock and do not expect to pay any dividends for the foreseeable future. We currently intend to retain any future earnings to fund the operation, development and expansion of our business. Any future determination to pay dividends will be at the sole discretion of our board of directors and will depend upon a number of factors, including our results of operations, capital requirements, financial condition, future prospects, contractual arrangements, restrictions imposed by applicable law, any limitations on payments of dividends present in our current and future debt arrangements, and other factors our board of directors may deem relevant.

Stock Performance Graph

The following graph shows a comparison of cumulative total stockholder returns for our common stock, the NASDAQ Composite Index and the NASDAQ Biotechnology Index. The graph assumes the investment of $100 on November 1, 2007, the date of our initial public offering and listing of our common stock on the NASDAQ Global Market, and the reinvestment of all dividends. The performance shown is not necessarily indicative of future performance.



Investment Return Analysis	November 2007	December 2007	December 2008	December 2009	December 2010	December 2011
Nanosphere	$ 100.00	$ 99.93	$ 34.00	$ 46.00	$ 31.14	$ 10.50
NASDAQ Composite	$ 100.00	$ 93.55	$ 55.63	$ 80.04	$ 93.58	$ 91.89
NASDAQ Biotechnology	$ 100.00	$ 94.07	$ 82.19	$ 95.04	$ 109.30	$ 122.21

The information contained in the graph above shall not be deemed to be "soliciting material" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act or the Exchange Act, or subject to Regulation 14A or 14C promulgated under the Exchange Act, other than as provided in Item 402 of the SEC's Regulation S-K, or to the liabilities of Section 18 of the Exchange Act, except to the extent that Nanosphere specifically requests that the information be treated as soliciting material or specifically incorporates it by reference in such filing.

Equity Compensation Plan Information

The following table provides information as of December 31, 2011 with respect to shares of the Company's common stock that may be issued under the 2007 Plan, which is the Company's only existing equity compensation plan under which grants can be made. Stockholders approved the Company's 2007 Plan on March 27, 2007.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding awards (a)	Weighted Average exercise price of outstanding awards (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column(a)) (c)
Equity compensation plans approved by stockholders	4,663,760	$5.09	1,725,806
Equity compensation plans not approved by stockholders	—	—	—
Total	4,663,760	$5.09	1,725,806

Pursuant to the evergreen provision, an additional 900,000 shares of common stock were authorized for issuance under the 2007 Plan as of January 1, 2012.

Item 6. Selected Financial Data.

The following selected financial data should be read in conjunction with, and is qualified by reference to, our financial statements and related notes and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this report.

	As of December 31,				
Statements of Operations Data:	**2011**	**2010**	**2009**	**2008**	**2007**
	(in thousands, except per share data)				
Total revenue	$ 2,533	$ 2,026	$ 2,214	$ 1,367	$ 1,167
Research and development expense	20,013	18,821	18,608	23,675	21,446
Sales, general and administrative expense	16,154	22,007	14,472	13,616	13,443
Net loss	(35,419)	(40,612)	(33,949)	(37,042)	(53,199)
Net loss attributable to common stock	(35,419)	(40,612)	(33,949)	(37,042)	(59,284)
Net loss per common share: basic and diluted	(0.94)	(1.46)	(1.46)	(1.67)	(14.18)
Weighted average number of common shares: basic and diluted (1)(2)(3)	37,800	27,755	23,302	22,213	4,181

	As of December 31,				
Balance Sheet Data:	**2011**	**2010**	**2009**	**2008**	**2007**
	(in thousands)				
Cash and cash equivalents (1)(2)(3)	$ 39,273	$ 39,628	$ 76,689	$ 75,357	$ 114,313
Working capital (1)(2)(3)	38,729	37,426	71,152	69,027	107,685
Total assets (1)(2)(3)	50,337	51,375	88,669	86,896	125,964
Long-term debt	—	—	—	3,352	7,462
Stockholders' equity (1)(2)(3)	45,609	44,524	79,082	74,541	109,200

(1) In May 2011, we completed an underwritten public offering of 15,686,000 shares of common stock at $2.20 per share. The Company received net proceeds from the Offering of approximately $32.2 million.

(2) In October 2009, we completed an underwritten public offering of 5,405,000 shares of common stock at $7.00 per share. We received approximately $35.4 million of net proceeds from the offering.

(3) In November 2007, we completed our initial public offering of 8,050,000 shares of common stock at $14.00 per share. We received approximately $102 million of net proceeds from the offering. All shares of convertible preferred stock were converted to common stock upon the closing of the initial public offering.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis is based primarily on the financial statements of Nanosphere, Inc. for the years presented and should be read together with the notes thereto contained in this annual report on Form 10-K. Terms employed herein as defined terms, but without definition, have the meanings set forth in the notes to the financial statements (see "Item 8. Financial Statements and Supplementary Data").

Business Overview

We develop, manufacture and market an advanced molecular diagnostics platform, the Verigene System, that enables simple, low cost and highly sensitive genomic and protein testing on a single platform. Our proprietary nanoparticle technology provides the ability to run multiple tests simultaneously on the same sample. The Verigene System includes a bench-top molecular diagnostics workstation that is a universal platform for genomic and protein testing. While many systems currently available on the market provide a diagnostic result for one test or a few tests within a specific market niche, the Verigene System provides for multiple tests to be performed on a single platform, including both genomic and protein assays, from a single sample.

The Verigene System is differentiated by its ease of use, rapid turnaround times and ability to detect many targets on a single test, referred to as "multiplexing." It provides lower cost for laboratories already performing molecular diagnostic testing and enables smaller laboratories and hospitals without advanced diagnostic capabilities to perform genetic testing. Our ability to detect proteins, which can be as much as 100 times more sensitive than current technologies for certain targets, may enable earlier detection of and intervention in diseases associated with known biomarkers as well as the introduction of tests for new biomarkers that exist in concentrations too low to be detected by current technologies. We are focused on the clinical diagnostics market.

Our test menu is designed to fulfill the following unmet hospital laboratory needs:

1) the conversion of microbiology to molecular methods to more rapidly pinpoint infectious diseases;

2) point-of-care pharmacogenetics to ensure that appropriate therapies are prescribed; and

3) earlier detection of life threatening disease through ultra-sensitive protein assays.

The Verigene System is comprised of a microfluidics processor, a touchscreen reader and disposable test cartridges. Certain assays, such as the Warfarin metabolism and hyper-coagulation tests, were cleared by the U.S. Food and Drug Administration ("FDA") for use with the original Verigene System processor (the "Original Processor"). Subsequently, we developed and launched a second generation Verigene System processor (the "Processor *SP*") that handles the same processing steps as the Original Processor and incorporates sample preparation. Some of our current customers continue to use the Original Processor for hyper-coagulation testing and Warfarin metabolism testing. Our development plans are focused on expanding the menu of tests that will run on the Processor *SP*, and we plan to develop and seek regulatory approval of all future assays on the Processor *SP*.

Our Applications

The following table summarizes the FDA and CE In-Vitro Diagnostic Mark ("CE IVD Mark") regulatory status of our near-term genomic and protein assays on the Verigene System:

Assay	FDA Status[1]	CE IVD Mark Status[2]
Infectious Disease Assays		
Respiratory Virus with Sub-Typing	510(k) cleared	CE IVD Marked
Blood Infection Panels		
• Blood Culture – Staphylococcus (BC-S)	510(k) cleared	Part of BC-GP
• Blood Culture – Gram Positive (BC-GP)	510k) pending	CE IVD Marked
• Blood Culture – Gram Negative (BC-GN)	In development	In development
• Blood Culture – Fungal (BC-F)	In development	In development

C. difficile	In development	In development
Enteric Panel	In development	In development
Human and Pharmacogenetic Assays		
Warfarin Metabolism	510(k) cleared[3]	CE IVD Marked
Hyper-Coagulation	510(k) cleared[3]	CE IVD Marked
Plavix® Metabolism (2C19)	510(k) and PMA pending	CE IVD Marked
Ultra-Sensitive Protein Assays		
Cardiac Troponin I	In development	In development
Prostate-Specific Antigen (PSA)	Research use only	

(1) For further description of our FDA regulatory requirements, please refer to the section ***"Regulation by the United States Food and Drug Administration"*** beginning on page 10 of this Annual Report on Form 10-K for the year ended December 31, 2011.
(2) For further description of our CE IVD Mark regulatory requirements, please refer to the section ***"Foreign Government Regulation"*** beginning on page 13 of this Annual Report on Form 10-K for the year ended December 31, 2011.
(3) Currently cleared only for use with the Original Processor.

Infectious Disease Assays

The conversion of microbiology to molecular methods is driven by the need to identify infectious diseases more quickly, allowing a more rapid commencement of clinical intervention. Microbiology labs need tests that can rapidly detect a wide range of potential infectious agents in an automated system. The Verigene System provides the multiplexing, rapid turnaround and ease-of-use needed by these labs. Our infectious disease menu and the Processor *SP* provide microbiology labs with a compelling solution for conversion to molecular testing.

We have received 510(k) clearance from the FDA for our respiratory panel that detects the presence of influenza A and B as well as respiratory syncytial virus ("RSV") A and B. Influenza is commonly known as the seasonal flu and RSV is a respiratory virus that infects the lungs and breathing passages. RSV is the most common cause of bronchitis and pneumonia in children under the age of one year and has become a significant concern for older adults. Our respiratory panel provides physicians with a highly accurate and fast determination of which virus is present. This test result guides the most appropriate treatment therapy.

In the fourth quarter of 2009, we received 510(k) clearance from the FDA for our respiratory panel on the Processor *SP*. We believe that our respiratory assay on the Processor *SP* offers a simple-to-use molecular test for diagnosing respiratory infections and the flu, while providing improved sensitivity over currently available rapid tests. We have received clearance for a package insert change for this assay confirming that the novel H1N1 virus is detected as a positive Influenza A when using our respiratory assay and the Processor *SP*.

In the first quarter of 2011, we received 510(k) clearance from the FDA and CE IVD Mark for our respiratory assay that includes subtyping for seasonal H1 virus, seasonal H3 virus, and the 2009 novel H1N1 virus, commonly known as swine flu, as well as the targets on our previously cleared respiratory assay. We believe this is the first sample-to-result molecular respiratory test to include all of these viruses, thus lowering the cost of molecular respiratory testing for hospitals and demonstrating the multiplexing capability of the Verigene System. The demand for this test will be highly dependent upon the seasonality and prevalence of respiratory viruses.

We are developing blood stream infection panels for the earlier detection of specific bacteria and resistance markers within patients with blood stream infections. These panels include gram positive, gram negative and fungal pathogens and resistance markers. These assays are designed to enable physicians to pinpoint bacterial strains infecting patients and thus prescribe the most appropriate antibiotic regimen within 24 hours rather than after several days. Treatment is sometimes begun before assays are complete and we believe that this early detection capability will allow patients to avoid unnecessary treatments that may expose them to serious side

effects. The first blood stream infection panel developed was the gram positive that represents approximately 65% of blood stream infections. In the fourth quarter of 2011 we received CE IVD Mark for the BC-GP and FDA clearance of BC-S, a subset of the BC-GP panel. The full BC-GP panel is pending FDA 510(k) clearance and BC-GN and BC-F panels are in development.

Our development efforts also include a *C. difficile* test and an enteric bacteria test. *C. difficile* is a bacterium that can cause symptoms ranging from diarrhea to life-threatening inflammation of the colon. Our enteric bacteria assay is being developed to detect and identify the *Enterobacteriaceae* species that most often result from food poisoning. The enteric assay tests for a wide spectrum of bacteria that are treated with various antibiotics and other anti-bacterial drug therapies. These assays also will require regulatory submission to the FDA and corresponding foreign regulatory bodies. We have begun clinical trials for the *C. difficile* test that we believe are necessary to secure regulatory approval.

Human and Pharmacogenetic Assays

Hospitals need faster, less expensive and easier-to-use human and pharmacogenetic tests that can be run for a single patient at the point-of-care. Our Verigene System and human and pharmacogenetic test menu addresses these hospital needs. Pharmacogenomics is an emerging subset of human genetic testing that correlates gene variation with a drug's efficacy or toxicity. These tests play a key role in the advancement of personalized medicine where drug therapies and dosing are guided by each patient's genetic makeup. There is a growing demand on laboratories to implement molecular diagnostic testing, but the cost and complexity of existing technologies and the need for specialized personnel and facilities have limited the number of laboratories with these capabilities. The ease-of-use and reduced complexity of the Verigene System enables any hospital to perform these testing needs.

We have received 510(k) clearance from the FDA for a warfarin metabolism assay performed on our Original Processor. This is a pharmacogenetic test to determine the existence of certain genetic mutations that affect the metabolism of warfarin-based drugs, including Coumadin®, the most-prescribed oral anticoagulant. This assay has been CE IVD Marked during the first quarter of 2011, and we plan to submit an FDA application for this assay to allow its use on the Processor *SP*.

In the third quarter of 2010, we filed a pre-market approval application ("PMA") with the FDA for our cytochrome P-450 2C19 assay that detects genetic mutations associated with deficient metabolism of clopidogrel, more commonly known by the trade name Plavix. On June 9, 2011, we received a "not approvable" letter from the FDA with respect to our PMA submission in which the FDA stated that it will not approve the Plavix metabolism test for commercial use in the United States until the PMA is amended. The FDA cited several deficiencies in our submission that necessitate we perform additional analytical studies and address manufacturing questions. We have completed the analytical studies required by the FDA and have submitted this data in a 510(k) application. Although there can be no assurance that we will receive 510(k) clearance for this product, we expect that any 510(k) clearance will be indicated for the detection of certain 2C19 genetic variances. Our intent is to use the analytical data submitted in the 510(k) application to support a response to the pending PMA, which, if approved, would likely be indicated for the use or avoidance of Plavix. This assay was CE IVD Marked during the first quarter of 2011.

Clopidogrel inhibits platelet function and is a standard treatment to reduce the risk of thrombolytic events for patients undergoing percutaneous coronary interventions. Clopidogrel metabolism is affected by the cytochrome P-450 family of genes. Up to 50% of the population possess variations in these genes and abnormally metabolize this drug, thus increasing the risk of adverse events. Our 2C19 assay is designed to identify patients possessing certain of these variations so that alternative therapeutic approaches can be prescribed to reduce clotting that can result in heart attack or stroke.

We have also received 510(k) clearance from the FDA for a hyper-coagulation assay on the Original Processor that determines an individual's risk, based upon genetic information, for the development of blood clots that can lead to pulmonary embolism and deep vein thrombosis. This assay has been CE IVD Marked during the fourth quarter of 2011, and we plan to submit an FDA application for this assay to allow its use on the Processor *SP*.

Ultra-Sensitive Protein Assays

Our ability to detect proteins at sensitivity levels that can be 100 times greater than current technologies may enable earlier detection of and intervention in diseases as well as enable the introduction of tests for new biomarkers that exist in concentrations too low to be detected by current technologies. We have developed or are currently developing diagnostic tests for markers that reveal the existence of a variety of medical conditions including cardiovascular, respiratory, cancer, autoimmune, neurodegenerative and other diseases.

The first ultra-sensitive protein test we plan to commercialize is for cardiac troponin I ("cTnI"), which is the gold standard biomarker for diagnosis of myocardial infarction, or heart attack, and identification of patients with acute coronary syndromes at risk for subsequent cardiovascular events. We previously submitted a 510(k) application to the FDA to obtain clearance for the cardiac troponin assay on the Original Processor. We have withdrawn this application and plan to submit a new 510(k) application to obtain clearance for this assay on the Processor *SP*. We plan to use patient samples from our FAST-TRAC clinical trial to run the clinical trials in support of our new 510(k) submission. The FAST-TRAC clinical study is designed to further demonstrate the clinical utility of ultra-sensitive cTnI measurements as a diagnostic tool for use in the management of both acute and chronic cardiac disease.

In addition to the cardiac troponin I assay, we are developing an ultra-sensitive prostate-specific antigen ("PSA") test for early diagnosis of recurrent prostate cancer. Early testing data suggest this assay may serve as a more specific test for PSA screening. We are also working on a multiplexed protein-based connective-tissue panel for the detection of rheumatoid arthritis, lupus and other related diseases. Finally, we are investigating new biomarkers where our ultra-sensitive protein detection technology may enable earlier detection of a broad range of diseases, such as cancer.

Intellectual Property

As of December 31, 2011, our patent portfolio is comprised, on a worldwide basis, of 172 issued patents and 26 pending patent applications which we own directly or for which we are the exclusive licensee. Some of these patents and patent applications derive from a common parent patent application or are foreign counterpart patent applications and relate to similar or identical technological claims. The issued patents cover approximately 11 different technological claims and the pending patent applications cover approximately four additional technological claims.

Many of our issued and pending patents were exclusively licensed from the International Institute for Nanotechnology at Northwestern in May 2000, and they generally cover our core technology, including nanotechnology-based biodiagnostics and biobarcode technology. Our issued patents expire between 2017 and 2025. We believe our patent portfolio provides protection against other companies offering products employing the same technologies and methods as we have patented. While we believe our patent portfolio establishes a proprietary position, there are many competitive products utilizing other technologies that do not infringe on our patents.

In addition, as of December 31, 2011, we have non-exclusive licenses for at least 47 U.S. patents that cover 12 different technological claims from various third parties. Most of these license agreements require us to pay the licensor royalty fees that typically expire upon the patent expiration dates, which range from 2012 to 2027. These license agreements are non-exclusive and do not create a proprietary position. The expiration of these non-exclusive licenses will result in the termination of certain royalty payments by us to the licensors.

Financial Operations Overview

Revenue

Product sales revenue is derived from the sale or lease of the Verigene System, including cartridges and related products sold to research laboratories and hospitals. Grant and contract revenue consists of funds received under contracts and government grants, including funds for the reimbursement of certain research and development expenses. Our market efforts are primarily focused on driving product sales rather than grants and contracts. However, the Company will be opportunistic with regard to future contract and grant opportunities.

Cost of Sales

Cost of sales represents the cost of materials, direct labor and other manufacturing overhead costs incurred to produce Verigene cartridges and instruments, as well as royalties on product sales, amortization of purchased intellectual property relevant to products available for sale and depreciation of instrument leases and rentals. Costs associated with custom assay development contracts also include labor associated with assay development, validation and testing.

Research and Development Expenses

Research and development expenses primarily include all costs incurred during the development of the Verigene System instruments and disposable test cartridges, and the expenses associated with fulfilling our development obligations related to the United States government contracts and grants. Such expenses include salaries and benefits for research and development personnel, consulting services, materials, patent-related costs and other expenses. We expense all research and development costs in the periods in which they are incurred. We expect research and development expenses to grow modestly as we continue to develop future generations of the Verigene System instruments, and additional genomic and protein tests.

Sales, General and Administrative Expenses

Sales, general and administrative expenses principally include compensation for employees in our sales, customer service, marketing, management and administrative functions. We also include professional services, facilities, technology, communications and administrative expenses in sales, general and administrative. The professional services costs primarily consist of legal and accounting costs. We expect sales and marketing expenses will increase as additional sales and customer support are needed to drive and support customer growth.

Interest Income

Interest income principally includes interest earned on our excess cash balances. Such balances are primarily invested in money market and bank checking accounts at major financial institutions. We expect that continued low interest rates will significantly limit our interest income in the near term.

Interest Expense

Interest expense includes the interest charges related to our debt borrowings, including non-cash amortization of debt discount and issuance costs.

Fiscal 2011 Compared to 2010

Revenues

Revenues were $2.5 million for fiscal 2011, as compared to $2.0 million for fiscal 2010. Product sales increased from $1.4 million for fiscal 2010 to $2.4 million for fiscal 2011, driven by an increase in consumables revenue and system sales. Contract development and grant revenue was $0.1 million for 2011 as compared to $0.6 million for 2010.

Cost of Sales

For fiscal 2011, cost of sales was $1.8 million, as compared to $2.6 million for fiscal 2010. During 2010, the Company established a valuation reserve of $0.7 million for the Original Processor inventory. This reserve was taken based on the Company's plan to submit future assay applications to the FDA for use only on the Processor *SP*. In addition, license amortization expense was $0.3 million lower in 2011 than 2010 due to the expiration of a licensed patent.

Research and Development Expenses

Research and development expenses were $20.0 million for fiscal 2011 as compared to $18.8 million for fiscal 2010. The $1.2 million increase was driven almost entirely by an increase in goods and materials used for assay development and clinical trials.

Sales, General and Administrative Expenses

Sales, general and administrative expenses decreased from $22.0 million for fiscal 2010 to $16.2 million for fiscal 2011, a decrease resulting from a $6.1 million reduction in litigation defense and settlement expenses related to a patent dispute settled in 2010. In addition, sales, general and administrative expenses increased by $0.8 million in 2011 due to increased regulatory and customer support headcount, which was completely offset by reduced bonus expense in 2011.

U.S. Treasury Grant

During fiscal 2010, the United States Department of the Treasury awarded the Company a grant of $1.0 million for investments in qualifying therapeutic discovery projects under section 48D of the Internal Revenue Code.

Interest Expense

There was no interest expense for fiscal 2011, as compared to $0.3 million for fiscal 2010. The debt financing with Venture Lending and Leasing IV, Inc. and Venture Lending and Leasing V, Inc. matured August 2010.

Interest Income

Interest income was less than $0.1 million for 2011 and for 2010.

Fiscal 2010 Compared to 2009

Revenues

Revenues were $2.0 million for fiscal 2010, as compared to $2.2 million for fiscal 2009. Product sales increased from $1.1 million for fiscal 2009 to $1.4 million for fiscal 2010, driven by an increase in consumables revenue and system sales. Service revenue related to an assay development contract with a major pharmaceutical company was $0.6 million for 2010 as compared to $1.1 million for 2009. This assay development contract was substantially completed in the first half of 2010.

Cost of Sales

For fiscal 2010, cost of sales was $2.6 million, as compared to $2.2 million for fiscal 2009. During 2010, the Company established a valuation reserve of $0.7 million for the Original Processor inventory. This reserve was taken based on the Company's plan to submit future assay applications to the FDA for use only on the Processor *SP*. In addition, the Company withdrew its 510(k) application to the FDA for the cardiac troponin assay on the Original Processor and plans to submit a new 510(k) application for this assay on the Processor *SP*. Partially offsetting the impact of this inventory reserve was a decrease in cost of sales due to lower service revenue.

Research and Development Expenses

Research and development expenses have remained relatively consistent at $18.8 million for fiscal 2010 as compared to $18.6 million for fiscal 2009.

Sales, General and Administrative Expenses

Sales, general and administrative expenses increased from $14.5 million for fiscal 2009 to $22.0 million for fiscal 2010, an increase due to litigation settlement expenses of $3.5 million as well as a $2.6 million increase in litigation defense expenses related to the Eppendorf AG litigation. In addition, non-cash share-based compensation increased $2.4 million due to options and restricted stock granted in the fourth quarter of 2009. Clinical trial expenses associated with the FAST-TRAC Troponin I study decreased approximately $1.5 million during 2010 due to the substantial completion of patient enrollment in 2009.

U.S. Treasury Grant

During fiscal 2010, the United States Department of the Treasury awarded the Company a grant of $1.0 million for investments in qualifying therapeutic discovery projects under section 48D of the Internal Revenue Code.

Interest Expense

Interest expense was $0.3 million for fiscal 2010, as compared to $1.3 million for fiscal 2009. The decrease in interest expense in 2010 resulted from a decrease in the scheduled amortization in accordance with the loan and security agreements with Venture Lending and Leasing. The balance of this debt was fully repaid in August 2010.

Interest Income

Interest income was less than $0.1 million for 2010 and $0.4 million for 2009. The decrease in interest income during the fiscal 2010 resulted from lower interest rates during 2010 as compared to the same period in 2009. In addition, the average cash balance was lower during 2010 as compared to 2009.

Liquidity and Capital Resources

From our inception in December 1999 through December 31, 2011, we have received net proceeds of $103.9 million from the sale of convertible preferred stock and issuance of notes payable that were exchanged for convertible preferred stock, $102.2 million from our November 2007 initial public offering, $35.4 million from our October 2009 underwritten public offering, $32.2 million from our May 2011 underwritten public offering and $10.3 million from government grants. We have devoted substantially all of these funds to research and development and sales, general and administrative expenses. Since our inception, we have generated minimal revenues from the sale of the Verigene System, including consumables and related products, to our initial clinical customers, research laboratories and government agencies. We also incurred significant losses and, as of December 31, 2011, we had an accumulated deficit of approximately $315.3 million. While we are currently in the commercialization stage of operations, we have not yet achieved profitability and anticipate that we will continue to incur net losses in the foreseeable future.

Because we recently began to expand the test menu available on the Verigene *SP*, we do not anticipate achieving positive operating cash flow in at least the next two years. During this period we expect to increase investment in additional manufacturing scale-up, and to add to sales, marketing and customer support personnel. Achievement of positive cash flow from operations will depend upon revenue resulting from adoption of both our current products and future products that depend upon regulatory clearance. Demand for our respiratory products is directly proportional to the size and duration of the annual season for influenza and other respiratory illnesses. Any unanticipated acceleration or deceleration of customer demand for our products relative to projections will have a material effect on our cash flows. While the Company anticipates that capital resources will be sufficient to meet estimated needs for at least twelve months, the Company operates in a market that makes its prospects difficult to evaluate, and the Company will need additional financing in the future to execute on its current or future business strategies. Capital outlays and operating expenditures may increase over the next few years as the Company expands its infrastructure, commercialization, manufacturing, and research and development activities.

A customer may purchase the Verigene System instruments, lease them from a third party or enter into a reagent rental agreement. Our reagent rental agreements include customer commitments to purchase a certain minimum volume of cartridges over the term of the agreement. As part of these agreements, a portion of the charge for each cartridge is a rental fee for use of the equipment. We may need to increase our investment in systems rented to customers to support future customer growth through reagent rental agreements. We have established a relationship with a third party financing company to provide our customers with lease financing for Verigene equipment. This arrangement may help mitigate the demand on our capital resources as it allows us to recover the cost of such systems immediately, instead of over three to five years.

As of December 31, 2011, we had $39.3 million in cash and cash equivalents, compared to $39.6 million at December 31, 2010. Cash used in operations of $31.5 million for the year ended December 31, 2011 was down slightly as compared to $31.6 million in the year ended December 31, 2010. Cash used in operations for the year ended December 31, 2010 increased to $31.6 million from $27.9 million for the year ended December 31, 2009 due primarily to a lump sum payment to settle a patent litigation dispute.

Net cash used in investing activities decreased to $1.0 million for the year ended December 31, 2011 compared to $1.6 million for the year ended December 31, 2010. This $0.6 million decrease was predominantly driven by the reduction in capitalized license fees paid. Net cash used in investing activities was relatively consistent at $1.6 million for the year ended December 31, 2010 compared to $1.8 million for the year ended December 31, 2009.

Net cash provided by financing activities increased to $32.1 million for the year ended December 31, 2011 compared to $3.9 million in cash used for financing activities for the year ended December 31, 2010. This increase in cash flow was driven by the May 2011 underwritten public offering of 15,686,000 shares at $2.20 per share that provided approximately $32.2 million in net proceeds. Net cash used in financing activities was $3.9 million for the year ended December 31, 2010, compared to cash provided by financing activities of $31.1 million for the year ended December 31, 2009. In October 2009, we completed our public offering of 5,405,000 shares of common stock at $7.00 per share. We received approximately $35.4 million of net proceeds from this offering.

We may need to increase our capital outlays and operating expenditures over the next several years as we expand our product offering, drive product adoption, further scale-up manufacturing and implement product cost savings. The amount and the timing of the additional capital we will need to raise depends on many factors, including:

- the level of research and development investment required to maintain and improve our technology;
- the amount and growth rate of our revenues;
- changes in product development plans needed to address any difficulties in manufacturing or commercializing the Verigene System and enhancements to our system;
- the costs of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights;
- competing technological and market developments;
- our need or decision to acquire or license complementary technologies or acquire complementary businesses; and
- changes in regulatory policies or laws that affect our operations.

We cannot be certain that additional capital will be available when and as needed or that our actual cash requirements will not be greater than anticipated. If we require additional capital at a time when investment in diagnostics companies or in the marketplace in general is limited due to the then prevailing market or other conditions, we may not be able to raise such funds at the time that we desire or any time thereafter. In addition, if we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly-issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we obtain additional debt financing, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, and the terms of the debt securities issued could impose significant restrictions on our operations. If we raise additional funds through collaborations and licensing arrangements, we might be required to relinquish significant rights to our technologies or products, or grant licenses on terms that are not favorable to us.

Income Taxes

Since inception, we have incurred operating losses and, accordingly, have not recorded a provision for income taxes for any of the periods presented. As of December 31, 2011, we had net operating loss carryforwards for federal and state income tax purposes of $219 million. The Company also has federal research and development tax credit carryforwards of $10 million which will begin to expire in 2020. Section 382 of the Internal Revenue Code subjects the utilization of net operating loss and credit carryforwards to an annual limitation that is applicable if the Company experiences an ownership change. The Company believes its public offerings and/or prior equity investments may have triggered an ownership change as defined by the Internal Revenue Code. However, the Company has yet to perform the computations under Section 382 which would determine the amount of annual limitation on its utilization of its net operating loss and tax credit carryforwards. The annual limitation may result in the expiration of the Company's net operating loss and tax credit carryforwards before they can be used.

Contractual Obligations and Commitments

As of December 31, 2011, the annual amounts of future minimum payments under certain of our contractual obligations were (in thousands):

	Payments Due by Period				
Contractual Obligations	**Total**	**Less than 1 Year**	**1-3 Years**	**3-5 Years**	**More than 5 Years**
Operating lease	$ 1,080	$ 439	$ 641	$ —	$ —
Obligations under license agreements	2,754	781	1,158	335	480
Total	$ 3,834	$ 1,220	$ 1,799	$ 335	$ 480

On July 9, 2010, the Company executed a worldwide non-exclusive license agreement (the Agreement") to utilize certain patented technology believed by the Company to be useful in the manufacture of certain of its current and future products. Under the terms of the Agreement, the Company will pay a license and technology transfer fee of $1,865,000, payable in four installments. The first installment of $165,000 was due upon the execution of the Agreement, the second installment of $350,000 was paid on July 9, 2011, and the remaining installments of $600,000 and $750,000 are payable on July 9, 2012 and 2013, respectively. These fees represent full payment for use of the licensed patents during the term of the Agreement, which ends on the expiration date of the last patent issued and licensed under the Agreement.

License Agreements

We have entered into several nonexclusive license agreements with various companies covering certain technologies which are embedded in the Company's diagnostic instruments and diagnostic test products. Since inception, we have paid aggregate initial license fees of $3.2 million for these licenses, and have agreed to pay a percentage of net sales as royalties, in percentage amounts ranging from less than 1% to 12%. Certain of the license agreements have minimum annual royalty payments, and such minimum payments are as shown above. These licenses expire at various times, corresponding to the subject patents expirations, which currently range from 2012 to 2027.

We have entered into a license agreement with Northwestern which provides us with an exclusive license to certain patents and patent applications related to the application of nanotechnology to biodiagnostics and to biobarcode technology. This license covers all discoveries from the International Institute for Nanotechnology at Northwestern in the field of biodiagnostics through January 1, 2013. Nanosphere also has the right of first negotiation for an exclusive license on inventions after such date. Our research team utilizes the research and patents developed at Northwestern to develop diagnostic applications including additional genomic and protein testing assays for use in the Verigene System.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet financing or unconsolidated special-purpose entities.

Critical Accounting Policies and Significant Judgments and Estimates

This discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as revenues and expenses during the reporting periods. We evaluate our estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results could therefore differ materially from those estimates under different assumptions or conditions.

Our significant accounting policies are described in Note 3 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K. We believe the following critical accounting policies reflect our more significant estimates and assumptions used in the preparation of our financial statements.

Revenue Recognition

We recognize revenue under grants and contracts and for reimbursement of related research and development expenses at the time the relevant expenses are incurred. For product sales, revenue is recognized when persuasive evidence of an arrangement exists, title and risk of loss is transferred to customers, the price to the buyer is fixed or determinable, and collectability is reasonably assured.

Verigene System instrument units are sold outright to customers or leased to customers pursuant to operating leases. We recognize revenue from sales of the Verigene System, including cartridges and related products, when the risks and rewards of ownership are transferred to the customer. Revenue for Verigene System instrument units leased under operating lease arrangements is recognized on an installment basis over the life of the lease while the cost of the leased equipment is carried on the Company's balance sheet and fully amortized over the life of lease arrangements.

Stock-Based Compensation Expense

We have granted share-based compensation consisting of restricted stock and common stock options issued to employees, consultants and founders. Compensation expense is recognized based on the fair value of the stock-based awards granted utilizing various assumptions regarding the underlying attributes of the options and our common stock. The estimated fair value of options granted, net of forfeitures expected to occur during the vesting period, is determined using the Black-Scholes option-pricing model and then amortized as compensation expense on a straight-line basis over the vesting period of the options. All of the stock options granted prior to November 2007 have exercise prices at or above the estimated fair value of the common stock on the date of grant, as

determined by our board of directors prior to our initial public offering in November 2007, who used their knowledge of us and our affairs along with third-party valuation assessments, to determine the fair value of our common stock. For option grants after our initial public offering, we use the fair value of our common stock as determined by the closing price of our common stock on NASDAQ on the date of grant. In addition to the grant date fair value of our common stock, the Black-Scholes model requires inputs for risk-free interest rate, dividend yield, volatility and expected lives of the options. Due to the Company's limited period of trading activity as a public company from 2007 through the third quarter of 2009, the expected volatility of option grants prior to the fourth quarter of 2009 was based on historical data from various peer public companies with similar product portfolios. The expected volatility for option awards granted in the fourth quarter of 2009 and in subsequent periods was based on the Company's actual historical volatility. The expected life of options that vest ratably over four years of service is derived from the average of the vesting period and the term of the option following the guidance in SEC Staff Accounting Bulletins No. 107 and 110. The Company estimates the expected life of options with accelerated vesting terms giving consideration to the dates that the Company expects to achieve key milestones under the option agreements and the term of the option. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of the grant.

Recent Accounting Pronouncements

In October 2009, the FASB issued authoritative guidance that amends existing guidance for identifying separate deliverables in a revenue-generating transaction where multiple deliverables exist, and provides guidance for allocating and recognizing revenue based on those separate deliverables. The guidance is expected to result in more multiple-deliverable arrangements being separable than under current guidance. This guidance was effective for us beginning on January 1, 2011 and was required to be applied prospectively to new or significantly modified revenue arrangements. This guidance did not have a material impact on our financial statements in 2011.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Our exposure to market risk is currently confined to our cash and cash equivalents. We have not used derivative financial instruments for speculation or trading purposes. The primary objective of our investment activities is to preserve our capital for the purpose of funding operations while at the same time maximizing the income we receive from our investments without significantly increasing risk. To achieve these objectives, our investment policy allows us to maintain a portfolio of cash equivalents and short-term investments through a variety of securities, including commercial paper, money market funds and corporate debt securities. Our cash and cash equivalents through December 31, 2011 included amounts in bank checking and liquid money market accounts. As a result, we believe we have minimal interest rate risk; however, a one percentage point decrease in the average interest rate on our portfolio, if such a decrease were possible, would have reduced our interest income to $0 for the twelve month period ended December 31, 2011.

Item 8. Financial Statements and Supplementary Data.

The following financial statements and the related notes thereto, of Nanosphere, Inc. and the Report of Independent Registered Public Accounting Firm, Deloitte & Touche LLP, are filed as a part of this Form 10-K.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Nanosphere, Inc.
Northbrook, Illinois

We have audited the accompanying balance sheets of Nanosphere, Inc. (the "Company") as of December 31, 2011 and 2010, and the related statements of operations, stockholders' equity (deficit), and cash flows for each of the three years in the period ended December 31, 2011. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2011 and 2010, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2011, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2011, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 15, 2012 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois
February 15, 2012

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Nanosphere, Inc.
Northbrook, Illinois

We have audited the internal control over financial reporting of Nanosphere, Inc. (the "Company") as of December 31, 2011, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the financial statements as of and for the year ended December 31, 2011 of the Company and our report dated February 15, 2012 expressed an unqualified opinion on those financial statements.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois
February 15, 2012

Nanosphere, Inc.
Balance Sheets
(dollars in thousands)

	As of December 31,	
	2011	2010
CURRENT ASSETS:		
Cash and cash equivalents	$ 39,273	$ 39,628
Accounts receivable	861	198
Inventories	2,325	2,428
Other current assets	248	673
Total current assets	42,707	42,927
PROPERTY AND EQUIPMENT — Net	4,522	5,142
INTANGIBLE ASSETS — Net of accumulated amortization	3,033	3,231
OTHER ASSETS	75	75
TOTAL	$ 50,337	$ 51,375
CURRENT LIABILITIES:		
Accounts payable	$ 1,794	$ 3,352
Accrued compensation	342	794
Other current liabilities	1,842	1,355
Total current liabilities	3,978	5,501
LONG-TERM LIABILITIES:		
Other noncurrent liabilities	750	1,350
Total liabilities	4,728	6,851
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY:		
Common stock, $0.01 par value; 100,000,000 shares authorized; 44,070,437 shares and 28,408,506 shares issued and outstanding as of December 31, 2011 and 2010, respectively	441	284
Preferred stock, $0.01 par value; 10,000,000 shares authorized; no shares issued	—	—
Additional paid-in capital	359,493	318,714
Warrants to acquire common stock	992	5,424
Accumulated deficit	(315,317)	(279,898)
Total stockholders' equity	45,609	44,524
TOTAL	$ 50,337	$ 51,375

See notes to financial statements.

Nanosphere, Inc.
Statements of Operations
(dollars and shares in thousands except per share data)

	Years Ended December 31,		
	2011	**2010**	**2009**
REVENUE:			
Product sales	$ 2,433	$ 1,416	$ 1,124
Grant and contract revenue	100	610	1,090
Total revenue	2,533	2,026	2,214
COSTS AND EXPENSES:			
Cost of sales	1,820	2,597	2,175
Research and development	20,013	18,821	18,608
Sales, general, and administrative	16,154	22,007	14,472
Total costs and expenses	37,987	43,425	35,255
Loss from operations	(35,454)	(41,399)	(33,041)
OTHER INCOME (EXPENSE):			
Foreign exchange gain (loss)	(13)	4	(4)
U.S. Treasury grant	—	978	—
Interest expense	—	(274)	(1,258)
Interest income	48	79	354
Total other income (expense)	35	787	(908)
NET LOSS	$ (35,419)	$ (40,612)	$ (33,949)
Net loss per common share – basic and diluted	$ (.94)	$ (1.46)	$ (1.46)
Weighted average number of common shares outstanding – basic and diluted	37,800	27,755	23,302

See notes to financial statements.

Nanosphere, Inc.
Statements of Stockholders' Equity (Deficit)
(dollars and shares in thousands)

	Common Stock Shares	Common Stock Par Value	Additional Paid-In Capital	Warrants To Acquire Common Stock	Accumulated Deficit	Total
BALANCE — January 1, 2009	22,229	$ 222	$ 274,232	$ 5,424	$ (205,337)	$ 74,541
Share-based compensation	672	7	2,528	—	—	2,535
Exercise of stock options on common stock	116	1	521	—	—	522
Issuance of common stock from public offering, net of offering expenses	5,405	54	35,379	—	—	35,433
Net loss					(33,949)	(33,949)
BALANCE — December 31, 2009	28,422	284	312,660	5,424	(239,286)	79,082
Share-based compensation	—	—	6,019	—	—	6,019
Exercise of stock options on common stock	9	—	35	—	—	35
Forfeiture of restricted stock	(22)	—	—	—	—	—
Net loss					(40,612)	(40,612)
BALANCE — December 31, 2010	28,409	284	318,714	5,424	(279,898)	44,524
Share-based compensation	29	—	4,411	—	—	4,411
Issuance of common stock from public offering, net of offering expenses	15,686	157	32,021	—	—	32,178
Forfeiture of restricted stock	(54)	—	(85)	—	—	(85)
Expiration of warrants to acquire common stock	(22)	—	4,432	(4,432)	—	—
Net loss					(35,419)	(35,419)
BALANCE — December 31, 2011	44,070	$ 441	$ 359,493	$ 992	$ (315,317)	$ 45,609

See notes to financial statements.

Nanosphere, Inc.
Statements of Cash Flows
(dollars in thousands)

	Years Ended December 31,		
	2011	2010	2009
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$ (35,419)	$ (40,612)	$ (33,949)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	2,667	3,343	3,067
	—		
Amortization of financing costs and accretion of debt discount		119	499
Loss from write-off of intangible assets	—	292	—
Loss from disposal of fixed assets	28	21	3
Share-based compensation	4,411	6,019	2,534
Changes in operating assets and liabilities:			
Accounts receivable	(663)	537	(349)
Inventories	(1,163)	(865)	(1,335)
Other current assets	425	(318)	205
Accounts payable	(1,547)	1,036	519
Accrued and other current liabilities	(215)	(1,199)	856
Net cash used in operating activities	(31,476)	(31,627)	(27,950)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of property and equipment	(622)	(710)	(1,327)
Investments in intangible assets	(350)	(865)	(507)
Other	—	23	—
Net cash used in investing activities	(972)	(1,552)	(1,834)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Repayment of long-term debt	—	(3,917)	(4,818)
Payments on capital lease obligation	—	—	(21)
Proceeds from the issuance of common stock, net of offering expenses	32,178	—	35,433
Payments for restricted stock net settled upon vesting	(85)	—	—
Proceeds from stock option exercises	—	35	522
Net cash (used in) provided by financing activities	32,093	(3,882)	31,116
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(355)	(37,061)	1,332
CASH AND CASH EQUIVALENTS — Beginning of year	39,628	76,689	75,357
CASH AND CASH EQUIVALENTS — End of year	$ 39,273	$ 39,628	$ 76,689
NONCASH INVESTING AND FINANCING ACTIVITIES:			
Capital expenditures included in accounts payable	$ —	$ —	$ 206
License costs capitalized and included in other current liabilities	—	350	278
License costs capitalized and included in other noncurrent liabilities	—	1,350	—
Reclassification of inventory to property and equipment	1,266	1,378	252

See notes to financial statements.

Nanosphere, Inc.

Notes to Financial Statements
As of December 31, 2011 and 2010, and
For the years ended December 31, 2011, 2010 and 2009

1. Description of Business

Nanosphere, Inc. (the "Company") develops, manufactures and markets an advanced molecular diagnostics platform, the Verigene System, that enables simple, low cost, and highly sensitive genomic and protein testing on a single platform.

Basis of Presentation — The accompanying financial statements have been prepared on a going-concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business.

2. Liquidity and Capital Resources

The Company has incurred net losses attributable to common stock of $315.3 million since inception, and has funded those losses primarily through the sale and issuance of equity securities and secondarily through the issuance of debt. While the Company is no longer in the development stage and the focus of the Company's business activities has turned towards commercialization of its products, because of the numerous risks and uncertainties associated with its product development and commercialization efforts, the Company is unable to predict when it will become profitable, and the Company may never become profitable. While the Company anticipates that capital resources will be sufficient to meet estimated needs for at least twelve months, the Company operates in a market that makes its prospects difficult to evaluate, and the Company will need additional financing in the future to execute on its current or future business strategies. Capital outlays and operating expenditures may increase over the next few years as the Company expands its infrastructure, commercialization, manufacturing, and research and development activities.

3. Summary of Significant Accounting Policies

Cash and Cash Equivalents — The Company considers all highly liquid investments with a maturity of three months or less, at date of purchase, to be cash equivalents. The majority of these funds are held in interest-bearing money market and bank checking accounts. Interest income is recorded on the accrual basis as earned.

Receivables — Accounts receivable consists of amounts due to the Company for sales of the Verigene system as well as amounts due under various contracts and government grants. An allowance for doubtful accounts is not recorded because the Company has no history of uncollectible receivables and there are no specifically identified uncollectible accounts.

Inventories — Inventories are carried at the lower of cost or market, using the first-in, first-out method. Certain finished goods inventory is ultimately leased rather than sold, and upon the lease date is transferred to Property and equipment and subsequently depreciated to Cost of sales over the period indicated below.

Property and Equipment — Property and equipment are recorded at cost and depreciated using the straight-line method over the assets' estimated useful lives, which are:

Equipment with customers	3-5 years
Computers and office equipment	3 years
Engineering and laboratory equipment, including tooling	3-5 years
Furniture and fixtures	7 years
Manufacturing equipment	5-7 years

The economic life of the Company's equipment with customers is based on the original term of the lease, which is typically three years. The Company believes that this is representative of the period during which the instrument is expected to be economically usable.

Assets classified as leasehold improvements are amortized over the shorter of their estimated useful lives or the lease term using the straight-line method. Maintenance and repair costs are expensed as incurred.

Intangible Assets — Intangible assets are stated at cost less accumulated amortization and consist of purchased intellectual property. Purchased intellectual property represents licenses and is associated with patents owned by third-parties for technologies which are embedded in the Company's diagnostic instruments and diagnostic test products that the Company licensed in anticipation of sales of such products. Amortization of upfront license fees begins upon the initial use of the licensed technology and is calculated using the straight-line method over the remaining expected lives of the licensed technology, which range from less than one year to 15.25 years. Such amortization of upfront license fees is classified in Cost of sales on the statement of operations. Purchased intellectual property also includes purchased patents and patent rights. These patents and patent rights are amortized using a straight-line method over the remaining 8.5 years of the patent, and the amortization expense is classified in research and development expense on the statement of operations.

Deferred Financing Costs — Deferred financing costs of $0.1 million incurred in connection with the Company's issuance of debt was amortized over the life of the debt using the effective interest rate method with amortization of such costs being charged to interest expense.

Impairment of Long-Lived Assets — The Company assesses the recoverability of long-lived assets, including intangible assets, by periodically evaluating the carrying value of such assets whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. If impairment is indicated, the Company will value the asset at its estimated fair value.

Use of Estimates — The preparation of 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 amounts reported in the financial statements and the notes thereto. The Company's significant estimates included in the preparation of the financial statements are related to inventories, property and equipment, intangible assets, service revenue and share-based compensation. Actual results could differ from those estimates.

Revenue Recognition — The Company recognizes revenue from product sales and contract arrangements. The Company recognizes revenue from product sales when there is persuasive evidence that an arrangement exists, delivery has occurred, the price is fixed or determinable and collectability is reasonably assured. Verigene System instrument units are sold outright to customers or leased to customers pursuant to operating leases. The Company recognizes revenue from sales of the Verigene System, including cartridges and related products, when the risks and rewards of ownership are transferred to the customer. The Company evaluates the financial position and payment history for each international distribution partner and recognizes revenue from these distributors only when timely collectability can be reasonably assured. Revenue for Verigene System instrument units sold under operating lease arrangements is recognized on an installment basis over the life of the lease while the cost of the leased equipment is carried on the Company's balance sheet in Property and equipment and depreciated over its estimated useful life to Cost of sales.

Shipping and handling costs are expensed as incurred and included in Cost of sales. In those cases where the Company bills shipping and handling costs to customers, the amounts billed are classified as product sales.

Grant and government sponsored research revenue and contract revenue related to research and development services are recognized as the related services are performed based on the performance requirements of the relevant contract. Under such agreements, the Company is required to perform specific research and development activities and is compensated either based on the costs or costs plus a mark-up associated with each specific contract over the term of the agreement or when certain milestones are achieved.

Research and Development Costs — Research and development costs are expensed as incurred.

U.S. Treasury Grant — During 2010, the United States Department of the Treasury awarded the Company a grant of approximately $1.0 million for investments in qualifying therapeutic discovery projects under section 48D of the Internal Revenue Code. The proceeds from this grant are classified in "Other income (expense) - U.S. Treasury Grant" on the statement of operations.

Income Taxes — The Company accounts for income taxes, including uncertain tax positions, under the provisions of Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 740 "Accounting for Income Taxes". This Topic requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial reporting and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. An allowance is provided to reduce net deferred tax assets to the amount management believes will, more likely than not, be recovered.

Share-Based Compensation — The Company recognizes share-based compensation expense related to restricted stock and common stock options issued to employees, consultants and directors. ASC Topic 718 "Stock Compensation" provides for recognition of compensation expense based on the fair value of the stock-based compensation utilizing various assumptions regarding the underlying attributes of the options and stock. The estimated fair value of options granted, net of forfeitures expected to occur during the vesting period, is amortized as compensation expense on a straight-line basis over the service period of the options.

Fair Value of Financial Instruments — The carrying amount of the Company's financial instruments, including cash and cash equivalents, accounts receivable and accounts payable approximate their fair values.

New Accounting Standards — In October 2009, the FASB issued authoritative guidance that amends existing guidance for identifying separate deliverables in a revenue-generating transaction where multiple deliverables exist, and provides guidance for allocating and recognizing revenue based on those separate deliverables. The guidance is expected to result in more multiple-deliverable arrangements being separable than under current guidance. This guidance was effective for the Company beginning on January 1, 2011 and was required to be applied prospectively to new or significantly modified revenue arrangements. This guidance did not have a material impact on the Company's financial statements in 2011.

Net Loss Per Common Share — Basic and diluted net loss per common share have been calculated in accordance with ASC Topic 260, "Earnings Per Share", for the years ended December 31, 2011, 2010 and 2009. As the Company had a net loss in each of the periods presented, basic and diluted net loss per common share are the same.

The computation of basic net loss per common share for the years ended December 31, 2011 and 2010 excluded 354,000 and 650,000 shares of restricted stock, respectively (see Note 6). While these restricted shares of stock are included in outstanding shares on the balance sheet at December 31, 2011 and 2010, these restricted shares are excluded from basic net loss per common share in accordance with ASC Topic 260 due to the forfeiture provisions associated with these shares.

The computations of diluted net loss per common share for the years ended December 31, 2011, 2010 and 2009 did not include the outstanding shares of restricted stock as well as the effects of the following options to acquire common stock and common stock warrants as the inclusion of these securities would have been antidilutive:

	Year ended December 31,		
	2011	2010	2009
Restricted stock	354,000	650,000	672,500
Stock options	4,663,760	4,208,830	4,338,695
Common stock warrants	164,925	1,300,119	1,300,119
	5,182,685	6,158,949	6,311,314

4. Intangible Assets

Intangible assets, consisting of purchased intellectual property, as of December 31, 2011 and 2010 comprise the following (in thousands):

	December 31, 2011			December 31, 2010		
	Cost	Accumulated Amortization	Net	Cost	Accumulated Amortization	Net
Intellectual property - licenses	$ 4,036	$ (1,392)	$ 2,644	$ 4,036	$ (1,241)	$ 2,795
Patents	455	(66)	389	455	(19)	436
	$ 4,491	$ (1,458)	$ 3,033	$ 4,491	$ (1,260)	$ 3,231

On July 9, 2010, the Company executed a worldwide non-exclusive license agreement ("the License Agreement") for a fee of $1,850,000 to utilize certain patented technology believed by the Company to be useful in the manufacture of certain of its current and future products. Under the terms of the License Agreement, the Company will pay a license and technology transfer fee, payable in four installments. The license fee is reflected in "Intangible Assets — Net of accumulated amortization" in the balance sheet and amounts as of December 31, 2011 and 2010 were $1,813,000 and $1,850,000 respectively. The first installment of $165,000, including a $15,000 of technology transfer fee, was paid upon the execution of the License Agreement. The second installment of $350,000 was paid on July 9, 2011. The next installment of $600,000 is payable on July 9, 2012 and is reflected in "Current Liabilities – Other Current Liabilities" on the balance sheet as of December 31, 2011. The final installment of $750,000 is payable July 9, 2013, and is reflected in "Long-Term Liabilities - Other Noncurrent Liabilities" on the balance sheet as of December 31, 2011.

These fees represent full payment for use of the licensed patents during the term of the License Agreement, which ends on the expiration date of the last patent issued and licensed under the License Agreement.

The Company acquired patents and patent rights from Eppendorf AG on August 18, 2010. See Note 10.

Amortization expense for intangible assets was $0.2 million, $0.5 million and $0.3 million for the years ended December 31, 2011, 2010, and 2009, respectively. Estimated future amortization expense is as follows (in thousands):

Years Ending December 31	
2012	$ 325
2013	325
2014	325
2015	320
2016	307
Thereafter	$ 1,431

Licenses are amortized from the date of initial use of the licensed technology and such amortization continues over the remaining life of the license. The future amortization expense reflected above is based on licenses for which the licensed technology is being used as of December 31, 2011. The amortization period related to $1.8 million of licenses began in the fourth quarter 2011 when the Company began using the licensed technology. During the year ended December 31, 2010, the Company wrote off capitalized license fees of $0.3 million associated with licenses which the Company did not plan to utilize in the Verigene System. There were no license costs written off in the years ended December 31, 2011 and 2009.

5. Related Party Transactions

Dr. Chad Mirkin, a co-founder of the Company, provides contracted research and development services to the Company and is reimbursed for these services based upon negotiated contract rates. The Company incurred expenses of $0.1 million for these services in each of the years ended December 31, 2011, 2010 and 2009.

Alpha-Tech, LLC, a 5% stockholder of the Company, and Anda-Proquest, LLC, an affiliate of Alpha-Tech, LLC, purchased 1,350,000 shares each of the Company's common stock at $2.20 per share in the Company's May 2011 underwritten public offering on the same terms and conditions as all non-affiliate investors in the offering. Mark Slezak, a director of the Company, is the managing member of Alpha-Tech, LLC and Anda-Proquest, LLC.

6. Equity Incentive Plans

The Company's 2000 Equity Incentive Plan, as amended (the "2000 Plan"), permitted the grant of options to employees, founders, and consultants for up to 1,600,000 shares of common stock. Option awards are generally granted with an exercise price equal to the fair value of the Company's common stock at the date of grant; those option awards have various vesting structures and have 10 year contractual terms. In connection with the approval of the 2007 Plan as defined below, the Company terminated the 2000 Plan and therefore, the Company may not make any further awards of options, share appreciations rights or restricted shares under the 2000 Plan.

In March 2007, the Company's board of directors adopted and its shareholders approved the Nanosphere 2007 Long-Term Incentive Plan (the "2007 Plan"). The 2007 Plan authorizes the grant of stock options, share appreciation rights, restricted shares, restricted share units, unrestricted shares, incentive stock options, deferred share units and performance awards. The total awards originally authorized under the 2007 Plan was 4,106,009 shares, plus up to an additional 773,591 shares of common stock that will become available in the event that awards made under the 2000 Plan expire, are forfeited or cancelled, plus an annual increase in the number of shares pursuant to the evergreen provision equal to the least of: 900,000 shares of common stock; 4.0% of the Company's outstanding shares of common stock as of fiscal year end; and an amount determined by the board of directors. Pursuant to the evergreen provision, an additional 900,000 shares of common stock were authorized for issuance under the 2007 Plan as of January 1, 2010, 2011 and 2012.

Certain options vest ratably over four years of service, while other options vest after seven years of service but provide for accelerated vesting contingent upon the achievement of various company-wide performance goals, such as decreasing time to market for new products and entering into corporate collaborations (as defined in the option grant agreements). For these "accelerated

vesting" options, 20-25% of the granted option shares will vest upon the achievement of each of four or five milestones as defined in the option grant agreements, with any remaining unvested options vesting on the seven year anniversary of the option grant dates. Approximately 39% of the options granted and outstanding contain "accelerated vesting" provisions. The service period over which compensation expense is recognized for options which include the accelerated vesting provision is the shorter of the seven year cliff term or the projected timeframe for achieving the company-wide performance goals.

The fair values of the Company's option awards were estimated at the dates of grant using the Black-Scholes option pricing model with the following assumptions:

	2011	2010	2009
Expected dividend yield	0%	0%	0%
Expected volatility	90%	100%	97%
Risk free interest rate	1.32%	2.46%	2.42%
Weighted-average expected option life	5.3 years	6.1 years	6.1 years
Estimated weighted-average fair value on the date of grant based on the above assumptions	$ 1.28	$ 3.99	$ 4.59
Estimated forfeiture rate for unvested options	0.4%	11.9%	4.4%

Due to the Company's limited period of trading activity as a public company from 2007 through the third quarter of 2009, the expected volatility was based on historical data from various peer public companies with similar product portfolios. The expected volatility for option awards granted in the fourth quarter of 2009 and during 2010 and 2011 was based on the Company's actual historical volatility. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of the grants for periods consistent with the expected life of the option. The expected life of options that vest ratably over four years of service is derived from the average of the vesting period and the term of the option as defined in the Plans, following the guidance in Securities and Exchange Commission ("SEC") Staff Accounting Bulletin Nos. 107 and 110. The Company estimates the expected life of options with accelerated vesting terms giving consideration to the dates that the Company expects to achieve key milestones under the option agreements and the term of the option. Total compensation cost associated with the option awards was $3.0 million, $4.5 million and $2.4 million in 2011, 2010 and 2009, respectively.

As of December 31, 2011, the total compensation cost not yet recognized related to the nonvested awards is approximately $3.8 million, which amount is expected to be recognized over the next two years, which is a weighted average term. Certain milestone events are deemed probable of achievement prior to their seven year vesting term, and the acceleration of vesting resulting from the achievement of such milestone events has been factored into the weighted average vesting term. While the Company does not have a formally established policy, as a practice the Company has delivered newly issued shares of its common stock upon the exercise of stock options.

A summary of option activity under the Plan as of December 31, 2011, and for the year then ended is presented below:

Options	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value of Options
Outstanding — January 1, 2011	4,208,830	$ 5.60		
Granted	683,240	$ 2.45		
Exercised	-	$ -		
Expired	(99,135)	$ 8.13		
Forfeited	(129,175)	$ 5.30		
Outstanding — December 31, 2011	4,663,760	$ 5.09	6.55	$ 40,500
Exercisable — December 31, 2011	2,830,801	$ 4.88	6.30	$ 40,500
Vested and Expected to Vest — December 31, 2011	4,579,444	$ 5.09	6.54	$ 40,500

The intrinsic value of options exercised in 2010 was less than $0.1 million and the intrinsic value of options exercised in 2009 was $0.2 million.

Included in the number of options outstanding at December 31, 2011, are 1,829,636 options with a weighted average exercise price of $5.28 per share and accelerated vesting provisions based on the criteria mentioned above. During 2009, two of the five milestones as defined in the 2000 Plan were achieved and one of the four milestones as defined in option grants prior to November 25, 2009 under the 2007 Plan was achieved. During 2011, one of the five milestones as defined in the option grants on or after November 25, 2009 under the 2007 Plan was achieved. As of December 31, 2011, 40% of the outstanding options under the 2000 Plan with

accelerated vesting provisions were vested, 25% of the outstanding options issued under the 2007 Plan prior to November 25, 2009 with accelerated vesting provisions were vested and 20% of the outstanding options issued under the 2007 Plan on or after November 25, 2009 with accelerated vesting provisions were vested. The total fair value of option shares vested during 2011, 2010 and 2009 was $2.9 million, $2.0 million and $3.1 million, respectively.

In November 2009, the Company granted 672,500 shares of restricted stock under the 2007 Plan, of which 50% vest on the two-year anniversary of the grant date and are subject to forfeiture until vested, and 50% vest on the four-year anniversary of the grant date and are subject to forfeiture until vested. The weighted average grant-date fair value was $6.06 per share. During fiscal 2011, the Company granted 29,000 shares of restricted stock under the 2007 Plan, of which 50% vest on the two-year anniversary of the grant date and are subject to forfeiture until vested, and 50% vest on the four-year anniversary of the grant date and are subject to forfeiture until vested. The weighted average grant-date fair value was $4.02 per share. 325,000 shares of restricted stock vested during fiscal 2011 and 53,069 shares of restricted stock were forfeited during fiscal 2011. The total fair value of restricted stock shares that vested during 2011 was $2.0 million. There were no shares of restricted stock that vested in 2010 and 2009. The Company recognized $1.4 million, $1.5 million and $0.1 million in compensation expense associated with the restricted stock during 2011, 2010 and 2009, respectively. As of December 31, 2011, the total compensation cost not yet recognized related to the nonvested restricted stock awards is approximately $1.0 million, which amount is expected to be recognized over a weighted average term of 1.9 years.

7. Income Taxes

Deferred tax assets consist primarily of net operating loss ("NOL") carryforwards related to U.S. federal and state taxes and research and development tax credits. Realization of future tax benefits related to deferred tax assets is dependent on many factors, including the Company's ability to generate future taxable income. Due to the Company's history of operating losses, the Company has recorded a full valuation allowance against these assets.

NOL carryforwards of approximately $219 million for income tax purposes are available to offset future taxable income. If not used, these carryforwards will expire in varying amounts from 2020 through 2031. The Company also has federal research and development tax credit carryforwards of $10 million which will expire from 2020 through 2031. Section 382 of the Internal Revenue Code subjects the utilization of net operating loss and credit carryforwards to an annual limitation that is applicable if the Company experiences an ownership change. The Company believes its public offerings and/or prior equity investments may have triggered an ownership change as defined by the Internal Revenue Code. However, the Company has yet to perform the computations under Section 382 which would determine the amount of annual limitation on its utilization of its net operating loss and tax credit carryforwards. The annual limitation may result in the expiration of the Company's net operating loss and tax credit carryforwards before they can be used.

The following is a summary of the components of the Company's deferred tax assets and liabilities as of December 31, 2011 and 2010 (in thousands):

	2011	2010
Deferred tax assets:		
Net operating losses	$ 88,229	$ 74,125
Research and development credits	10,276	9,100
Share-based compensation	2,294	1,549
Amortization of intangible assets	1,179	1,169
Other	262	542
	102,240	86,485
Valuation allowance	(101,995)	(86,137)
Net deferred tax assets after valuation allowance	245	348
Deferred tax liabilities:		
Depreciation on property and equipment	(245)	(348)
Deferred tax assets – net	$ —	$ —

The reconciliation of the federal statutory rate to the Company's effective tax rate of zero percent for the years ended December 31, 2011, 2010 and 2009 is as follows:

	Years Ended December 31,		
	2011	2010	2009
Tax provision at the statutory federal rate	34.0 %	34.0 %	34.0 %
State income taxes, net of federal income tax benefit	6.3 %	4.8 %	4.8 %
Other	(8.1)%	(6.7)%	(5.5)%

Valuation allowance	(32.2)%	(32.1)%	(33.3)%
	0.0 %	0.0 %	0.0 %

As of December 31, 2011 and 2010, the Company had no liability recorded for unrecognized tax benefits. The Company classifies penalties and interest expense related to income tax liabilities as an income tax expense. There were no interest and penalties recognized in the statements of operations for the years ended December 31, 2011, 2010 and 2009 or accrued on the balance sheets as of December 31, 2011 and 2010.

The Company files tax returns in the U.S. and various states. All tax years since 1999 remain open to examination by the major taxing jurisdictions to which the Company is subject. The Company has not made any cash payments for income taxes since its inception.

8. License Agreements

In 2006, the Company entered into a license agreement with Northwestern University ("Northwestern"), which provides the Company with an exclusive license to certain existing patents and patent applications owned by Northwestern and future inventions developed by Northwestern that are related to (1) nanotechnology, which technology involves a particle where no single dimension is greater than 100 nanometers, or Nanotechnology, and (2) biobarcode technology, which is analysis where oligonucleotides act as surrogate targets or reporter molecules, or Biobarcode Technology. The license is limited to the "Biodiagnostics Field" defined as qualitative or quantitative in vitro analysis, testing, measurement, or detection of various biodiagnostics field subjects and target combinations.

The Company has entered into several nonexclusive license agreements with various companies covering certain technologies which are embedded in the Company's diagnostic instruments and diagnostic test products. As of December 31, 2011, the Company has paid aggregate initial license fees of $3.2 million for these licenses, and has agreed to pay a percentage of net sales as royalties, in percentage amounts ranging from less than 1% to 12.0%. Royalties on net sales are classified in Cost of sales. Certain of the license agreements have minimum annual royalty payments, and such minimum payments are $0.2 million in each of the fiscal years 2012, 2013, 2014 and 2015 and are approximately $0.1 million annually thereafter through the dates the respective licenses terminate. These licenses expire at various times, corresponding to the subject patents expirations, which currently range from 2012 to 2027.

9. Stockholders' Equity

Common Stock

During 2007, the Company closed on the sale of 8,050,000 shares related to the initial public offering at $14.00 per share, less underwriting discounts and commissions. Net proceeds from the initial public offering were approximately $102 million, net of transaction expenses. Approximately $0.8 million of the transaction expenses were paid in 2008.

The Company completed an underwritten public offering of 5,405,000 shares of common stock on October 21, 2009 at a public offering price of $7.00 per share, less underwriting discounts and commissions. Net proceeds from the public offering were approximately $35.4 million.

The Company completed an underwritten public offering of 15,686,000 shares of common stock on May 13, 2011 at a public offering price of $2.20 per share, less underwriting discounts and commissions. Net proceeds from the public offering were approximately $32.2 million.

Registration Rights

Pursuant to an agreement between the Company and certain of its stockholders, the Company has granted the following demand registration rights to Mr. Mark Slezak and Ms. Sheli Rosenberg, who are members of the Company's board of directors, AOQ Trust, Alfa-Tech, LLC, Lurie Investment Fund, LLC, Lurie Investments, Inc. and their respective affiliates, and Bain Capital Venture Fund 2005, L.P., Brookside Capital Partners Fund, L.P., and their respective affiliates and other stockholders. Mr. William P. Moffitt, III, the Company's chief executive officer and a member of the board of directors, and Dr. Chad Mirkin, a member of the board of directors, are parties to this agreement, but do not have the right to demand registration. At any time after the earlier to occur of (1) 120 days after the closing of an initial public offering, which occurred on November 6, 2007, or (2) April 1, 2010:

- *Long-Form Registrations.* Stockholders holding at least 20% of the then outstanding shares of the Company's common stock that are subject to the registration rights agreement, which are referred to as registrable securities, have the right to demand that the Company file a registration statement under the Securities Act on Form S-1 or any similar long-form registration covering their registrable securities. However, the Company is not obligated to file a long-form registration statement on more than three occasions upon the request of the stockholders.
- *Short-Form Registrations.* Stockholders holding at least 10% of the then outstanding registrable securities have the right to demand that the Company file a registration statement on Form S-3 or any similar short-form registration covering their registrable securities, provided that such short-form registration is then available to the Company under applicable law. Such stockholders are entitled to request an unlimited number of short-form registrations.

If the Company's board of directors believes in its reasonable good faith that any demand registration would require premature disclosure of a proposal or plan that the Company intends to undertake, and such disclosure would have a material adverse effect on the Company, then it may delay the registration once in any twelve month period for up to 90 days. Moreover, if the demand registration is an underwritten offering, the Company may reduce the number of shares of registrable securities to be registered upon the advice of the underwriters that such offering exceeds the number of securities that can be sold in an orderly manner within an acceptable price range. If shares of the Company's common stock requested to be included in a registration must be excluded pursuant to the underwriters' advice, the Company will generally register a pro rata portion of the shares requested to be registered.

Under the piggyback registration provisions, if the Company proposes to register any securities under the Securities Act, other than pursuant to a demand registration, and the registration form to be used may be used for the registration of registrable securities, stockholders holding such registrable securities have the right to include their shares in the registration statement. However, if the registration is an underwritten offering, the Company may reduce the number of shares to be registered under the piggyback registration provisions upon the advice of the underwriters that such offering exceeds the number of securities that can be sold in an orderly manner within an acceptable price range. If shares of the Company's common stock requested to be included in a registration must be excluded pursuant to the underwriters' advice, the Company will generally register a pro rata portion of the shares requested to be registered under the piggyback registration provisions. The piggyback registration rights granted under the registration rights agreement have no expiration date.

Expenses of Registration. The Company will generally pay all registration expenses in connection with the demand and piggyback registrations described above, including all registration and filing fees, expenses and fees of compliance with securities laws, and fees and disbursements of all counsel, independent certified public accountants, underwriters (excluding discounts and commissions) and other persons retained by the Company. The Company will also pay the reasonable fees and disbursements of one counsel chosen by the selling stockholders in each demand or piggyback registration.

Transferability. The demand and piggyback registration rights described above are generally transferable to any subsequent holder of registrable securities.

Warrants

Prior to the completion of the Company's initial public offering, the Company issued warrants to purchase shares of convertible preferred stock in connection with certain of the convertible preferred stock financings. Certain of these warrants were converted to common stock warrants upon the closing of the initial public offering. As of December 31, 2010 there were outstanding warrants to acquire shares of common stock of 1,300,119. In April 2011 1,135,194 warrants expired. As of December 31, 2011 there were outstanding warrants to acquire shares of common stock of 164,925. The exercise price and expiration date of the warrants outstanding at December 31, 2011 are as follows:

Series of Stock to which the Warrant is Exercisable	Number of Warrants	Expiration Date
Common - exercise price of $8.75 per share	164,925	April 2013

10. Commitments and Contingencies

In August 2009, the Company executed a lease renewal which commenced in June 2010 and ends in May 2014. Under the terms of the lease renewal, the Company has two successive three year options to renew the lease, and the Company has the right of first refusal to lease additional space within the facility.

Rent and operating expenses associated with the office and laboratory space were $0.7 million, $0.6 million and $0.5 million in 2011, 2010 and 2009, respectively.

Annual future minimum obligations for the operating lease as of December 31, 2011 are as follows (in thousands):

Years Ending December 31	Operating Lease
2012	$ 439
2013	451
2014	190
2015	---
Total minimum lease payments	$ 1,080

In July 2009, the Company was named as a defendant in a lawsuit filed in the United States District Court for the District of Delaware by Eppendorf AG alleging infringement of a patent owned by the plaintiff. On August 18, 2010, the Company executed a Settlement Agreement and Intellectual Property Purchase Agreement (the "Settlement and Purchase Agreement") with Eppendorf AG. The Settlement and Purchase Agreement provides for, among other things, a lump sum payment of $4 million to settle a patent litigation dispute between the companies, the Company's acquisition from Eppendorf of certain patents and patent rights, and a limited license back to service existing Eppendorf customers and licenses previously issued that relate to the purchased patents and patent rights. Pursuant to the Settlement and Purchase Agreement, the Company paid $4 million to Eppendorf AG during the third quarter of 2010. The Company has allocated $3.5 million of the lump sum payment to settlement expense and $0.5 million to intangible assets for the fair value of the acquired patents and patent rights.

11. Long-Term Debt

In February 2007, the Company entered into two loan and security agreements, with commitments for debt financing with Venture Lending & Leasing IV, Inc., and Venture Lending & Leasing V, Inc. The Company borrowed $12.5 million under these agreements in February 2007. Interest rates under the agreements were 12.5% for the initial twelve month period and 10.0% during the following thirty month period. Notes issued pursuant to this commitment were secured by a first security lien on all of the Company's assets including intellectual property. This debt matured in August 2010.

The $12.5 million of proceeds received were allocated to debt and the Series D Convertible Preferred Stock based on their fair values at the borrowing date with $1.9 million allocated to Series D Convertible Preferred Stock and the remaining $10.6 million allocated to debt. The discount on the debt of $1.9 million resulted in an effective interest rate on the debt of 21% and the discount was amortized as interest expense over the term of the debt following the interest method. Interest expense on this debt for the years ended December 31, 2010 and 2009 was $0.3 million and $1.2 million, respectively, which included $0.1 million and $0.5 million of discount amortization, respectively. Cash interest paid on this debt was $0.2 million and $0.8 million for the years ended December 31, 2010 and 2009, respectively.

12. Supplemental Financial Information

Inventories:	2011	2010
	(in thousands)	
Raw materials	$ 1,021	$ 760
Work-in-process	64	69
Finished goods	1,240	1,599
Total	$ 2,325	$ 2,428

During 2010, the Company established a valuation reserve of $0.7 million for most of the original Verigene System processor inventory. All near-term assay submissions are expected to be on the Processor *SP*. The valuation reserve remained at $0.7 million as of December 31, 2011.

Property and Equipment – Net:

	2011	2010
	(in thousands)	
Equipment with customers	$ 2,467	$ 2,164
Computer equipment and software	935	935
Laboratory equipment	6,866	5,725
Furniture and fixtures	269	269
Leasehold improvements	2,878	2,878
Manufacturing equipment	4,561	4,298
Office equipment	67	67
Tooling	1,461	1,423
Total property and equipment — at cost	19,504	17,759
Less accumulated depreciation	(14,982)	(12,617)
Property and Equipment - Net	$ 4,522	$ 5,142

Other Current Liabilities:

	2011	2010
	(in thousands)	
Accrued clinical trial expenses	$ 292	$ 603
Accrued license fees	632	377
All other	918	375
Total	$ 1,842	$ 1,355

13. Selected Quarterly Financial Data (Unaudited)

	2011 Quarters			
	(in thousands, except per share data)			
	First	Second	Third	Fourth
Total revenue	$ 640	$ 509	$ 556	$ 828
Loss from operations	$ (8,896)	$ (8,439)	$ (9,481)	$ (8,638)
Net loss	$ (8,889)	$ (8,435)	$ (9,473)	$ (8,622)
Per share data:				
Net loss per common share – basic and diluted	$ (0.32)	$ (0.23)	$ (0.22)	$ (0.17)

	2010 Quarters			
	(in thousands, except per share data)			
	First	Second	Third	Fourth
Total revenue	$ 826	$ 517	$ 373	$ 310
Loss from operations	$ (8,416)	$ (13,689)	$ (10,920)	$ (8,374)
Net loss	$ (8,551)	$ (13,759)	$ (10,919)	$ (7,383)
Per share data:				
Net loss per common share – basic and diluted	$ (0.31)	$ (0.50)	$ (0.39)	$ (0.27)

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

We have had no disagreements with our independent registered public accounting firm on any matter of accounting principles or practices or financial statement disclosure.

Item 9A. Controls and Procedures.

(a) Evaluation of Disclosure Controls and Procedures

Management of the Company, with the participation of the Chief Executive Officer and the Chief Financial Officer, evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended) as of December 31, 2011. The Company's disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported on a timely basis and that such information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding disclosure. Based upon this evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that the Company's disclosure controls and procedures were effective as of December 31, 2011.

(b) Management's Report on Internal Control Over Financial Reporting

Internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, is a process designed by, or under the supervision of, the Company's chief executive officer and chief financial officer, or persons performing similar functions, and effected by the Company's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. The Company's management, with the participation of the Company's chief executive officer and chief financial officer, has established and maintained policies and procedures designed to maintain the adequacy of the Company's internal control over financial reporting, and includes those policies and procedures that:

(1) Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;

(2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and

(3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f). The Company's management conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its evaluation under the framework in *Internal Control – Integrated Framework*, the Company's management concluded that internal control over financial reporting was effective as of December 31, 2011.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree or compliance with the policies or procedures may deteriorate.

The Company's independent registered public accounting firm, Deloitte & Touche LLP, has issued an attestation report on the Company's internal control over financial reporting as of December 31, 2011. Their report is included in this Form 10-K.

(c) Changes in Internal Controls Over Financial Reporting

There have been no changes to the Company's internal control over financial reporting during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information.

None.

PART III.

Item 10. Directors and Executive Officers and Corporate Governance.

The information required by Item 10 will be set forth in the Company's definitive proxy statement for its annual meeting of shareholders expected to be held on May 30, 2012, and is incorporated herein by reference.

Item 11. Executive Compensation.

The information required by Item 11 will be set forth in the Company's definitive proxy statement for its annual meeting of shareholders expected to be held on May 30, 2012, and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by Item 12 will be set forth in the Company's definitive proxy statement for its annual meeting of shareholders expected to be held on May 30, 2012, and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by Item 13 will be set forth in the Company's definitive proxy statement for its annual meeting of shareholders expected to be held on May 30, 2012, and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

The information required by Item 14 will be set forth in the Company's definitive proxy statement for its annual meeting of shareholders expected to be held on May 30, 2012, and is incorporated herein by reference.

PART IV.

Item 15. Exhibits, Financial Statement Schedules.

(a)(1) Financial Statements

Reports of Independent Registered Public Accounting Firm

Balance Sheets as of December 31, 2011 and 2010

Statements of Operations for the years ended December 31, 2011, 2010 and 2009

Statements of Stockholders' Equity (Deficit) for the years ended December 31, 2011, 2010 and 2009

Statements of Cash Flows for the years ended December 31, 2011, 2010 and 2009

Notes to Financial Statements

(a)(2) Financial Statement Schedules

None

(a)(3) Exhibits required by Item 601 of Regulation S-K.

Exhibit Number	Exhibit Description
3.1	Second Amended and Restated Certificate of Incorporation of Nanosphere, Inc. (3) (Exhibit 3.1)
3.2	Amended and Restated Bylaws of Nanosphere, Inc. (3) (Exhibit 3.2)
4.1	Specimen of common stock certificate (4) (Exhibit 4.3)
10.1	Nanosphere, Inc. 2000 Equity Incentive Plan (1) (Exhibit 10.1)
10.2	Form of Nanosphere, Inc. 2000 Equity Incentive Plan Non-Qualified Stock Option Award Agreement, as amended (1) (Exhibit 10.2)
10.3	Form of Nanosphere, Inc. 2000 Equity Incentive Plan Option Award Agreement (1) (Exhibit 10.3)
10.4	Nanosphere, Inc. 2007 Long-Term Incentive Plan, as amended and restated (4) (Exhibit 10.4)
10.5	Form of Nanosphere, Inc. 2007 Long-Term Incentive Plan Incentive Stock Option Award Agreement (Time Vested) (1) (Exhibit 10.5)
10.6	Form of Nanosphere, Inc. 2007 Long-Term Incentive Plan Non-Qualified Stock Option Award Agreement (Time Vested) (1) (Exhibit 10.6)
10.7	Form of Nanosphere, Inc. 2007 Long-Term Incentive Plan Option Award Agreement (Cliff-vested, performance-accelerated) (1) (Exhibit 10.7)
10.8	Employment Agreement, dated as of July 19, 2004, by and between Nanosphere, Inc. and William P. Moffitt III, as amended (1) (Exhibit 10.8)
10.9	Restricted Stock Purchase Agreement, dated as of March 16, 2006, by and between Nanosphere, Inc. and William P. Moffitt III (3) (Exhibit 10.9)
10.10	Employment Agreement, dated January 2, 2001, by and between Nanosphere, Inc. and William Cork (4) (Exhibit 10.10)
10.11	Employment Agreement, dated May 13, 2005, by and between Nanosphere, Inc. and Gregory Shipp (1) (Exhibit 10.11)
10.12	Employment Agreement, dated September 5, 2005, by and between Nanosphere, Inc. and Michael McGarrity (1) (Exhibit 10.12)
10.13	Employment Agreement, dated April 25, 2007, by and between Nanosphere, Inc. and J. Roger Moody, Jr. (1) (Exhibit 10.13)
10.14	Employment Agreement, dated May 31, 2007, by and between Nanosphere, Inc. and Winton Gibbons (1) (Exhibit 10.14)
10.15	Severance Agreement, dated as of June 4, 2007, by and between Nanosphere, Inc. and Stephen

	Wasko (1) (Exhibit 10.15)
10.16	License Agreement, dated as of January 1, 2006, by and between Northwestern University and Nanosphere, Inc. (2)# (Exhibit 10.16)
10.17	Non-Exclusive License Agreement, dated as of December 20, 2002, by and between Nanosphere, Inc. and Abbott Laboratories (2)# (Exhibit 10.17)
10.18	Lease with Motorola, Inc., dated as of March 24, 2003, as amended (1) (Exhibit 10.18)
10.19	Loan and Security Agreement, dated as of February 7, 2007, by and between Nanosphere, Inc. and Venture Lending & Leasing IV, Inc. (1) (Exhibit 10.19)
10.20	Loan and Security Agreement, dated as of February 21, 2007, by and between Nanosphere, Inc. and Venture Lending & Leasing V, Inc. (1) (Exhibit 10.20)
10.21	Consulting and Non-Competition Agreement, dated as of October 31, 2002, by and between Nanosphere, Inc. and Chad A. Mirkin, as amended (1) (Exhibit 10.21)
10.22	Bonus Agreement, dated as of March 16, 2006, by and between Nanosphere, Inc. and William P. Moffitt III, as amended (2) (Exhibit 10.22)
10.23	Series D Preferred Stock and Warrant Purchase Agreement, dated as of April 12, 2006 (2) (Exhibit 10.24)
10.24	Note Purchase Agreement, dated as of March 15, 2006, by and between Nanosphere, Inc. and Lurie Investment Fund, L.L.C. (2) (Exhibit 10.28)
10.25	Form of Indemnification Agreement (3) (Exhibit 10.29)
10.26	Non-Exclusive Financial Advisory Services Engagement Letter, dated as of August 8, 2007, by and between Nanosphere, Inc. and Allen & Company LLC (4) (Exhibit 10.30)
10.27	Amended and Restated Employment Agreement dated as of January 1, 2009, between Nanosphere, Inc. and Mr. William P. Moffitt (5) (Exhibit 10.31)
10.28	Second Amended and Restated Registration Rights Agreement, dated August 19, 2009 (6) (Exhibit 10.1)
10.29	Lease Agreement, dated August 28, 2009, between Nanosphere, Inc. and Northbrook Commercial Properties, LLC (7) (Exhibit 10.1)
10.30	License Agreement, dated July 9, 2010, between Nanosphere, Inc. and Accelr8 Technology Corporation (8) (Exhibit 10.1)
10.31	Settlement Agreement and Intellectual Property Purchase Agreement, dated August 18, 2010, between Nanosphere, Inc. and Eppendorf AG (9) (Exhibit 10.1)
10.33	Second Amended and Restated Employment Agreement, dated as of December 28, 2011, by and between Nanosphere, Inc. and William P. Moffitt III, as amended (10) (Exhibit 10.1)
10.34	Stock Option Award Agreement dated, as of December 28, 2011, by and between Nanosphere, Inc. and William P. Moffitt III *
23.1	Consent of Deloitte & Touche LLP *
31.1	Certification of Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 *
31.2	Certification of Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 *
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 *
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 *
101.1	The following financial statements from Nanosphere, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2011, formatted in XBRL: (i) Balance Sheets, (ii) Statements of Operations, (iii) Statements of Stockholders' Equity (Deficit), (iv) Statements of Cash Flows, and (v) Notes to Consolidated Financial Statements, tagged as blocks of text *

* Filed herewith

\# Confidential treatment has been requested with respect to certain provisions of this agreement. Omitted portions have been filed separately with the SEC.

(1) Incorporated by reference from the Company's Registration Statement on Form S-1 as filed with the Securities and Exchange Commission on August 13, 2007. The exhibit reference in parentheses indicates the corresponding exhibit number in such

Registration Statement.

(2) Incorporated by reference from the Company's Amendment No. 1 to Form S-1 as filed with the Securities and Exchange Commission on September 27, 2007. The exhibit reference in parentheses indicates the corresponding exhibit number in such Amendment.

(3) Incorporated by reference from the Company's Amendment No. 2 to Form S-1 as filed with the Securities and Exchange Commission on October 17, 2007. The exhibit reference in parentheses indicates the corresponding exhibit number in such Amendment.

(4) Incorporated by reference from the Company's Amendment No. 3 to Form S-1 as filed with the Securities and Exchange Commission on October 29, 2007. The exhibit reference in parentheses indicates the corresponding exhibit number in such Amendment.

(5) Incorporated by reference from the Company's Current Report on Form 8-K as filed with the Securities and Exchange Commission on March 5, 2009. The exhibit reference in parentheses indicates the corresponding exhibit number in such Current Report.

(6) Incorporated by reference from the Company's Quarterly Report on Form 10-Q as filed with the Securities and Exchange Commission on November 5, 2009. The exhibit reference in parentheses indicates the corresponding exhibit number in such Quarterly Report.

(7) Incorporated by reference from the Company's Current Report on Form 8-K as filed with the Securities and Exchange Commission on September 1, 2009. The exhibit reference in parentheses indicates the corresponding exhibit number in such Current Report.

(8) Incorporated by reference from the Company's Current Report on Form 8-K as filed with the Securities and Exchange Commission on July 15, 2010. The exhibit reference in parentheses indicates the corresponding exhibit number in such Current Report.

(9) Incorporated by reference from the Company's Current Report on Form 8-K as filed with the Securities and Exchange Commission on August 24, 2010. The exhibit reference in parentheses indicates the corresponding exhibit number in such Current Report.

(10) Incorporated by reference from the Company's Current Report on Form 8-K as filed with the Securities and Exchange Commission on December 30, 2011. The exhibit reference in parentheses indicates the corresponding exhibit number in such Current Report.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NANOSPHERE, INC.

By: /s/ William P. Moffitt
William P. Moffitt
President and Chief Executive Officer

Date: February 16, 2011

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

Signature	Title(s)	Date
/s/ William P. Moffitt William P. Moffitt	President, Chief Executive Officer, Director (principal executive officer)	February 16, 2012
/s/ Roger Moody Roger Moody	Chief Financial Officer, Treasurer (principal financial officer and principal accounting officer)	February 16, 2012
/s/ Mark Slezak Mark Slezak	Chairman of the board of directors	February 16, 2012
/s/ Jeffrey R. Crisan Jeffrey R. Crisan	Director	February 16, 2012
/s/ André de Bruin André de Bruin	Director	February 16, 2012
/s/ Chad A. Mirkin Chad A. Mirkin	Director	February 16, 2012
/s/ Sheli Z. Rosenberg Sheli Z. Rosenberg	Director	February 16, 2012
/s/ Lorin J. Randall Lorin J. Randall	Director	February 16, 2012

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-161859 on Form S-3 and in Registration Statements No. 333-148989 and 333-163634 on Form S-8 of our reports dated February 15, 2012, relating to the financial statements of Nanosphere, Inc. (the "Company"), and the effectiveness of the Company's internal control over financial reporting, appearing in this Annual Report on Form 10-K of Nanosphere, Inc. for the year ended December 31, 2011.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois
February 15, 2012

Exhibit 31.1

CERTIFICATION
PURSUANT TO 17 CFR 240.13a-14
PROMULGATED UNDER
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2003

I, William P. Moffitt, certify that:

1. I have reviewed this annual report on Form 10-K of Nanosphere, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ William P. Moffitt
William P. Moffitt
President and Chief Executive Officer

Date: February 16, 2012

Exhibit 31.2

CERTIFICATION
PURSUANT TO 17 CFR 240.13a-14
PROMULGATED UNDER
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Roger Moody, certify that:

1. I have reviewed this annual report on Form 10-K of Nanosphere, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Roger Moody
Roger Moody
Chief Financial Officer and Treasurer

Date: February 16, 2012

Exhibit 32.1

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Nanosphere, Inc. (the "Company") on Form 10-K for the fiscal year ended December 31, 2011 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, William P. Moffitt, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ William P. Moffitt
William P. Moffitt
President and Chief Executive Officer

February 16, 2012

This certification accompanies each Report pursuant to §906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of §18 of the Securities Exchange Act of 1934, as amended.

A signed original of this written statement required by §906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Nanosphere, Inc. (the "Company") on Form 10-K for the fiscal year ended December 31, 2011 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Roger Moody, Chief Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Roger Moody
Roger Moody
Chief Financial Officer and Treasurer

February 16, 2012

This certification accompanies each Report pursuant to §906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of §18 of the Securities Exchange Act of 1934, as amended.

A signed original of this written statement required by §906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Corporate Information

DIRECTORS

Mark Slezak[2,3]
Chairman, Nanosphere, Inc.
Chief Executive Officer, Lurie Investments, Inc.

Jeffrey R. Crisan
Managing Director, Bain Capital Ventures

André de Bruin[1,2]
Chief Executive Officer, DuraPorts Inc.

Chad A. Mirkin, Ph.D.
Co-Founder, Nanosphere, Inc.

William P. Moffitt
President and Chief Executive Officer,
Nanosphere, Inc.

Lorin J. Randall[1]
Financial Consultant

Sheli Z. Rosenberg[1,3]
Retired Chief Executive Officer,
President and Vice Chairwoman,
Equity Group Investments, Inc.

[1] Member of audit committee
[2] Member of compensation committee
[3] Member of corporate governance and nominating committee

OFFICERS

William P. Moffitt
President, Chief Executive Officer

J. Roger Moody, Jr.
Chief Financial Officer, Vice President of Finance and Administration, Treasurer and Secretary

Winton G. Gibbons
Senior Vice President, Business Development

Michael K. McGarrity
Chief Commercial Officer
Vice President, Sales and Marketing

Timothy J. Patno
Chief Technology Officer

SHAREHOLDER INFORMATION

Annual Meeting
The annual meeting of stockholders will be held at 9:00 a.m. Central Daylight Time on Wednesday, May 30, 2012 at:

The Westin Chicago North Shore
601 N. Milwaukee Avenue
Wheeling, IL 60090

Auditors
Deloitte & Touche LLP
111 S. Wacker Drive
Chicago, IL 60606

Common Stock Listing
NASDAQ Stock Market
Symbol: NSPH

Registrar & Transfer Agent
American Stock Transfer & Trust Co.
59 Maiden Lane
Plaza Level
New York, NY 10038
(800) 937-5449

Internet
www.nanosphere.us

E-mail
ir@nanosphere.us

Annual Report Design by Curran & Connors, Inc. / www.curran-connors.com

Nanosphere

Nanosphere, Inc.
4088 Commercial Avenue
Northbrook, IL 60062
(847) 400-9000
www.nanosphere.us