NEOPROBE CORP
Form 10-K
March 16, 2011

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

FORM 10-K

(Mark One)
x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2010

or

¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE EXCHANGE ACT

For the transition period from to to

Commission file number 0-26520

NEOPROBE CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	31-1080091
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
425 Metro Place North, Suite 300, Dublin, Ohio	43017-1367
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (614) 793-7500

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

Common Stock, par value $.001 per share	NYSE Amex Equities
(Title of Class)	(Name of Each Exchange on Which Registered)

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
Yes ¨ No x

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 x 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 (§ 229.405 of this chapter) 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.

Yes ¨ No x

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

Large accelerated filer ¨	Accelerated filer x
Non-accelerated filer ¨	Smaller reporting company x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12-b-2 of the Act.)

Yes ¨ No x

The aggregate market value of shares of common stock held by non-affiliates of the registrant on June 30, 2010 was $142,554,910.

The number of shares of common stock outstanding on March 11, 2011 was 88,175,675.

DOCUMENTS INCORPORATED BY REFERENCE

None.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends affecting the financial condition of our business. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, among other things:

- general economic and business conditions, both nationally and in our markets,
- our history of losses, negative net worth and uncertainty of future profitability;
- our expectations and estimates concerning future financial performance, financing plans and the impact of competition;
- our ability to implement our growth strategy;
- anticipated trends in our business;
- advances in technologies; and
- other risk factors set forth under “Risk Factors” in this report.

In addition, in this report, we use words such as “anticipate,” “believe,” “plan,” “expect,” “future,” “intend,” and similar expressions to identify forward-looking statements.

We undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this report. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this report may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements.

PART I

Item 1. Business

Development of the Business

Neoprobe Corporation (Neoprobe, the Company or we) is a biomedical company that develops and commercializes innovative oncology products that enhance patient care and improve patient benefit. We were originally incorporated in Ohio in 1983 and reincorporated in Delaware in 1988. Our executive offices are located at 425 Metro Place North, Suite 300, Dublin, Ohio 43017. Our telephone number is (614) 793-7500.

From our inception through 1998, we devoted substantially all of our efforts and resources to the research and clinical development of radiopharmaceutical and medical device technologies related to the intraoperative diagnosis and treatment of cancers, including our proprietary radioimmunoguided surgery (RIGS®) technology. In 1998, U.S. and European regulatory agencies completed evaluations and discussions of the status of the regulatory pathway for our RIGScanTM product which, coupled with our limited financial resources at the time, caused us to suspend our radiopharmaceutical development activities and refocus our operating strategy on our medical device business. After achieving profitability in the fourth quarter of 1999 following this retrenchment, we expanded our medical device offerings at the beginning of 2002 through the acquisition of an Israeli company that was developing a line of blood flow measurement devices.

Although we had expanded our strategic focus with the addition of medical devices outside the oncology field, we continued to look for other avenues to reinvigorate our radiopharmaceutical development portfolio. As a result of our efforts over the last several years we have successfully re-established our core competency regarding

radiopharmaceutical development. We recently announced that we had enrolled an adequate number of subjects to enable us to meet the lymph node accrual goal for the second Phase 3 clinical trial for our lead radiopharmaceutical product candidate, Lymphoseek®, and as a result, we are now preparing to submit a New Drug Application (NDA) to the U.S. Food and Drug Administration (FDA). Interest in, and activity related to, our original radiopharmaceutical initiative, RIGS, has also increased significantly in recent years following the receipt of formal scientific advice in late 2008 from the European Medicines Agency (EMA). We recently held a meeting with FDA that has clarified the regulatory and development process related to our RIGScan product. As a result of this meeting, we intend to implement additional manufacturing activities through 2011 as a first step to recommencing human clinical study of the technology in 2012 and beyond. Our subsidiary, Cira Biosciences, Inc. (Cira Bio), is also evaluating the market opportunities for yet another technology platform, activated cellular therapy (ACT).

The success we have been experiencing in recent years related to our drug development activities caused us, during 2009, to re-evaluate our product initiatives and strategies. As a result of this re-evaluation, we made the decision during the third quarter of 2009 to discontinue the operations of our blood flow measurement device product line. To date, we have been unsuccessful in our attempts to sell our Cardiosonix Ltd. subsidiary. As a result, we are taking additional steps to complete the shutdown of our blood flow measurement device business. We believe this decision will allow us to better focus on our pipeline development opportunities that better leverage our core competencies. We expect to continue utilizing a virtual business model to further our product and pipeline development that provides the opportunity for incremental return on the achievement of key development and funding milestones.

Our Technology

Gamma Detection Devices

Through 2010, our line of gamma radiation detection devices has generated substantially all of our revenue. Our gamma detection systems are used by surgeons in the diagnosis and treatment of cancer and related diseases. Our currently-marketed line of gamma detection devices has been cleared by FDA and other international regulatory agencies for marketing and commercial distribution throughout most major global markets.

Our patented gamma detection device systems consist of hand-held detector probes and a control unit. The critical detection component is a highly radiosensitive crystal mounted in the tip of the probe that relays a signal through a preamplifier to the control unit to produce both a digital readout and an audible signal. The detector element fits into a housing approximately the size of a pen flashlight. The neoprobe® GDS gamma detection system, originally released in 1998 under the name neo2000®, is the fourth generation of our gamma detection products. The neoprobe GDS is designed as a platform for future growth of our instrument business. The neoprobe GDS is software upgradeable and is designed to support future surgical targeting probes without the necessity of costly factory remanufacture. Our most recent software release enables our entire installed base of neoprobe GDS and neo2000 users to use our wireless gamma detection probes, based on Bluetooth® wireless technology, that have been commercially launched over the last few years. During 2009, we also introduced a new gamma detection probe capable of detecting higher energy isotopes such as F-18 fluorodeoxyglucose (18F FDG) that are frequently used in connection with Positron Emission Tomography (PET) scans. During early March of 2011, we introduced a 9mm wireless gamma detection probe further expanding our family of wireless probes to enable surgeons to address a broader range of surgical challenges. In addition, in February 2011 we licensed intellectual property that may be used to develop an intraoperative hand-held miniature gamma camera to be used in combination with either Lymphoseek or RIGScan products.

Surgeons use our gamma detection devices in a surgical application referred to as intraoperative lymphatic mapping (ILM or lymphatic mapping) or sentinel lymph node biopsy (SLNB). ILM helps trace the lymphatic drainage patterns in a cancer patient to evaluate potential tumor drainage and cancer spread in lymphatic tissue. The technique does not detect cancer; rather it helps surgeons identify the lymph node(s) to which a tumor is likely to drain and spread. These lymph node(s), sometimes referred to as the "sentinel" node(s), may provide critical information about the stage of a patient’s disease. ILM begins when a patient is injected at the site of the main tumor with a commercially available radioactive tracing agent, with or without a blue dye. The agent is intended to follow the same lymphatic flow as the cancer would have if it had metastasized. The surgeon may then track the radiotracer agent's path with a hand-held gamma radiation detection probe, thus following the potential avenues of metastases and identifying lymph nodes to be biopsied for evaluation and determination of cancer spread.

The application of ILM to solid tumor cancer treatment has been most widely developed in the breast cancer and melanoma indications. Numerous clinical studies, involving thousands of patients and published in peer-reviewed medical journals as far back as Oncology (January 1999) and The Journal of The American College of Surgeons (December 2000), have indicated SLNB is approximately 97% accurate in predicting the presence or absence of disease spread in melanoma and breast cancers. Consequently, it is estimated that more than 80% of breast cancer patients who would otherwise have undergone full axillary lymph node dissections (ALND), involving the removal of as many as 20 - 30 lymph nodes, might be spared this radical surgical procedure if the sentinel node was found to be free of cancer. Surgeons practicing SLNB have found that our gamma detection probes are well-suited to the procedure.

Hundreds of articles have been published in recent years in peer-reviewed journals on the topic of ILM or SLNB. Furthermore, a number of thought leaders and cancer treatment institutions have recognized and embraced the technology as standard of care for melanoma and for breast cancer. Our marketing partner for our neoprobe GDS continues to see strong sales, especially for use in breast cancer treatment. SLNB in breast cancer has been the subject of national and international clinical trials. Recently, important data regarding lymph node dissections were published in the Journal of the American Medical Association (JAMA, February 9, 2011) and in the New England Journal of Medicine (NEJM, January 19, 2011). We believe the information published in both articles continues to underscore the importance of effective SLNB in the staging and treatment of patients with solid tumor cancers. We also believe, based on an estimate of the total number of operating rooms in medical centers that are capable of performing the types of procedures in which our gamma detection devices are used, that while we continue to approach saturation at the major cancer centers and teaching institutions, a significant portion of the global market for gamma detection devices such as ours remains untapped. In addition, we believe that a replacement device market in the gamma detection device sector is beginning to develop, aided in part by new offerings such as our wireless probes, as devices purchased over ten years ago during the early years of lymphatic mapping begin to be retired.

Although lymphatic mapping has found its greatest acceptance thus far in breast cancer and melanoma, we believe that Lymphoseek may be instrumental in extending ILM into other solid tumor cancers in which surgeons are currently investigating such as prostate, gastric, colon, head and neck, and non-small cell lung cancers. Investigations in these other cancer types have thus far met with mixed levels of success due, we believe, to limitations associated with currently available radioactive tracing agents; however, we believe our development of Lymphoseek may positively impact the effectiveness of ILM in such indications. Surgeons have also been using our devices for other gamma-guided surgery applications, such as evaluating the thyroid function and conducting parathyroid surgery, and in determining the state of disease in patients with vulvar and penile cancers. Expanding the application of ILM beyond the current primary uses in the treatment of breast cancer and melanoma is a primary focus of our strategy regarding our gamma-guided surgery products and is consistent with our Phase 3 Lymphoseek clinical trial strategy. To support that expansion, we continue to work with our marketing and distribution partners to develop additional enhancements to the neoprobe GDS platform such as the 9mm wireless probe introduced at the Society of Surgical Oncology (SSO) 64th Annual Cancer Symposium held in March 2011.

Lymphoseek

Our gamma detection devices are primarily capital in nature; as such, they generate revenue only on the initial sale. To complement the one-time revenue stream related to capital products, we are working on developing recurring revenue or "procedural" products that would generate revenue based on each procedure in which they are used. The product we are developing with the greatest near-term potential in this area is Lymphoseek, a proprietary drug compound under exclusive worldwide license from the Regents of the University of California through their UC, San Diego affiliate (UCSD). The UCSD license grants Neoprobe the commercialization rights to Lymphoseek for diagnostic imaging and intraoperative detection applications.

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Lymphoseek (Tilmanocept) is a diagnostic imaging agent designed for radiolabeling and subsequent administration in radiodetection and visualization of the lymphatic system draining the region of injection for delineation of the lymphatic tissue. Lymphoseek is designed to accumulate in lymphatic tissue by specifically binding to mannose binding receptor (MBR; CD206) proteins that reside on the surface of resident dendritic cells and macrophages. Lymphoseek is a macromolecule consisting of multiple units of diethylene triamine pentaacetic acid (DTPA) and mannose, each synthetically attached to a 10 kDa dextran backbone. The mannose acts as a substrate for the receptor, and the DTPA serves as a chelating agent for labeling with Technetium Tc 99m.

The initial pre-clinical evaluations of Lymphoseek were completed in 2001. Since that time, Neoprobe, in cooperation with UCSD, has completed or initiated five Phase 1 clinical trials, one multi-center Phase 2 trial and three multi-center Phase 3 trials involving Lymphoseek. The status of these trials is listed below:

Indication	Phase	Number of Patients	Status
Breast (peritumoral injection)	1	24	Completed
Melanoma	1	24	Completed
Breast (intradermal injection, next day surgery)	1	31	Completed
Prostate	1	14	Closed
Colon	1	6	Closed
Breast or Melanoma	2	80	Completed
Breast or Melanoma	3	179	Completed
Breast or Melanoma	3	150	Node accrual target reached
Head and Neck Squamous Cell Carcinoma (“Sentinel”)	3	196*	Ongoing

*estimated number based upon interim analysis; actual number is dependent on statistical analysis at potential stoppage points

The Phase 1 studies to date have been supported in part through research grants from a number of organizations such as the Susan G. Komen Breast Cancer Research Foundation, the American Cancer Society (ACS) and the NCI. Research data from some of these clinical evaluations of Lymphoseek have been presented at meetings of the Society of Nuclear Medicine, the Society of Surgical Oncology and the World Sentinel Node Congress. The two Phase 1 studies in prostate and colon cancers were closed prior to planned target completion due in part to our determination that the planned product labeling for Lymphoseek, based on our dialogue with FDA, would be as a general lymphatic tissue tracing agent rather than as a disease-specific agent. The ongoing Phase 3 studies are being conducted under Neoprobe’s investigational new drug (IND) application that has been cleared with FDA using drug product supplied by Neoprobe.

In November 2003, we met with the Interagency Council on Biomedical Imaging in Oncology, an organization representing FDA, the NCI and the Centers for Medicare and Medicaid Services, to discuss the regulatory approval process and to determine the objectives for the next clinical trial involving Lymphoseek. During 2004, we prepared and submitted an IND application to FDA to support the marketing clearance of Lymphoseek.

In early 2005, we announced that FDA had accepted our application to establish a corporate IND for Lymphoseek. With the transfer of the UCSD physician IND to Neoprobe, we assumed full clinical and commercial responsibility for the development of Lymphoseek. Following the establishment of the corporate IND, Neoprobe’s clinical and regulatory personnel began discussions with FDA regarding the clinical development program for Lymphoseek.

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As a “first in class” drug, Neoprobe was advised that additional non-clinical studies needed to be completed before additional clinical testing of the drug could occur in humans. The additional non-clinical testing was successfully completed in late 2005 and the reports were filed with FDA in December 2005. The seven studies included repeat administrations of Lymphoseek at dosages significantly in excess of the anticipated clinical dosage. None of the non-clinical studies revealed any toxicity issues associated with the drug.

Upon the submission of the IND and draft Phase 2 protocol, FDA advised Neoprobe that commercially-produced Lymphoseek would need to be used in the Phase 2 clinical study, as opposed to using drug previously manufactured in laboratories at UCSD. Also, FDA raised a number of Chemistry, Manufacturing and Control (CMC) questions regarding the drug compound and characterization. Neoprobe began the transfer of bulk drug manufacturing to Reliable Biopharmaceutical Corporation (Reliable) early in 2005 and engaged OSO BioPharmaceuticals Manufacturing LLC (OSO Bio, formerly Cardinal Health PTS) to establish the commercial manufacturing process for filling and lyophilization of the drug product. We submitted an initial CMC response to FDA in 2006.

We received clearance from FDA in May 2006 to move forward with patient enrollment for a multi-center Phase 2 clinical study of Lymphoseek. The first of our Phase 2 clinical sites received clearance from its internal clinical review committee, or Institutional Review Board (IRB), in July 2006. The IRB clearance permitted us to finalize arrangements to begin patient screening and enrollment activities for the Phase 2 trial. We began patient enrollment in September 2006 and completed enrollment of the 80 patients in June 2007. We announced positive preliminary efficacy results from our Phase 2 Lymphoseek trial in June 2007 and final results in December 2007. Localization of Lymphoseek to lymphoid tissue was confirmed by pathology in over 99% of the lymph node tissue samples removed during the Phase 2 trial. We held an end of Phase 2 meeting with FDA during late October 2007 during which the final results were reviewed. The Phase 2 study was conducted at five of the leading cancer centers in the U.S.: John Wayne Cancer Center; University of California, San Francisco; MD Anderson Cancer Center; University Hospital Cleveland (Case Western Reserve); and the University of Louisville. The results of the Phase 2 study were published in the February 2011 online edition of the Annals of Surgical Oncology.

During 2008, we initiated patient enrollment in a Phase 3 clinical study in subjects with either breast cancer or melanoma (NEO3-05). In March 2009, we announced that this study had reached the accrual of 203 lymph nodes, the study’s primary accrual objective. The NEO3-05 Phase 3 clinical study was an open label trial of node-negative subjects with either breast cancer or melanoma. It was designed to evaluate the safety and the accuracy of Lymphoseek in identifying the lymph nodes draining from the subject’s tumor site. To demonstrate the accuracy of Lymphoseek, each subject consenting to participate in the study was injected in proximity to the tumor with Lymphoseek and one of the vital blue dyes that are commonly used in lymphatic mapping procedures. The primary efficacy objective of the study was to identify lymph nodes that contained the vital blue dye and to demonstrate a statistically acceptable concordance rate between the identification of lymph nodes with the vital blue dye and Lymphoseek. To be successful, the study needed to achieve a statistical p-value of at least 0.05. In addition, the secondary endpoint of the study was to pathologically examine lymph nodes identified by either the vital blue dyes or Lymphoseek to determine if cancer was present in the lymph nodes.

In June 2009, we initiated a Phase 3 clinical trial to be conducted in subjects with head and neck squamous cell carcinoma (NEO3-06). The NEO3-06 clinical study was designed to expand the potential labeling for Lymphoseek as a sentinel lymph node targeting agent after the initial marketing clearance for the product. Our discussions with FDA and the European Medicines Agency (EMA) have also suggested that the NEO3-06 clinical trial will further support the use of Lymphoseek in sentinel lymph node biopsy procedures. We believe the outcome of the trial will be beneficial to the marketing and commercial adoption of Lymphoseek in the U.S. and will support registration in the European Union (EU). Our plan remains to have approximately 20 participating institutions in the NEO3-06 clinical trial. Subject recruitment and enrollment is actively underway at a number of institutions and the trial protocol is currently under review at several other institutions. The accrual rate for this trial is slower than the accrual rate for the

NEO3-05 and NEO3-09 trials due in part to the incidence rate for head and neck cancers for subjects eligible to participate in this trial. We do not expect this trial to complete full accrual until sometime in 2012; however, there are opportunities to stop the trial at earlier points in the event we encounter subjects with disease-involved lymph nodes at a higher than historical expected rate.

In March 2010, Neoprobe met with FDA to review the clinical outcomes of NEO3-05. The meeting included a review of the efficacy and safety results of the NEO3-05 clinical study and Neoprobe's plans for the submission of a NDA for Lymphoseek based on the results of NEO3-05 and other previously completed clinical studies. During the meeting, Neoprobe provided FDA with the clinical results of the protocol-compliant clinical sites that participated in the NEO3-05 clinical study that contributed 136 intent-to-treat subjects who provided 215 lymph nodes containing the vital blue dye. 210 of the vital blue dye positive lymph nodes contained Lymphoseek for an overall concordance rate of 98%, achieving a very high level of statistical correlation (p-value = 0.0001) for the primary endpoint of the clinical study. Prior to the meeting, FDA requested that Neoprobe conduct a "reverse concordance" assessment of the clinical study where Lymphoseek might identify lymph nodes missed by the vital blue dyes. This assessment showed that Lymphoseek was able to identify 85 additional lymph nodes that did not contain the vital blue dye, and 18% of these nodes were found by pathology to contain cancer. There were no significant reported safety events related to Lymphoseek. FDA indicated that the clinical data from the NEO3-05 clinical study and other completed clinical evaluations of Lymphoseek would be supportive of a NDA submission for Lymphoseek. FDA also encouraged Neoprobe to request a series of pre-NDA meetings to review the non-clinical and chemistry, manufacturing and control (CMC) components of the NDA prior to its formal submission. Neoprobe completed successful non-clinical and CMC pre-NDA reviews with FDA during the second quarter of 2010.

As a result of the March 2010 meeting, we moved forward with a plan to file the NDA for Lymphoseek later in 2010. A key part of the plan, however, was to ensure that the patient population in the safety database that would be considered in the approval of Lymphoseek would be adequate to meet the expectations of FDA. As such, in July 2010, Neoprobe initiated enrollment in another Phase 3 clinical evaluation of Lymphoseek in subjects with either breast cancer or melanoma (NEO3-09) which we expected would accrue patients, primarily for purposes of augmenting the safety population and to support expanded product labeling claims. Based on guidance received in the March 2010 meeting, we planned to file data related to the NEO3-09 trial as part of a planned major amendment to the primary NDA.

In October 2010, Neoprobe met with FDA for a pre-NDA assessment for Lymphoseek. As a result of the pre-NDA assessment, FDA requested that data from both the completed NEO3-05 study and the NEO3-09 study currently in progress be included in the Company's primary NDA for Lymphoseek rather than submitting the NEO3-09 study safety data as a planned major amendment to the ongoing NDA review, as initially intended. The pre-NDA assessment resulted in no modification to the NEO3-09 trial design or endpoints or to any of the other previously agreed-to clinical or regulatory components of the Lymphoseek NDA. As such, NEO3-09 will now be one of two adequate and well-controlled trials included in the primary NDA submission for a first-cycle review.

In February 2011, we announced that we had enrolled an adequate number of subjects to enable us to meet the lymph node accrual goal for the NEO3-09 clinical trial. Preliminary top-line data are expected to be announced in the second quarter of 2011. In addition, the results of the NEO3-09 clinical study may support the inclusion of enhanced product claims for Lymphoseek in the primary NDA submission.

The Lymphoseek NDA submission will be based on the clinical results of the Phase 3 clinical studies NEO3-05 and NEO3-09, and other already completed clinical evaluations of Lymphoseek. The request for the total data package from two Phase 3 clinical trials is consistent with FDA's ongoing initiative to push for more complete primary submissions and to limit major amendments made to NDAs. This ongoing initiative to shorten drug review cycle times was re-emphasized by FDA's Office of New Drug Development in late 2009 and enables more successful first-cycle reviews which ultimately shortens overall drug approval timelines. We believe inclusion of the NEO3-09 study data in the primary NDA submission may support stronger product labeling as an outcome of a first-cycle review of the Lymphoseek NDA and may also positively impact market adoption.

We plan to use the safety and efficacy results from the NEO3-06 Phase 3 clinical evaluations of Lymphoseek, which will include sites in the EU, to support the drug registration application process in the EU through the centralized drug authority EMA as well as to amend the filing in the U.S. for expanded product labeling. Neoprobe expects to submit the NDA for Lymphoseek during the first half of 2011. Depending on the timing and the outcome of the FDA regulatory review cycle, we believe that Lymphoseek could be commercialized in early 2012. We cannot assure you, however, that this product will achieve regulatory approval, or if approved, that it will achieve market acceptance. See Risk Factors.

RIGS

From inception until 1998, Neoprobe devoted significant efforts and resources to the development of its proprietary RIGS technology. The RIGS system combines a patented hand-held gamma radiation detection probe with proprietary radiolabeled cancer-specific targeting agents to provide surgeons with real-time information to locate tumor deposits generally not detectable by conventional methods. The RIGS system is designed to assist the surgeon in the more thorough removal of the cancer, thereby leading to improved surgical treatment of the patient. The targeting radiopharmaceutical agents used in the RIGS process are monoclonal antibodies that are specific for cancer markers, or antigens, labeled with a radioactive isotope that emits low energy gamma rays. The device used is a very sensitive radiation detection instrument that is capable of detecting small amounts of radiation bound to the targeting agent. Before surgery, a cancer patient is injected with one of the targeting agents which circulates throughout the patient's body and binds specifically to cancer cell antigens or receptors. Concentrations of the targeting agent are then located during surgery by Neoprobe's gamma detection device, which emits an audible tone to direct the surgeon to targeted tissue.

RIGScan is an intraoperative biologic targeting agent consisting of a radiolabeled murine monoclonal antibody (CC49 MAb, Minretumomab). Various potential radioisotopes can be used as the radiolabel. The CC49 MAb was developed by the NCI and is licensed to Neoprobe by the National Institutes of Health (NIH). The CC49 MAb is produced from a murine cell line generated by the fusion of splenic lymphocytes from mice immunized with tumor-associated glycoprotein-72 (TAG-72) with non-immunoglobulin secreting P3-NS-1-Ag4 myeloma cells. The CC49 MAb localizes or binds to TAG-72 antigen and shows a strong reactivity with both LS-174T colon cancer extract and to a breast cancer extract.

The RIGS system was conceived to be a diagnostic aid in the intraoperative detection of clinically occult disease in patients with colon or rectal cancer. RIGScan CR is intended to be used in conjunction with other diagnostic methods for the detection of the extent and location of occult tumor and tumor metastases in patients with colorectal cancer. The detection of clinically occult tumor provides the surgeon with a more accurate assessment of the extent of disease, and therefore may impact the surgical and therapeutic management of the patient. Clinical trials suggest that RIGScan CR provides additional information outside that provided by standard diagnostic modalities (including surgical exploration) that may aid in patient management. Specifically, RIGScan CR confirms the location of surgically suspicious metastases, evaluates the margins of surgical resection, and detects occult tumor in perihepatic (portal and celiac axis) lymph nodes.

Neoprobe conducted two Phase 3 studies, NEO2-13 and NEO2-14, of RIGScan CR in the mid-1990s in patients with primary and metastatic colorectal cancer, respectively. Both studies were multi-institutional involving cancer treatment institutions in the U.S., Israel, and the EU. The primary endpoint of both studies was to demonstrate that RIGScan CR detected pathology-confirmed disease that had not been detected by traditional preoperative (i.e., CT Scans) or intraoperative (i.e., surgeon's visual observations and palpation) means. That is, the trials were intended to show that the use of RIGScan CR assisted the surgeon in the detection of occult tumor. In 1996, Neoprobe submitted applications to EMA and FDA for marketing approval of RIGScan CR for the detection of metastatic colorectal cancer.

Clinical study NEO2-14, which was submitted to FDA in the RIGScan CR Biologic License Application (BLA), enrolled 151 colorectal cancer patients with either suspected metastatic primary colorectal disease or recurrent colorectal disease. During FDA's review of the BLA, 109 of the enrolled patients were determined to be evaluable patients. Clinical study NEO2-13 was conducted in 287 enrolled patients with primary colorectal disease. The primary end-point for clinical study NEO2-13 was the identification of occult tumor.

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NEO2-14 was the pivotal study submitted with Neoprobe's referenced BLA. Two additional studies evaluating patients with either primary or metastatic colorectal disease, NEO2-11 (a multi-center study) and NEO2-18 (a single institution study), were included in the BLA and provided supportive proof of concept (i.e., localization and occult tumor detection) and safety data. A study summary report for NEO2-13 was submitted under the BLA; however, FDA undertook no formal review of the study.

Following review of our applications, we received requests for further information from FDA and from the European Committee for Proprietary Medicinal Products on behalf of EMA. Both FDA and EMA acknowledged that our studies met the diagnostic endpoint of the Phase 3 clinical study, which was to provide incremental information to the surgeon regarding the location of hidden tumor. However, both agencies wanted to know how the finding of additional tumor provided clinical benefit that altered patient management or outcome for patients with metastatic colorectal cancer. In a series of conversations with FDA, the product claims were narrowed to the intraoperative detection of hepatic and perihepatic disease in patients with advanced colorectal cancer and patients with recurrent colorectal cancer.

FDA determined during its review of the BLA that the clinical studies of RIGScan CR needed to demonstrate clinical utility in enhancing patient outcomes in addition to identifying additional pathology-confirmed disease. In discussions between Neoprobe and the agency, an FDA-driven post hoc analysis plan was developed to limit the evaluation of RIGScan CR to patients with hepatic and perihepatic disease with known metastasis to the liver. Findings of occult disease and subsequent changes in patient management (i.e., abandoning otherwise risky hepatic resections) in this limited population would serve as a measure of patient benefit. FDA's analysis of the patients enrolled in NEO2-14 matching the limited criteria was evaluated with a determination to confirm the surgical resection abandonment outcome. The number of evaluable patients in this redefined patient population was deemed too small by the agency and the lack of pre-stated protocol guidance precluded consistent sets of management changes given similar occult findings. The number of evaluable patients for any measure of clinical utility, therefore, was too small to meet relevant licensing requirements and FDA ultimately issued a not approvable letter for the BLA on December 22, 1997, describing certain clinical and manufacturing deficiencies. Neoprobe withdrew its application to EMA in November 1997.

We developed a clinical response plan for both agencies during the first half of 1998. However, following our analysis of the regulatory guidance and pathways for approval that existed at that time, we determined that we did not have sufficient financial resources to conduct the additional studies requested.

In 2004, we obtained access to survival analyses of patients treated with RIGScan CR which have been prepared by third parties, indicating that RIGScan status was correlated with patient survival trends and that RIGScan CR may be predictive of, or actually contribute to, a positive outcome when measuring survival of the patients that participated in our original BLA studies. These data and its possible significance were unknown at the time of the BLA review given the limited maturity of the follow-up experience. The data include publication by some of the primary investigators involved in the Phase 3 RIGS trials who have independently conducted survival follow-up analyses to their own institution's RIGS trial patients with apparently favorable results relating to the long-term survival prognosis of patients who were treated with RIGS. Based primarily on this survival-related information, we requested a meeting with FDA in 2004 to discuss the possible next steps for evaluating the survival related to our previous Phase 3 clinical trials as well as the possible submission of these data, if acceptable, as a prospective analysis in response to questions originally asked by FDA in response to our original BLA.

The April 2004 meeting with FDA confirmed that the RIGS BLA remains active and open. We believe this will improve both the cost effectiveness and timeliness of future regulatory submissions for RIGScan CR. Additionally, FDA preliminarily confirmed that the BLA may be applicable to the general colorectal population; and not just the recurrent colorectal market as applied for in 1996. During the meeting, FDA also indicated that it would consider

possible prognostic indications for RIGScan CR and that survival data from one of our earlier Phase 3 studies could be supportive of a prognostic indication.

Our statistical analyses following the 2004 meeting with FDA indicated that a potential sample size of 2,400 to 2,800 patients would be required in clinical studies to get RIGScan CR registered, which proved cost prohibitive to us and our potential development partners in evaluating continued development for RIGScan CR. However, during 2008 we developed a protocol design which we believe could support our desired clinical endpoints but in a much smaller patient population. We held a pre-submission meeting with EMA and received positive feedback to the clinical trial design which involved approximately 400 patients. EMA subsequently indicated preliminary concurrence with a plan to harmonize the U.S. and EU regulatory pathways.

Our desire has been, and continues to be, to develop a clinical development plan which is harmonized between the U.S. and the EU in order to fully engage potential development partners. To that end, during December 2009 we submitted an IND amendment to FDA which included the design of a proposed Phase 3 clinical trial of RIGScan CR. Since filing the IND amendment, we have determined that due to differences in the current manufacturing process from the process used in the 1990's, a further amendment to the IND should be filed addressing the differences. In addition, in October 2010, we filed a response letter to FDA related to the Agency's complete response letter to the open BLA from 1997. The review responsibility for the RIGS BLA was recently transferred from CBER to the Division of Medical Imaging Products in CDER at FDA. The submission of the BLA response letter was the first of several near-term activities that Neoprobe intends to complete with FDA to reactivate the development of the RIGS technology. We have since filed a new IND request for the biologic component of the RIGS technology and held a pre-IND meeting with FDA to discuss the clinical development and regulatory plans for RIGScan.

The focus of Neoprobe's February 2011 pre-IND meeting with FDA was to first define the basic CMC requirements needed to resume clinical development efforts on RIGScan. FDA reviewed Neoprobe's comprehensive pre-IND package, including key aspects of the clinical development and drug development plans, and provided clear direction to the Company on its clinical and manufacturing activities going forward. As an outcome of the pre-IND meeting, we have clarified the path to reinitiate RIGScan development and the requirements for resuming development activities and moving toward clinical trials, FDA's guidance has provided direction to enhance our manufacturing platform, including process improvements to increase manufacturing efficiency and the quality of the underlying biologic antibody. We can now begin to implement our manufacturing plans through 2011 as a first step to recommencing clinical study of the technology in 2012 and beyond.

It should also be noted that the RIGScan biologic drug has not been produced for several years. We have successfully completed the initial steps in re-characterizing the drug cell line and believe, based on work done to date, that the cell line is still viable. We plan to submit these data to EMA and FDA for their evaluation in connection with preparations to restart pivotal clinical trials. During the third quarter of 2009, we announced that we had executed a Biopharmaceutical Development and Supply Agreement with Laureate Biopharmaceutical Services, Inc. (Laureate Biopharma). This agreement will support the initial evaluation of the viability of the CC49 master working cell bank as well as the initial steps in re-validating the commercial production process for the biologic agent used in RIGScan. Laureate Biopharma has made progress in the re-validation of the manufacturing process and has completed preliminary biologic characterization activities. They are expected to provide Neoprobe with cGMP-produced material to support non-clinical and clinical evaluation within the next few months. Our development plans for RIGScan include the consideration of alternative radiolabeling processes. Depending on the outcome of our evaluation, we will need to establish radiolabeling capabilities for the CC49 antibody in order to meet the regulatory needs for the RIGScan product. We have already begun discussions with parties capable of supporting such activities.

We believe it will likely be necessary and beneficial for us to identify a development partner to prepare for the pivotal clinical testing that will be necessary to gain marketing clearance for RIGScan. Such a partner may or may not be involved in funding future RIGS development. In the past, we have engaged in discussions with various parties regarding potential partnerships. We believe the recently clarified regulatory pathway with FDA is very valuable, and we believe re-approaching the EMA through the scientific advice process will be helpful in clarifying the regulatory

pathway in the EU and will be helpful for us and our potential partners in assessing the full potential for RIGScan. However, even if we are able to make such arrangements on satisfactory terms, we believe that the time required for continued development, regulatory approval and commercialization of a RIGS product would likely be a minimum of five years before we receive any significant product-related royalties or revenues. We cannot assure you that we will be able to complete definitive agreements with a development partner or obtain financing to fund development of the RIGS technology and do not know if such arrangements could be obtained on a timely basis on terms acceptable to us, or at all. We also cannot assure you that FDA or EMA will clear our RIGS products for marketing or that any such products will be successfully introduced or achieve market acceptance. See Risk Factors.

Activated Cellular Therapy

Through various research collaborations, we performed early-stage research during the late 1990's on another technology platform, ACT, based on work originally done in conjunction with the RIGS technology. ACT is intended to boost the patient's own immune system by removing lymph nodes identified during surgery and then, in a cell processing technique, activating and expanding "helper" T-cells found in the nodes. Within 10 to 14 days, the patient's own immune cells, activated and expanded, are infused into the patient in an attempt to trigger a more effective immune response to the cancer.

In the course of our research into ACT performed with RIGS, we learned that these lymph node-derived lymphocytes containing helper T-cells could be activated and expanded to treat patients afflicted with viral and autoimmune disease as well as oncology patients. We have seen promising efficacy of this technology demonstrated from six Phase 1 clinical trials covering the oncology, viral and autoimmune applications.

In 2005, we formed a new subsidiary, Cira Bio, to explore the development of ACT. Neoprobe owns approximately 90% of the outstanding shares of Cira Bio with the remaining shares being held by the principals of a private holding company, Cira LLC. In conjunction with the formation of Cira Bio, an amended technology license agreement also was executed with The Ohio State University, from whom both Neoprobe and Cira LLC had originally licensed or optioned the various cellular therapy technologies. As a result of the cross-license agreements, Cira Bio has the exclusive development and commercialization rights to three issued U.S. patents that cover the oncology and autoimmune applications of its technology. In addition, Cira Bio has exclusive licenses to several pending patent applications.

In 2006, Cira Bio engaged the Battelle Memorial Institute to complete a technology and manufacturing process assessment of the cellular therapy approach. Cira Bio has attempted over the past few years to raise the necessary capital to move this technology platform forward. In August 2007 we entered into a Stock and Technology Option Agreement whereby Neoprobe gained the option to purchase the remaining 10% of Cira Bio from Cira LLC for $250,000; however, this option expired in 2008. The prospects for the ACT technology were buoyed during the fourth quarter of 2009 as a result of the publication of the discovery of a retrovirus linked to chronic fatigue syndrome, an autoimmune dysfunction the treatment of which showed promise during the early clinical trials for ACT. Scientists are continuing to evaluate the data regarding the linkage. Should the link to the retrovirus be further substantiated, the development prospects for ACT will likely improve. We do not know if our assessment of the technology's prospects will ultimately yield positive results or if we will be successful in obtaining funding on terms acceptable to us, or at all. In the event we fail to obtain financing for Cira Bio, the technology rights for the oncology applications of ACT may revert back to Neoprobe and the technology rights for the viral and autoimmune applications may revert back to Cira LLC upon notice by either party. See Risk Factors.

Market Overviews

The medical device marketplace is a fast growing market. Espicom Business Intelligence estimated in 2010 an annual medical device market of $95 billion in the U.S. and $230 billion internationally.

Cancer Market Overview

Cancer is the second leading cause of death in the U.S. and Western Europe and was estimated by the ACS to be responsible for over 569,000 deaths annually in 2010 in the U.S. alone. The NIH has estimated the overall annual costs for cancer (the primary focus of our gamma detection and pharmaceutical products) for the U.S. for 2010 at $263.8 billion: $102.8 billion for direct medical costs, $20.9 billion for indirect morbidity, and $140.1 billion for indirect mortality. Our line of gamma detection systems is currently used primarily in the application of ILM in breast cancer and melanoma which, according to the ACS, have been estimated to account for 14% and 4%, respectively, of new cancer cases which occurred in the U.S. in 2010.

The NIH has estimated that 1.4 million new cases of invasive breast cancer are expected to occur annually among women worldwide. Breast cancer is the second leading cause of death from cancer among all women in the U.S. The incidence of breast cancer, while starting to show minor declines in the past few years, generally increases with age, rising from about 120 cases per 100,000 women at age 40 to about 400 cases per 100,000 women at age 65. While the incidence rate for breast cancer appears to be decreasing, the overall number of new cases of breast cancer is still increasing. According to the ACS, over 207,000 new cases of invasive breast cancer are expected to be diagnosed and approximately 40,000 women are estimated to have died from the disease during 2010 in the U.S. alone. Thus, we believe that the significant aging of the population, combined with improved education and awareness of breast cancer and diagnostic methods, will continue to lead to an increased number of breast cancer surgical diagnostic procedures.

Approximately 80% of the patients diagnosed with breast cancer undergo a lymph node dissection (either ALND or SLNB) to determine if the disease has spread. While many breast cancer patients are treated in large cancer centers or university hospitals, regional and/or community hospitals continue to treat the majority of breast cancer patients. Over 10,000 hospitals are located in the markets targeted for our gamma detection SLNB products. We believe a significant portion of the potential market for gamma detection devices remains unpenetrated and that a replacement market is beginning to develop as units placed in the early years of SLNB begin to exceed over ten years of use. In addition, if the potential of Lymphoseek as a radioactive tracing agent is ultimately realized, it may address not only the current breast and melanoma markets on a procedural basis, but also to assist in the clinical evaluation and staging of solid tumor cancers and expanding SLNB to additional indications, such as gastric, non-small cell lung and other solid tumor cancers.

We estimate the total market potential for Lymphoseek, if ultimately approved for all of these indications, could exceed $450 million. However, we cannot assure you that Lymphoseek will be cleared to market, or if cleared to market, that it will achieve the prices or sales we have estimated. See Risk Factors.

The ACS has also estimated that nearly 143,000 new incidences of colon and rectal cancers were expected to occur in the U.S. in 2010. Based on an assumed recurrence rate of 40%, this would translate into total potential surgical procedures of approximately 200,000 annually in the U.S. alone. We believe the number of procedures in other markets of the world to be approximately two times the estimated U.S. market. As a result, we believe the total potential global market for RIGScan CR could be in excess of $3 billion annually, depending on the level of reimbursement allowed. However, we cannot assure you that RIGScan CR will be cleared to market, or if cleared to market, that it will receive the reimbursement or achieve the level of sales we have currently estimated. See Risk Factors.

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Marketing and Distribution

Gamma Detection Devices

We began marketing the neo2000 gamma detection system in October 1998. From October 1999 through July 2010, our gamma detection systems have been marketed and distributed throughout most of the world through Ethicon Endo-Surgery, Inc. (EES), a Johnson & Johnson company. We entered into a distribution agreement with EES effective October 1, 1999 for an initial five-year term with options to extend for two successive two-year terms. In March 2004, EES exercised its first two-year extension option, and in March 2006 EES exercised its option for the second and final two-year term extension, thus extending the term of our the agreement through the end of 2008. In December 2007, Neoprobe and EES executed an amendment to the distribution agreement which extended the agreement through the end of 2013. In July 2010, EES sold its breast care franchise to Devicor Medical Products, LLC (Devicor). As a part of the acquisition, Devicor took on EES' sales and marketing resources in the U.S. and certain rest-of-world markets. In connection with their acquisition of EES' breast care franchise, Devicor assumed all of EES' rights and responsibilities related to the sales, marketing and distribution of our gamma detection products. Under this agreement, we manufacture and sell our gamma detection medical devices on an exclusive basis to Devicor. Devicor has no ongoing purchase or reimbursement commitments to us other than the rolling four-month binding purchase commitment for gamma detection devices and certain annual minimum sales levels in order to maintain their exclusivity in distribution in most global markets. In addition, the economic terms of the revenue sharing from the end customer sale of our gamma detection devices increased commencing in January 2009. Our agreement with Devicor also contains certain termination provisions and licenses to our intellectual property that take effect only in the event we fail to supply product, or for other reasons such as a change of control. In Japan, however, we market our products through a pre-existing relationship with Century Medical, Inc.

The heart of our gamma detection product line, the neoprobe GDS, is a control unit that is software-upgradeable, permitting product enhancements without costly remanufacturing. Since the original launch of the GDS' predecessor platform, the neo2000 (in 1998), we have also introduced a number of enhanced radiation detection probes optimized for lymphatic mapping procedures, including three wireless probes, as well as a new probe optimized for the detection of high energy radioisotopes. We have also developed four major software upgrades for the system that have been made available for sale to customers. We intend to continue developing additional SLNB-related probes and instrument products in cooperation with Devicor to maintain our leadership position in the gamma detection field.

Physician training is critical to the use and adoption of SLNB products by surgeons and other medical professionals. Our company and our marketing partners have established relationships with leaders in the SLNB surgical community and have established and supported training courses internationally for lymphatic mapping. We intend to continue to work with our partners to expand the number of SLNB training courses available to surgeons. See Risk Factors.

Gamma Detection Radiopharmaceuticals

During the fourth quarter of 2007, we executed an agreement with Cardinal Health, Inc.'s radiopharmaceutical distribution division (Cardinal Health) for the exclusive distribution of Lymphoseek in the United States. The agreement is for a term of five years from the date of marketing clearance of a NDA from FDA. Under the terms of our agreement with Cardinal Health, Neoprobe will receive a significant share of the revenue from each patient dose of Lymphoseek sold. In addition, Neoprobe will receive up to $3 million in payments upon the achievement of certain sales milestones by Cardinal Health. We have had preliminary discussions with potential marketing and distribution partners in the EU and other major world markets; however, we do not currently have collaborative agreements covering Lymphoseek in areas of the world other than the U.S. or for RIGScan CR or ACT. We cannot assure you that we will be successful in securing collaborative partners for other global markets or radiopharmaceutical products, or that we will be able to negotiate acceptable terms for such arrangements. We believe the most preferable and likely

distribution partners for Lymphoseek would be entities with established radiopharmaceutical distribution channels, although it is possible that other entities with more traditional oncology pharmaceutical portfolios may also have interest.

With respect to RIGScan CR, we continue to believe it will be necessary for us to identify a development partner or an alternative funding source in order to prepare for and to fund further clinical testing that will be necessary to gain marketing clearance for RIGScan CR. We are aware of potential development partners who have previously indicated an interest in entering into a development relationship and expect to have ongoing discussions with such parties in the coming months; however, we do not expect to enter into any definitive partnership at least until we have further advanced the clinical testing for RIGScan CR. We cannot assure you that we will be able to secure marketing and distribution partners for the product, or if secured, that such arrangements will result in significant sales of RIGScan CR.

Manufacturing

Gamma Detection Devices

As part of our virtual business model, we rely on independent contract manufacturers, some of which are single-source suppliers, for the manufacture of the principal components of our current line of gamma detection system products. See Risk Factors. We have devoted significant resources to develop production capability of our gamma detection systems at qualified contract manufacturers. Production of the neoprobe GDS control unit, the 14mm probe, the 11mm laparoscopic probe, and the wireless probes involve the manufacture of components by a combination of subcontractors, including but not limited to, eV Microelectronics, a division of Endicott Interconnect Technologies, Inc. (eV), Redlen Technologies (Redlen) and Nortech Systems, Inc. (Nortech). We also purchase certain accessories for our line of gamma detection systems from other qualified manufacturers.

We purchase certain solid-state crystals used in the manufacture of our proprietary line of hand-held gamma detection probes from eV and Redlen. We do not currently have a supply agreement with either eV or Redlen, however we currently purchase from both under extended blanket purchase orders. The number of potential suppliers of such solid-state crystals is limited. However, we believe our relationships with eV and Redlen mitigate the risk of prolonged interruption of supply of crystals that could negatively impact the availability of our probe gamma detection device products, which would accordingly adversely affect our operating results.

In February 2004, we executed a Product Supply Agreement with TriVirix International, Inc. (TriVirix) for the manufacture and/or final assembly of our gamma detection products, including probes and control units. This agreement was assigned to Nortech in connection with Nortech’s acquisition of TriVirix during 2010. The original term of this agreement expired in February 2007 but has been extended under the automatic renewal terms of the agreement through February 2012. The agreement will continue to be automatically extended for successive one-year periods unless six months notice is provided by either party.

We cannot assure you that we will be able to maintain agreements or other purchasing arrangements with our subcontractors on terms acceptable to us, or that our subcontractors will be able to meet our production requirements on a timely basis, at the required levels of performance and quality. In the event that any of our subcontractors is unable or unwilling to meet our production requirements, we cannot assure you that an alternate source of supply could be established without significant interruption in product supply or without significant adverse impact to product availability or cost. Any significant supply interruption or yield problems that we or our subcontractors experience would have a material adverse effect on our ability to manufacture our products and, therefore, a material adverse effect on our business, financial condition, and results of operations until a new source of supply is qualified. See Risk Factors.

Gamma Detection Radiopharmaceuticals

In preparation for the commencement of a multi-center clinical evaluation of Lymphoseek, Neoprobe engaged drug manufacturing organizations to produce the drug that was used in the Phase 2 trial and in our Phase 3 work completed to date, and is expected to be used in the ongoing Phase 3 clinical work. Reliable has produced the active pharmaceutical ingredient (API) and OSO Bio has performed final product manufacturing including final drug formulation, lyophilization (i.e., freeze-drying) and packaging processes. Once packaged, the vialed drug can then be shipped to a hospital or regional commercial radiopharmacy where it can be made radioactive (i.e., radiolabeled) with Technetium 99m (Tc99m) to become the final form of Lymphoseek. The commercial manufacturing processes at Reliable and OSO Bio are being validated and both organizations have assisted Neoprobe in the preparation of the chemistry, manufacturing and control sections of our submissions to FDA and EMA. Both Reliable and OSO Bio are registered manufacturers with FDA and/or EMA. In November 2009, we completed a Manufacture and Supply Agreement with Reliable for the manufacture of the bulk API material with an initial term of 10 years. At this point, drug product produced by OSO Bio has been manufactured under clinical development agreements. A commercial supply agreement is being negotiated with OSO Bio. We cannot assure you that we will be successful in reaching an agreement with OSO Bio on terms satisfactory to us, or at all. We also cannot assure you that we will be able to maintain agreements or other purchasing arrangements with our subcontractors on terms acceptable to us, or that our subcontractors will be able to meet our production requirements on a timely basis, at the required levels of performance and quality. In the event that any of our subcontractors are unable or unwilling to meet our production requirements, we cannot assure you that an alternate source of supply could be established without significant interruption in product supply or without significant adverse impact to product availability or cost. Any significant supply interruption or yield problems that we or our subcontractors experience would have a material adverse effect on our ability to manufacture our products and, therefore, a material adverse effect on our business, financial condition, and results of operations until a new source of supply is qualified. See Risk Factors.

During the third quarter of 2009, we announced that we had executed a Biopharmaceutical Development and Supply Agreement with Laureate Biopharma. This agreement will support the initial evaluation of the viability of the CC49 master and working cell banks as well as the initial steps in re-validating the commercial production process for the biologic agent used in RIGScan CR. In addition, we will need to re-establish radiolabeling capabilities for the CC49 antibody in order to meet the regulatory needs for the RIGScan CR product. We have also begun discussions with parties capable of supporting such activities.

We cannot assure you that we will be successful in securing and/or maintaining the necessary biologic, product and/or radiolabeling capabilities. See Risk Factors.

Competition

We face competition from medical product and biotechnology companies, as well as from universities and other non-profit research organizations in the field of cancer diagnostics and treatment. Many emerging medical product companies have corporate partnership arrangements with large, established companies to support the research, development, and commercialization of products that may be competitive with our products. In addition, a number of large established companies are developing proprietary technologies or have enhanced their capabilities by entering into arrangements with or acquiring companies with technologies applicable to the detection or treatment of cancer. Many of our existing or potential competitors have substantially greater financial, research and development, regulatory, marketing, and production resources than we have. Other companies may develop and introduce products and processes competitive with or superior to those of ours. See Risk Factors.

For our products, an important factor in competition is the timing of market introduction of our products or those of our competitors' products. Accordingly, the relative speed with which we can develop products, complete the

regulatory clearance processes and supply commercial quantities of the products to the market is an important competitive factor. We expect that competition among products cleared for marketing will be based on, among other things, product efficacy, safety, reliability, availability, price, and patent position.

Gamma Detection Devices

With the continued emergence of SLNB, a number of companies have begun to market gamma radiation detection instruments. Most of the competitive products have been designed from an industrial or nuclear medicine perspective rather than being developed initially for surgical use. We compete with products produced and/or marketed by Care Wise Medical Products Corporation, Intra-Medical Imaging LLC, RMD Instruments LLC (a subsidiary of Dynasil Corporation), SenoRx, Eurorad S.A and other companies.

It is often difficult to glean accurate competitive information within the lymphatic mapping field, primarily because most of our competitors are either subsidiaries or divisions of larger corporations or privately held corporations, whose sales revenue or volume data is not readily available or determinable. In addition, lymphatic mapping does not currently have a separate reimbursement code in most healthcare systems. As such, determining trends in the actual number of procedures being performed using lymphatic mapping is difficult. We believe, based on our understanding of Devicor's (previously EES') success rate in competitive bid situations, that our market share has remained relatively constant or increased slightly in light of changes in the competitive landscape over the past few years. We believe our intellectual property portfolio will be a barrier to competitive products; however, we cannot assure you that competitive products will not be developed, be successful in eroding our market share or affect the prices we receive for our gamma detection devices. See Risk Factors.

Gamma Detection Radiopharmaceuticals

We do not believe there are any directly competitive intraoperative diagnostic radiopharmaceuticals with RIGScan that would be used intraoperatively in the colorectal cancer application that RIGScan is initially targeted for. There are other radiopharmaceuticals that are used as preoperative imaging agents; however, we are unaware of any that could be used as a real-time diagnostic aid during surgery such as RIGScan.

Surgeons who practice the lymphatic mapping procedure for which Lymphoseek is intended currently use other radiopharmaceuticals such as a sulphur-colloid compound in the U.S. and other colloidal compounds in other markets. In addition, many surgeons use vital blue dyes to assist in the visual identification of the draining lymphatic tissue. However, these drugs are being used "off-label" in most major global markets (i.e., they are not specifically indicated for use as a sentinel node targeting agent). As such, we believe that Lymphoseek, if ultimately approved, would be the first drug specifically labeled for use as a lymph node targeting agent.

Patents and Proprietary Rights

We regard the establishment of a strong intellectual property position in our technology as an integral part of the development process. We attempt to protect our proprietary technologies through patents and intellectual property positions in the United States as well as major foreign markets. Approximately 30 instrument patents issued in the United States as well as major foreign markets protect our gamma detection technology.

Lymphoseek is also the subject of patents and patent applications in the United States and certain major foreign markets. The patents and patent applications are held by The Regents of the University of California and have been licensed exclusively to Neoprobe for lymphatic tissue imaging and intraoperative detection worldwide. The first composition of matter patent covering Lymphoseek was issued in the United States in June 2002. The claims of the composition of matter patent covering Lymphoseek have been allowed in the EU and issued in the majority of EU countries in 2005. The composition of matter patent has also been issued in Japan. We have filed additional patent applications in the United States related to the manufacturing processes for Lymphoseek.

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We continue to support proprietary protection for the products related to RIGS and ACT in major global markets such as the U.S. and the EU, which although not currently integral to our near-term business plans, may be important to a potential RIGS or ACT development partner. Composition of matter patents have been issued in the U.S. and EU that cover the antibodies used in clinical studies. The most recent of these patents was issued in 2004 and additional patent applications are pending. We have a license to these patents through the NIH; however, our license is subject to ongoing diligence requirements. Additionally, statutory exclusivity exists for biologics upon approval in the U.S. for 12 years. In the EU, 10 years of data exclusivity are provided for.

The activated cellular therapy technology of Cira Bio is the subject of issued patents in the United States to which Neoprobe has exclusive license rights. European patent statutes do not permit patent coverage for treatment technologies such as Cira Bio's. The oncology applications of Cira Bio's treatment approach are covered by issued patents with expiration dates of 2018 and 2020, unless extended. The autoimmune applications are covered by an issued patent with an expiration date of 2018, unless extended. The viral applications are the subject of patent applications and other aspects of the Cira Bio technology that are in the process of being reviewed by the United States Patent and Trademark Office. Cira Bio has received favorable office action correspondence on both applications.

The patent position of biotechnology and medical device firms, including our company, generally is highly uncertain and may involve complex legal and factual questions. Potential competitors may have filed applications, or may have been issued patents, or may obtain additional patents and proprietary rights relating to products or processes in the same area of technology as that used by our company. The scope and validity of these patents and applications, the extent to which we may be required to obtain licenses thereunder or under other proprietary rights, and the cost and availability of licenses are uncertain. We cannot assure you that our patent applications will result in additional patents being issued or that any of our patents will afford protection against competitors with similar technology; nor can we assure you that any of our patents will not be designed around by others or that others will not obtain patents that we would need to license or design around.

We also rely upon unpatented trade secrets. We cannot assure you that others will not independently develop substantially equivalent proprietary information and techniques, or otherwise gain access to our trade secrets, or disclose such technology, or that we can meaningfully protect our rights to our unpatented trade secrets.

We require our employees, consultants, advisers, and suppliers to execute a confidentiality agreement upon the commencement of an employment, consulting or manufacturing relationship with us. The agreement provides that all confidential information developed by or made known to the individual during the course of the relationship will be kept confidential and not disclosed to third parties except in specified circumstances. In the case of employees, the agreements provide that all inventions conceived by the individual will be the exclusive property of our company. We cannot assure you, however, that these agreements will provide meaningful protection for our trade secrets in the event of an unauthorized use or disclosure of such information. See Risk Factors.

Government Regulation

Most aspects of our business are subject to some degree of government regulation in the countries in which we conduct our operations. As a developer, manufacturer and marketer of medical products, we are subject to extensive regulation by, among other governmental entities, FDA and the corresponding state, local and foreign regulatory bodies in jurisdictions in which our products are sold. These regulations govern the introduction of new products, the observance of certain standards with respect to the manufacture, safety, efficacy and labeling of such products, the maintenance of certain records, the tracking of such products and other matters.

Failure to comply with applicable federal, state, local or foreign laws or regulations could subject us to enforcement action, including product seizures, recalls, withdrawal of marketing clearances, and civil and criminal penalties, any one or more of which could have a material adverse effect on our business. We believe that we are in substantial compliance with such governmental regulations. However, federal, state, local and foreign laws and regulations regarding the manufacture and sale of medical devices are subject to future changes. We cannot assure you that such changes will not have a material adverse effect on our company.

For some products, and in some countries, government regulation is significant and, in general, there is a trend toward more stringent regulation. In recent years, FDA and certain foreign regulatory bodies have pursued a more rigorous enforcement program to ensure that regulated businesses like ours comply with applicable laws and regulations. We devote significant time, effort and expense addressing the extensive governmental regulatory requirements applicable to our business. To date, we have not received any notifications or warning letters from FDA or any other regulatory bodies of alleged deficiencies in our compliance with the relevant requirements, nor have we recalled or issued safety alerts on any of our products. However, we cannot assure you that a warning letter, recall or safety alert, if it occurred, would not have a material adverse effect on our company.

In the early- to mid-1990s, the review time by FDA to clear medical products for commercial release lengthened and the number of marketing clearances decreased. In response to public and congressional concern, FDA Modernization Act of 1997 (the 1997 Act) was adopted with the intent of bringing better definition to the clearance process for new medical products. While FDA review times have improved since passage of the 1997 Act, we cannot assure you that FDA review process will not continue to delay our company's introduction of new products in the U.S. in the future. In addition, many foreign countries have adopted more stringent regulatory requirements that also have added to the delays and uncertainties associated with the release of new products, as well as the clinical and regulatory costs of supporting such releases. It is possible that delays in receipt of, or failure to receive, any necessary clearance for our new product offerings could have a material adverse effect on our business, financial condition or results of operations.

While we are unable to predict the extent to which our business may be affected by future regulatory developments, we believe that our substantial experience dealing with governmental regulatory requirements and restrictions on our operations throughout the world, and our development of new and improved products, should enable us to compete effectively within this environment.

Gamma Detection Devices

As a manufacturer of medical devices sold in various global markets, we are required by regulatory agency regulations to manufacture the devices under recognized quality standards and controls. Our medical devices are regulated in the United States by FDA in accordance with 21CFR requirements, in the EU according to the Medical Device Directive (93/42/EEC), and in Canada and Japan according to the Medical Devices Regulation. These regulatory requirements for quality systems are prescribed in the international standard ISO 13485 Medical devices – Quality management systems – Requirements for regulatory purposes. To ensure continued compliance in our daily processes, we have established and maintain the Neoprobe Corporate Quality Management System, which is based on the ISO 13485 standard. These requirements can also be extended to drug and biologic products regarding our future product portfolio.

Our first generation gamma detection instrument received 510(k) marketing clearance from FDA in December 1986 with modified versions receiving similar clearances in 1992 through 1997. In March 1998, FDA reclassified "nuclear uptake detectors" as Class 1 and conditionally exempt from 510(k) with full quality controls. We obtained the European CE mark, by “self-declaration,” for the neo2000 device in January 1999, with full quality controls. The gamma detection products are Class IIa in the EU. We maintain a “manufacturer’s license” in order to import our gamma detection products into Canada, with full quality controls. The gamma detection products are Class II in Canada.

Gamma Detection Radiopharmaceuticals

Our radiolabeled targeting agents and biologic products, if developed, would require a regulatory license to market by FDA and by comparable agencies in foreign countries. The process of obtaining regulatory licenses and approvals is

costly and time consuming, and we have encountered significant impediments and delays related to our previously proposed biologic products.

The process of completing pre-clinical and clinical testing, manufacturing validation and submission of a marketing application to the appropriate regulatory bodies usually takes a number of years and requires the expenditure of substantial resources, and we cannot assure you that any approval will be granted on a timely basis, if at all. Additionally, the length of time it takes for the various regulatory bodies to evaluate an application for marketing approval varies considerably, as does the amount of preclinical and clinical data required to demonstrate the safety and efficacy of a specific product. The regulatory bodies may require additional clinical studies that may take several years to perform. The length of the review period may vary widely depending upon the nature and indications of the proposed product and whether the regulatory body has any further questions or requests any additional data. Also, the regulatory bodies will likely require post-marketing reporting and surveillance programs to monitor the side effects of the products. We cannot assure you that any of our potential drug or biologic products will be approved by the regulatory bodies or approved on a timely or accelerated basis, or that any approvals received will not subsequently be revoked or modified.

In addition to regulations enforced by FDA, the manufacture, distribution, and use of radioactive targeting agents, if developed, are also subject to regulation by the Nuclear Regulatory Commission (NRC), the Department of Transportation and other federal, state, and local government authorities. We, or our manufacturer of the radiolabeled antibodies, must obtain a specific license from the NRC to manufacture and distribute radiolabeled antibodies, as well as comply with all applicable regulations. We must also comply with Department of Transportation regulations on the labeling and packaging requirements for shipment of radiolabeled antibodies to licensed clinics, and must comply with federal, state, and local governmental laws regarding the disposal of radioactive waste. We cannot assure you that we will be able to obtain all necessary licenses and permits and be able to comply with all applicable laws. The failure to obtain such licenses and permits or to comply with applicable laws would have a materially adverse effect on our business, financial condition, and results of operations.

Research and Development

We spent approximately $9.2 million and $5.0 million on research and development activities in the years ended December 31, 2010 and 2009, respectively.

Employees

As of March 11, 2011, we had 32 full-time and 10 part-time employees. We consider our relations with our employees to be good.

Item 1A. Risk Factors

An investment in our common stock is highly speculative, involves a high degree of risk, and should be made only by investors who can afford a complete loss. You should carefully consider the following risk factors, together with the other information in this prospectus, including our financial statements and the related notes, before you decide to buy our common stock. Our most significant risks and uncertainties are described below; however, they are not the only risks we face. If any of the following risks actually occur, our business, financial condition, or results of operations could be materially adversely affected, the trading of our common stock could decline, and you may lose all or part of your investment therein.

Our radiopharmaceutical product candidates are subject to extensive government regulations and we may not be able to obtain necessary regulatory approvals.

We may not receive the regulatory approvals necessary to commercialize our Lymphoseek and RIGScan product candidates, which could cause our business to be severely harmed. Our product candidates are subject to extensive and rigorous government regulation. FDA regulates, among other things, the development, testing, manufacture, safety, record-keeping, labeling, storage, approval, advertising, promotion, sale and distribution of pharmaceutical products. If our potential products are marketed abroad, they will also be subject to extensive regulation by foreign governments. None of our radiopharmaceutical product candidates have been approved for sale in the United States or in any foreign market. The regulatory review and approval process, which includes preclinical studies and clinical trials of each product candidate, is lengthy, complex, expensive and uncertain. Securing FDA clearance to market requires the submission of extensive preclinical and clinical data and supporting information to FDA for each indication to establish the product candidate's safety and efficacy. Data obtained from preclinical and clinical trials are susceptible to varying interpretation, which may delay, limit or prevent regulatory approval. The approval process may take many years to complete and may involve ongoing requirements for post-marketing studies. In light of the limited regulatory history of monoclonal antibody-based therapeutics, regulatory approvals for our products may not be obtained without lengthy delays, if at all. Any FDA or other regulatory approvals of our product candidates, once obtained, may be withdrawn. The effect of government regulation may be to:

- delay marketing of potential products for a considerable period of time;
- limit the indicated uses for which potential products may be marketed;
- impose costly requirements on our activities; and/or
- provide competitive advantage to other pharmaceutical and biotechnology companies.

We may encounter delays or rejections in the regulatory approval process because of additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. Failure to comply with applicable FDA or other regulatory requirements may result in criminal prosecution, civil penalties, recall or seizure of products, total or partial suspension of production or injunction, as well as other regulatory action against our product candidates or us. Outside the United States, our ability to market a product is contingent upon receiving clearances from the appropriate regulatory authorities. This foreign regulatory approval process includes risks similar to those associated with FDA approval process.

Clinical trials for our radiopharmaceutical product candidates will be lengthy and expensive and their outcome is uncertain.

Before obtaining regulatory approval for the commercial sale of any product candidates, we must demonstrate through preclinical testing and clinical trials that our product candidates are safe and effective for use in humans. Conducting clinical trials is a time consuming, expensive and uncertain process and may take years to complete. During 2009, we successfully completed a Phase 3 clinical trial in subjects with breast cancer or melanoma for our most advanced radiopharmaceutical product candidate, Lymphoseek. We are in the process of completing a second Phase 3 trial for this product also in subjects with breast cancer or melanoma and a third Phase 3 clinical trial in subjects with head and neck squamous cell carcinoma. In late 2008, we obtained approval from EMA for a Phase 3 clinical protocol for our next radiopharmaceutical candidate, RIGScan, and are preparing to approach FDA to obtain similar clearance. Historically, the results from preclinical testing and early clinical trials have often not been generally predictive of results obtained in later clinical trials. Frequently, drugs that have shown promising results in preclinical or early clinical trials subsequently fail to establish sufficient safety and efficacy data necessary to obtain regulatory approval. At any time during the clinical trials, we, the participating institutions, FDA or EMA might delay or halt any clinical trials for our product candidates for various reasons, including:

- ineffectiveness of the product candidate;
- discovery of unacceptable toxicities or side effects;
- development of disease resistance or other physiological factors;
- delays in patient enrollment; or
- other reasons that are internal to the businesses of our potential collaborative partners, which reasons they may not share with us.

While we have achieved some level of success in our recent Phase 2 and Phase 3 clinical trials for Lymphoseek, the results of these clinical trials, as well as pending and future trials, are subject to review and interpretation by various regulatory bodies during the regulatory review process and may ultimately fail to demonstrate the safety or effectiveness of our product candidates to the extent necessary to obtain regulatory approval or such that commercialization of our product candidates is worthwhile. Any failure or substantial delay in successfully completing clinical trials and obtaining regulatory approval for our product candidates could severely harm our business.

If we fail to obtain collaborative partners, or those we obtain fail to perform their obligations or discontinue clinical trials for particular product candidates, our ability to develop and market potential products could be severely limited.

Our strategy for the development and commercialization of our product candidates depends, in large part, upon the formation of collaborative arrangements. Collaborations may allow us to:

- generate cash flow and revenue;
- offset some of the costs associated with our internal research and development, preclinical testing, clinical trials and manufacturing;
- seek and obtain regulatory approvals faster than we could on our own; and
- commercialize existing and future product candidates.

We have an agreement in place with Cardinal Health for the distribution of Lymphoseek in the United States. We do not currently have collaborative agreements covering Lymphoseek in other areas of the world or for RIGScan or ACT. We cannot assure you that we will be successful in securing collaborative partners for other markets or radiopharmaceutical products, or that we will be able to negotiate acceptable terms for such arrangements. The development, regulatory approval and commercialization of our product candidates will depend substantially on the

efforts of collaborative partners, and if we fail to secure or maintain successful collaborative arrangements, or if our partners fail to perform their obligations, our development, regulatory, manufacturing and marketing activities may be delayed, scaled back or suspended.

We have suffered significant operating losses for several years in our history and we may not be able to again achieve profitability.

We had an accumulated deficit of approximately $251 million as of December 31, 2010. Although we were profitable in 2000 and 2001, we incurred substantial losses in the years prior to that, and again in subsequent years. The accumulated deficit resulted because we expended more money in the course of researching, developing and enhancing our technology and products and establishing our marketing and administrative organizations than we generated in revenues. We expect to continue to incur significant expenses in the foreseeable future, primarily related to the completion of development and commercialization of Lymphoseek, but also potentially related to RIGS and our device product lines. As a result, we are sustaining substantial operating and net losses, and it is possible that we will never be able to sustain or develop the revenue levels necessary to again attain profitability.

Our products and product candidates may not achieve the broad market acceptance they need in order to be a commercial success.

Widespread use of our handheld gamma detection devices is currently limited to one surgical procedure, sentinel lymph node biopsy (SLNB), used in the diagnosis and treatment of two primary types of cancer: melanoma and breast cancer. While the adoption of SLNB within the breast and melanoma indications appears to be widespread, we believe expansion of SLNB to other indications such as head and neck, colorectal and prostate cancers is likely dependent on a better lymphatic tissue targeting agent than is currently available. Without expanded indications in which to apply SLNB, it is likely that gamma detection devices will eventually reach market saturation. Our efforts and those of our marketing and distribution partners may not result in significant demand for our products, and the current demand for our products may decline.

Our radiopharmaceutical product candidates, Lymphoseek and RIGScan, are still in the process of development, and even if we are successful in commercializing them, we cannot assure you that they will obtain significant market acceptance.

We rely on third parties for the worldwide marketing and distribution of our gamma detection devices, who may not be successful in selling our products.

We currently distribute our gamma detection devices in most global markets through two partners who are solely responsible for marketing and distributing these products. The partners assume direct responsibility for business risks related to credit, currency exchange, foreign tax laws or tariff and trade regulation. While we believe that our distribution partners intend to continue to aggressively market our products, we cannot assure you that the distribution partners will succeed in marketing our products on a global basis. We may not be able to maintain satisfactory arrangements with our marketing and distribution partners, who may not devote adequate resources to selling our products. If this happens, we may not be able to successfully market our products, which would decrease our revenues.

Our radiopharmaceutical product candidates will remain subject to ongoing regulatory review even if they receive marketing approval. If we fail to comply with continuing regulations, we could lose these approvals and the sale of our products could be suspended.

Even if we receive regulatory clearance to market a particular product candidate, the approval could be conditioned on us conducting additional costly post-approval studies or could limit the indicated uses included in our labeling. Moreover, the product may later cause adverse effects that limit or prevent its widespread use, force us to withdraw it from the market or impede or delay our ability to obtain regulatory approvals in additional countries. In addition, the manufacturer of the product and its facilities will continue to be subject to FDA review and periodic inspections to

ensure adherence to applicable regulations. After receiving marketing clearance, the manufacturing, labeling, packaging, adverse event reporting, storage, advertising, promotion and record-keeping related to the product will remain subject to extensive regulatory requirements. We may be slow to adapt, or we may never adapt, to changes in existing regulatory requirements or adoption of new regulatory requirements.

If we fail to comply with the regulatory requirements of FDA and other applicable U.S. and foreign regulatory authorities or previously unknown problems with our products, manufacturers or manufacturing processes are discovered, we could be subject to administrative or judicially imposed sanctions, including:

- restrictions on the products, manufacturers or manufacturing processes;
- warning letters;
- civil or criminal penalties;
- fines;
- injunctions;
- product seizures or detentions;
- import bans;
- voluntary or mandatory product recalls and publicity requirements;
- suspension or withdrawal of regulatory approvals;
- total or partial suspension of production; and
- refusal to approve pending applications for marketing approval of new drugs or supplements to approved applications.

Our existing products are highly regulated and we could face severe problems if we do not comply with all regulatory requirements in the global markets in which these products are sold.

FDA regulates our gamma detection products in the United States. Foreign countries also subject these products to varying government regulations. In addition, these regulatory authorities may impose limitations on the use of our products. FDA enforcement policy strictly prohibits the marketing of FDA cleared medical devices for unapproved uses. Within the European Union, our products are required to display the CE Mark in order to be sold. We have obtained FDA clearance to market and European certification to display the CE Mark on our current line of gamma detection systems. We may not be able to obtain clearance to market any new products in a timely manner, or at all. Failure to comply with these and other current and emerging regulatory requirements in the global markets in which our products are sold could result in, among other things, warning letters, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, refusal of the government to grant pre-market clearance for devices, withdrawal of clearances, and criminal prosecution.

We rely on third parties to manufacture our medical device products and our business will suffer if they do not perform.

We rely on independent contract manufacturers for the manufacture of our current neoprobe GDS line of gamma detection systems. Our business will suffer if our contract manufacturers have production delays or quality problems. Furthermore, medical device manufacturers are subject to the quality system regulations of FDA, international quality standards, and other regulatory requirements. If our contractors do not operate in accordance with regulatory requirements and quality standards, our business will suffer. We use or rely on components and services used in our devices that are provided by sole source suppliers. The qualification of additional or replacement vendors is time consuming and costly. If a sole source supplier has significant problems supplying our products, our sales and revenues will be hurt until we find a new source of supply. In addition, our distribution agreement with Devicor for gamma detection devices contains failure to supply provisions, which, if triggered, could have a significant negative impact on our business.

We may be unable to establish the pharmaceutical manufacturing capabilities necessary to develop and commercialize our potential products.

We do not have our own manufacturing facility for the manufacture of the radiopharmaceutical compounds necessary for clinical testing or commercial sale. We intend to rely on third-party contract manufacturers to produce sufficiently large quantities of drug materials that are and will be needed for clinical trials and commercialization of our potential products. Third-party manufacturers may not be able to meet our needs with respect to timing, quantity or quality of materials. We are in the process of finalizing supply contracts with third-party manufacturers for our Lymphoseek product. However, if we are unable to contract for a sufficient supply of needed materials on acceptable terms, or if we should encounter delays or difficulties in our relationships with manufacturers, our clinical trials may be delayed, thereby delaying the submission of product candidates for regulatory approval and the market introduction and subsequent commercialization of our potential products. Any such delays may lower our revenues and potential profitability.

We and any third-party manufacturers that we may use must continually adhere to current Good Manufacturing Practices regulations enforced by FDA through its facilities inspection program. If our facilities or the facilities of third-party manufacturers cannot pass a pre-approval plant inspection, FDA will not grant approval to our product candidates. In complying with these regulations and foreign regulatory requirements, we and any of our third-party manufacturers will be obligated to expend time, money and effort on production, record-keeping and quality control to assure that our potential products meet applicable specifications and other requirements. If we or any third-party manufacturer with whom we may contract fail to maintain regulatory compliance, we or the third party may be subject to fines and/or manufacturing operations may be suspended.

Unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives applicable to our radiopharmaceutical products and product candidates could limit our potential product revenue and adversely affect our business.

The regulations governing drug pricing and reimbursement vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed and, in many of these countries, the pricing review period begins only after approval is granted. In some countries, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. Although we monitor these regulations, our product candidates are currently in the development stage and we will not be able to assess the impact of price regulations for at least several years. As a result, we may obtain regulatory approval for a product in a particular country, but then be subject to price regulations that may delay the commercial launch of the product and may negatively impact the revenues we are able to derive from sales in that country.

The healthcare industry is undergoing fundamental changes resulting from political, economic and regulatory influences. In the United States, comprehensive programs have been proposed that seek to increase access to healthcare for the uninsured, to control the escalation of healthcare expenditures within the economy and to use healthcare reimbursement policies to balance the federal budget. On March 23, 2010, health reform legislation was approved by Congress and has been signed into law. The reform legislation provides that most individuals must have health insurance, will establish new regulations on health plans, create insurance pooling mechanisms and other expanded public health care measures, and impose new taxes on sales of medical devices and pharmaceuticals. Since this legislation is recently enacted, and since significant portions may be amended or repealed, we cannot predict the effect, if any, that it will have on our business, but this legislation and similar federal and state initiatives may have the effect of lowering reimbursements for our products, reducing medical procedure volumes, increasing our taxes and otherwise adversely affect our business, possibly materially.

We expect that Congress and state legislatures will continue to review and assess healthcare proposals, and public debate of these issues will likely continue. We cannot predict which, if any, of such reform proposals will be adopted and when they might be adopted. Other countries also are considering healthcare reform. Significant changes in healthcare systems could have a substantial impact on the manner in which we conduct our business and could require us to revise our strategies.

We may have difficulty raising additional capital, which could deprive us of necessary resources.

We expect to continue to devote significant capital resources to fund research and development and to maintain existing and secure new manufacturing capacity. In order to support the initiatives envisioned in our business plan, we may need to raise additional funds through the sale of assets, public or private debt or equity financing, collaborative relationships or other arrangements. Our ability to raise additional financing depends on many factors beyond our control, including the state of capital markets, the market price of our common stock and the development or prospects for development of competitive technology by others. Sufficient additional financing may not be available to us or may be available only on terms that would result in further dilution to the current owners of our

common stock.

We believe that we have access to sufficient financial resources with which to fund our operations or those of our subsidiaries for the foreseeable future. Depending on market conditions and/or changes in our business plans, we may attempt to raise additional capital during 2011. The potential volatility in market conditions may adversely affect our ability to raise additional capital, either under facilities in place or from new sources of capital. If we are unsuccessful in raising additional capital, closing on financing under already agreed to terms, or the terms of raising such capital are unacceptable, we may have to modify our business plan and/or significantly curtail our planned development activities and other operations.

The sale of the shares of common stock acquired in private placements could cause the price of our common stock to decline.

Over the past few years, we completed various financings in which we issued common stock, convertible notes, warrants and other securities convertible into common stock to certain private investors, as more fully described in Item 7 of this Report under the caption "Liquidity and Capital Resources." The terms of these transactions require that we file registration statements with the Securities and Exchange Commission under which the investors may resell to the public common stock acquired in these transactions, as well as common stock acquired on the exercise of the warrants and convertible securities held by them. Further, some or all of the common stock sold in these transactions may become eligible for resale without registration under the provisions of Rule 144, upon satisfaction of the holding period and other requirements of the Rule.

We have no way of knowing whether or when the investors will sell these shares. Depending upon market liquidity at the time, a sale of these shares at any given time could cause the trading price of our common stock to decline. The sale of a substantial number of shares of our common stock, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

We may lose out to larger and better-established competitors.

The medical device and biotechnology industries are intensely competitive. Some of our competitors have significantly greater financial, technical, manufacturing, marketing and distribution resources as well as greater experience in the medical device industry than we have. The particular medical conditions our product lines address can also be addressed by other medical devices, procedures or drugs. Many of these alternatives are widely accepted by physicians and have a long history of use. Physicians may use our competitors' products and/or our products may not be competitive with other technologies. If these things happen, our sales and revenues will decline. In addition, our current and potential competitors may establish cooperative relationships with large medical equipment companies to gain access to greater research and development or marketing resources. Competition may result in price reductions, reduced gross margins and loss of market share.

Our products may be displaced by newer technology.

The medical device and biotechnology industries are undergoing rapid and significant technological change. Third parties may succeed in developing or marketing technologies and products that are more effective than those developed or marketed by us, or that would make our technology and products obsolete or non-competitive. Additionally, researchers could develop new surgical procedures and medications that replace or reduce the importance of the procedures that use our products. Accordingly, our success will depend, in part, on our ability to respond quickly to medical and technological changes through the development and introduction of new products. We may not have the resources to do this. If our products become obsolete and our efforts to develop new products do not result in any commercially successful products, our sales and revenues will decline.

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We may not have sufficient legal protection against infringement or loss of our intellectual property, and we may lose rights to our licensed intellectual property if diligence requirements are not met.

Our success depends, in part, on our ability to secure and maintain patent protection, to preserve our trade secrets, and to operate without infringing on the patents of third parties. While we seek to protect our proprietary positions by filing United States and foreign patent applications for our important inventions and improvements, domestic and foreign patent offices may not issue these patents. Third parties may challenge, invalidate, or circumvent our patents or patent applications in the future. Competitors, many of which have significantly more resources than we have and have made substantial investments in competing technologies, may apply for and obtain patents that will prevent, limit, or interfere with our ability to make, use, or sell our products either in the United States or abroad.

In the United States, patent applications are secret until patents are issued, and in foreign countries, patent applications are secret for a time after filing. Publications of discoveries tend to significantly lag the actual discoveries and the filing of related patent applications. Third parties may have already filed applications for patents for products or processes that will make our products obsolete or will limit our patents or invalidate our patent applications.

We typically require our employees, consultants, advisers and suppliers to execute confidentiality and assignment of invention agreements in connection with their employment, consulting, advisory, or supply relationships with us. They may breach these agreements and we may not obtain an adequate remedy for breach. Further, third parties may gain access to our trade secrets or independently develop or acquire the same or equivalent information.

Agencies of the United States government conducted some of the research activities that led to the development of antibody technology that some of our proposed antibody-based surgical cancer detection products use. When the United States government participates in research activities, it retains rights that include the right to use the technology for governmental purposes under a royalty-free license, as well as rights to use and disclose technical data that could preclude us from asserting trade secret rights in that data and software.

We may lose the license rights to certain in-licensed products if we do not exercise adequate diligence.

Our license agreements for Lymphoseek, RIGS, and ACT contain provisions that require that we demonstrate ongoing diligence in the continuing research and development of these potential products. Cira Bio’s rights to certain applications of the ACT technology may be affected by its failure to achieve certain capital raising milestones although no such notices to that effect have been received to date. We have provided information, as required or requested, to the licensors of our technology indicating the steps we have taken to demonstrate our diligence and believe we are adequately doing so to meet the terms and/or intent of our license agreements. However, it is possible that the licensors may not consider our actions adequate in demonstrating such diligence. Should we fail to demonstrate the requisite diligence required by any such agreements or as interpreted by the respective licensors, we may lose our development and commercialization rights for the associated product.

We could be damaged by product liability claims.

Our products are used or intended to be used in various clinical or surgical procedures. If one of our products malfunctions or a physician misuses it and injury results to a patient or operator, the injured party could assert a product liability claim against our company. We currently have product liability insurance with a $10 million per occurrence limit, which we believe is adequate for our current activities. However, we may not be able to continue to obtain insurance at a reasonable cost. Furthermore, insurance may not be sufficient to cover all of the liabilities resulting from a product liability claim, and we might not have sufficient funds available to pay any claims over the limits of our insurance. Because personal injury claims based on product liability in a medical setting may be very large, an underinsured or an uninsured claim could financially damage our company.

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We may have difficulty attracting and retaining qualified personnel and our business may suffer if we do not.

Our business has experienced a number of successes and faced several challenges in recent years that have resulted in several significant changes in our strategy and business plan, including the shifting of resources to support our current product initiatives. Our management will need to remain flexible to support our business model over the next few years. However, losing members of the Neoprobe management team could have an adverse effect on our operations. Our success depends on our ability to attract and retain technical and management personnel with expertise and experience in the medical device business. The competition for qualified personnel in the biotechnology industry is intense and we may not be successful in hiring or retaining the requisite personnel. If we are unable to attract and retain qualified technical and management personnel, we will suffer diminished chances of future success.

Our failure to maintain continued compliance with the listing requirements of the NYSE Amex Equities exchange could result in the delisting of our common stock.

Our common stock was recently listed on the NYSE Amex Equities exchange (Exchange). The rules of the Exchange provide that shares be delisted from trading in the event the financial condition and/or operating results of the Company appear to be unsatisfactory, the extent of public distribution or the aggregate market value of the common stock has become so reduced as to make further dealings on the Exchange inadvisable, the Company has sold or otherwise disposed of its principal operating assets, or has ceased to be an operating company, or the Company has failed to comply with its listing agreements with the Exchange. There can be no assurance that the Company will continue to meet the requirements necessary to maintain the listing of its common stock on the Exchange, and in the event of a delisting, the market for our common stock could become significantly less liquid, which would likely adversely affect its value.

The price of our common stock has been highly volatile due to several factors that will continue to affect the price of our stock.

Our common stock traded as low as $1.42 per share and as high as $4.71 per share during the 12-month period ended March 11, 2011. The market price of our common stock has been and is expected to continue to be highly volatile. Factors, including announcements of technological innovations by us or other companies, regulatory matters, new or existing products or procedures, concerns about our financial position, operating results, litigation, government regulation, developments or disputes relating to agreements, patents or proprietary rights, may have a significant impact on the market price of our stock. In addition, potential dilutive effects of future sales of shares of common stock by the company and by stockholders, and subsequent sale of common stock by the holders of warrants and options could have an adverse effect on the market price of our shares.

Some additional factors which could lead to the volatility of our common stock include:

- price and volume fluctuations in the stock market at large which do not relate to our operating performance;
- financing arrangements we may enter that require the issuance of a significant number of shares in relation to the number of shares currently outstanding;
- public concern as to the safety of products that we or others develop; and
- fluctuations in market demand for and supply of our products.

An investor’s ability to trade our common stock may be limited by trading volume.

Historically, the trading volume for our common stock has been relatively limited. The average daily trading volume for our common stock on the OTC Bulletin Board for the 12-month period ended January 31, 2011 was approximately 194,000 shares. Following the listing of our common stock on the Exchange on February 10, 2011, we expect the

market in our common stock to be more active, although we cannot assure that this will occur or will be consistently maintained in the future.

Some provisions of our organizational and governing documents may have the effect of deterring third parties from making takeover bids for control of our company or may be used to hinder or delay a takeover bid.

Our certificate of incorporation authorizes the creation and issuance of "blank check" preferred stock. Our Board of Directors may divide this stock into one or more series and set their rights. The Board of Directors may, without prior stockholder approval, issue any of the shares of "blank check" preferred stock with dividend, liquidation, conversion, voting or other rights, which could adversely affect the relative voting power or other rights of the common stock. Preferred stock could be used as a method of discouraging, delaying, or preventing a take-over of our company. If we issue "blank check" preferred stock, it could have a dilutive effect upon our common stock. This would decrease the chance that our stockholders would realize a premium over market price for their shares of common stock as a result of a takeover bid.

Because we will not pay dividends on common stock in the foreseeable future, stockholders will only benefit from owning common stock if it appreciates.

We have never paid dividends on our common stock and we do not intend to do so in the foreseeable future. We intend to retain any future earnings to finance our growth. Accordingly, any potential investor who anticipates the need for current dividends from his investment should not purchase our common stock.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We currently lease approximately 15,000 square feet of office space at 425 Metro Place North, Dublin, Ohio, as our principal offices. The current lease term is from June 1, 2007 through January 31, 2013, at a monthly base rent of approximately $11,600 during 2011. We must also pay a pro-rata portion of the operating expenses and real estate taxes of the building. We believe these facilities are in good condition, but that we may need to expand our leased space related to our radiopharmaceutical activities depending on the level of activities performed internally versus by third parties.

Item 3. Legal Proceedings

None.

Item 4. (Removed and Reserved)

PART II

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

Our common stock trades on the NYSE Amex stock exchange under the trading symbol NEOP. Prior to being listed on the NYSE Amex beginning February 10, 2011, our common stock was traded on the OTC Bulletin Board under the trading symbol NEOP.OB. The prices set forth below reflect the quarterly high, low and closing sales prices for shares of our common stock during the last two fiscal years as reported by Reuters Limited. These quotations reflect inter-dealer prices, without retail markup, markdown or commission, and may not represent actual transactions.

	High	Low	Close
Fiscal Year 2010:			
First Quarter	$ 2.30	$ 1.15	$ 1.64
Second Quarter	2.00	1.50	1.80
Third Quarter	2.15	1.66	1.88
Fourth Quarter	2.32	1.50	2.06
Fiscal Year 2009:			
First Quarter	$ 0.80	$ 0.42	$ 0.54
Second Quarter	1.20	0.35	0.95
Third Quarter	1.48	0.91	1.40
Fourth Quarter	1.40	0.95	1.22

As of March 11, 2011, we had approximately 740 holders of common stock of record.

We have not paid any dividends on our common stock and do not anticipate paying cash dividends on our common stock in the foreseeable future. We intend to retain any earnings to finance the growth of our business. We cannot assure you that we will ever pay cash dividends. Whether we pay cash dividends in the future will be at the discretion of our Board of Directors and will depend upon our financial condition, results of operations, capital requirements and any other factors that the Board of Directors decides are relevant. See Management's Discussion and Analysis of Financial Condition and Results of Operations.

Item 6. Selected Financial Data

Not applicable to smaller reporting companies.

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

The following discussion should be read together with our Consolidated Financial Statements and the Notes related to those statements, as well as the other financial information included in this Form 10-K. Some of our discussion is forward-looking and involves risks and uncertainties. For information regarding risk factors that could have a material adverse effect on our business, refer to Item 1A of this Form 10-K, Risk Factors.

The Company

Neoprobe Corporation is a biomedical technology company that provides innovative surgical and diagnostic oncology products that enhance patient care and improve patient treatment. We currently market a line of medical devices, our neoprobe® GDS gamma detection systems. In addition to our medical device products, we have two

radiopharmaceutical products, Lymphoseek® and RIGScanTM CR, in advanced phases of clinical development. We are also exploring the development of our activated cellular therapy (ACT) technology for patient-specific disease treatment through our majority-owned subsidiary, Cira Biosciences, Inc. (Cira Bio).

Executive Summary

This Overview section contains a number of forward-looking statements, all of which are based on current expectations. Actual results may differ materially. Our financial performance is highly dependent on our ability to continue to generate income and cash flow from our medical device product lines. We cannot assure you that we will achieve the volume of sales anticipated, or if achieved, that the margin on such sales will be adequate to produce positive operating cash flow.

We believe that the future prospects for Neoprobe continue to improve as we make progress in all of our key growth and development areas, especially related to our Lymphoseek initiative. Our gamma detection device line continues to provide a solid revenue base producing cash flow to cover our public company overhead and contribute to funding our research and development efforts. We expect our overall research and development expenditures to rise in 2011 over 2010 as we have expanded our clinical and regulatory staffing to support the commercialization of Lymphoseek and further development of RIGScan and as we take steps to expand our product pipeline. The level to which the expenditures rise will depend on the extent to which we are able to execute on each of these strategic initiatives, but we are confident we will have the resources necessary to execute on these initiatives. We expect to continue to incur modest development expenses to support our device product lines as well as we work to expand our product offerings in the gamma detection device arena. Our primary development efforts over the last few years have been focused on our oncology drug development initiatives: Lymphoseek and RIGScan. We continue to make progress with both initiatives; however, neither Lymphoseek nor RIGScan is anticipated to generate any significant revenue for us during 2011.

In August 2009, the Company's Board of Directors decided to discontinue the operations of Cardiosonix and to attempt to sell our Cardiosonix subsidiary. This decision was based on the determination that the blood flow measurement device segment was no longer considered a strategic initiative of the Company, due in large part to positive events in our other device product and drug development initiatives. To this point, we have not had significant interest expressed in Cardiosonix, and as such, we continue to wind down our activities in this area. Until a final shutdown of operations or a sale of the business unit is completed, we expect to continue to generate modest revenues and incur minimal expenses related to our blood flow measurement device business.

Our efforts in 2010 resulted in the following milestone achievements:

- Completed a successful meeting with the United States Food and Drug Administration (FDA) to review the Phase 3 (NEO3-05) clinical study results and development plan discussion to support a New Drug Application (NDA) submission for Lymphoseek as a lymphatic tissue tracing agent;
- Completed a successful pre-NDA dialogue with FDA on Lymphoseek pre-clinical data;
- Completed a successful pre-NDA dialogue with FDA on Lymphoseek chemistry, manufacturing and control data;
- Initiated a third Lymphoseek Phase 3 clinical study in subjects with breast cancer or melanoma (NEO3-09) to support the NDA filing with the potential to expand Lymphoseek's product labeling;
- Completed a pre-NDA meeting for Lymphoseek clarifying the regulatory pathway for Lymphoseek approval;
- Elected two new directors to Neoprobe's Board, bringing significant drug industry and corporate development expertise to the Company's leadership;
- Completed transactions that converted all of the Company's outstanding debt to equity;
- Received notice of grant awards of over $1.2 million to support future Lymphoseek development through non-dilutive funding;

- Filed a shelf registration on Form S-3 to allow the Company to raise capital as necessary through the sale of up to $20 million in a primary offering of securities to provide us with additional financial planning flexibility and to support the diversification of our share ownership to new institutions;
- Completed an offering and sale of common stock and warrants under the shelf registration statement resulting in approximately $5.5 million in net proceeds to the Company and the potential for an additional $7.0 million in proceeds from the cash-only exercise of the warrants included in the placement;
- Completed preliminary RIGS® development activities including transfer of the biologic license application (BLA) from the Center for Biologics Evaluation and Research (CBER) to the Division of Medical Imaging Products in the Center for Drug Evaluation and Research (CDER) at FDA and preparation of an investigational new drug (IND) request for the biologic product; and
- Filed a complete response to the open BLA for RIGScan.

Our Outlook for our Drug and Therapeutic Initiatives

Our operating expenses during 2010 were focused primarily on support of Lymphoseek product development, and to a lesser extent, on efforts to restart active development of RIGScan. We expect our drug-related development expenses to increase in 2011 as we complete the NEO3-09 clinical trial, prepare and file the NDA for Lymphoseek with FDA, and support the other drug stability and production validation activities related to supporting the potential marketing registration of Lymphoseek in the U.S. and other major markets. In addition, following the recent meeting with FDA regarding the development and regulatory pathway for RIGScan, we expect to incur significant expenses related to pre-clinical and manufacturing activities necessary to prepare to re-enter clinical trials with RIGScan in 2012. To the extent we are successful in identifying and securing additional product candidates to augment our product development pipeline, we may incur additional expenses related to furthering the development of such products.

Our Outlook for our Gamma Detection Device Business

We believe our core gamma detection device business line will continue to achieve positive results in 2011. We believe that most of the leading cancer treatment institutions in the U.S. and other major global markets have adopted SLNB and purchased gamma detection systems such as the neoprobe GDS. As a result, we may be reaching saturation within this segment of the market, except for a replacement sales market which we also believe is developing as devices introduced during the early years of lymphatic mapping begin to age over ten years. A decline in the adoption rate of SLNB or the development of alternative technologies by competitors may negatively impact our sales volumes, and therefore, revenues and net income in future years. In order to address the issue of potential saturation as well as to continue to provide our customers with the highest quality tools for performing SLNB, we have introduced several enhancements to our gamma device product line over the past few years, including a higher-energy gamma detection probe which was launched in mid- 2009 and a 9mm probe introduced at the recent Society of Surgical Oncology meeting in March 2011.

Our gamma detection devices are distributed in most global markets by Devicor Medical Products, Inc. (Devicor). Prior to July 2010, our gamma detection device products were marketed through a distribution arrangement with Ethicon Endo-Surgery, Inc. (EES), a Johnson & Johnson company. In July 2010, Devicor acquired EES' breast care business, including an assignment of the distribution agreement with Neoprobe. Under the terms of our distribution agreement with Devicor, the transfer prices we receive on product sales to Devicor are based on a fixed percentage of their end-customer average sales price (ASP), subject to a floor transfer price. Throughout their sales history, our products have generally commanded a price premium in most of the markets in which they are sold, which we believe is due to their superior performance and ease of use. While we continue to believe in the technical and user-friendly superiority of our products, the competitive landscape continues to evolve and current economic conditions present a number of challenges to the outlook for medical device sales. We may lose market share or experience price erosion and/or lower sales volumes as a result, any of which would have a direct negative impact on

net income. If price erosion occurs in 2011, or if the U.S. Dollar gains significantly against the Euro, there is a risk associated with future sales prices of our gamma detection devices to Devicor that may erode some or all of the premium we received in prior years in excess of the floor price. Overall, we expect revenues from our gamma detection devices to result in a net profit in 2011 for that line of business, excluding general and administrative costs, interest and other financing-related charges; however, as the market continues to approach saturation into current applications, we do not expect significant growth in the market for gamma detection devices until after the impact of Lymphoseek is felt in the application of SLNB beyond breast cancer and melanoma.

Our overall operating results for 2011 will also be greatly affected by the increased level of development activity we continue to conduct to support our radiopharmaceutical products. Primarily as a result of the significant development costs we expect to incur related to the continued clinical development of Lymphoseek and RIGScan, we do not expect to achieve overall operating profitability during 2011. We cannot assure you that our current or potential new products will be successfully commercialized, that we will achieve significant product revenues, or that we will achieve or be able to sustain profitability in the future. See Risk Factors.

Results of Operations

Revenue for 2010 increased to $10.7 million from $9.5 million in the prior year. The increase was primarily due to recognition of $617,000 in revenue from grants awarded during 2010 as well as increased unit sales and unit prices of our control units, increased unit sales of our wireless probes, and increased unit prices of our 14mm corded probes, offset by decreased unit sales of our high-energy and 14mm corded probes and decreased unit sales of our wireless probes. Gross margins for 2010 increased to 70% as compared to 67% in 2009. The increase in gross margins was primarily due to recognition of grant revenue and overall increased sales prices of our gamma detection devices.

In June 2010, Neoprobe was notified that Ohio's Third Frontier Commission voted to award a grant of $1 million to fund ongoing development of the Company's Lymphoseek initiative. The grant is being used to accelerate the application of Lymphoseek in head and neck cancer treatment and involves a collaboration of several Ohio-based companies as well as leading cancer centers in the US. Neoprobe and its collaborators will be required to contribute an additional $1.1 million in matching funds over the course of the project. We recognized approximately $358,000 in Ohio Third Frontier grant revenue during 2010, and expect to recognize the remaining $642,000 as revenue during 2011 and 2012. In October 2010, Neoprobe was awarded a grant of approximately $244,000 under the Qualifying Therapeutic Discovery Project (QTDP) program established under Section 48D of the Internal Revenue Code. The QTDP grant was a reimbursement of previous expenditures and there is no requirement for future matching funds from Neoprobe. We recognized the entire $244,000 of QTDP grant revenue in the fourth quarter of 2010. During the fourth quarter of 2010, Neoprobe received and recognized an additional $15,000 of miscellaneous grant revenue.

Net Sales and Margins. Net sales, comprised primarily of sales of our gamma detection systems, increased $565,000, or 6%, to $10.0 million during 2010 from $9.4 million in 2009. Gross margins on net sales increased slightly to 68% of net sales for 2010 compared to 67% of net sales for 2009.

The increase in net sales was the result of increased gamma detection device sales of $492,000, increased gamma detection device extended service contract revenue of $54,000, and increased gamma detection device non-warranty service revenue of $19,000. Of the $492,000 increase in gamma detection device sales, approximately $447,000 was attributable to increased net sales volumes and $45,000 was attributable to increased net sales prices. The price at which we sell our gamma detection device products to Devicor is based on a percentage of the global ASP received by Devicor on sales of Neoprobe products to end customers, subject to a minimum floor price. The slight increase in gross margins was primarily due to increased prices on certain of our gamma detection device products coupled with decreased costs of our wireless probes.

Research and Development Expenses. Research and development expenses increased $4.2 million, or 86%, to $9.2 million during 2010 from $5.0 million in 2009. The increase was primarily due to higher Lymphoseek development expenses related to conducting the Phase 3 clinical trials and preparing to file the NDA, higher RIGS development expenses related to product and process development, and higher compensation costs due to incentive-based compensation and increased headcount required to conduct our drug development activities. Research and development expenses in 2010 included approximately (i) $8.7 million in drug and therapy product development costs and (ii) $568,000 in gamma detection device development costs. This compares to expenses of $3.9 million and $1.1 million, respectively, in these segment categories in 2009. The changes in drug and therapy product development costs were primarily due to increased process development costs of $1.5 million, clinical activity costs of $962,000, regulatory consulting costs of $303,000, and market analysis costs of $217,000 related to Lymphoseek; increased compensation costs of $555,000 related to increased headcount and incentive-based compensation; and increased process development costs of $544,000, regulatory consulting costs of $118,000, market analysis costs of $108,000, and license fees of $62,000 related to RIGScan CR. The changes in gamma detection device development costs were primarily due to lower development costs related to our new high-energy detection probe, which was launched in 2009, of $128,000 and lower net development costs related to various other product improvements of $32,000.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased $1.4 million, or 41%, to $4.6 million during 2010 from $3.2 million in 2009. The increase was primarily due to compensation costs of $502,000 related to increased headcount and incentive-based compensation, increased financial advisory fees of $304,000, increased investor relations fees of $285,000 related to re-listing the Company's stock on a major exchange, increased professional services of $96,000, and the audit of our internal control over financial reporting of $70,000.

Other Income (Expense). Other expense, net increased $7.7 million to $43.6 million in 2010 from $35.9 million in 2009. During 2010, we recorded a non-cash loss on the extinguishment of debt of $41.7 million related to the exchange of our outstanding convertible debt for convertible preferred stock. During 2009, we recorded a $16.2 million non-cash loss on extinguishment of debt related to changes in the terms of our convertible debt, convertible preferred stock and the related warrants to purchase our common stock. During 2010 and 2009, we recorded charges of $1.3 million and $18.1 million, respectively, related to the increase in the fair value of our derivative liabilities resulting from the requirement to mark our derivative liabilities to market. Interest expense, primarily related to the convertible debt agreements we completed in December 2007 and April 2008 and extinguished in June 2010, decreased $978,000 to $555,000 in 2010 from $1.5 million in 2009. Of this interest expense, $16,000 and $428,000 in 2010 and 2009, respectively, were non-cash in nature related to the amortization of debt issuance costs and debt discounts resulting from the warrants and conversion features of the convertible debt. An additional $403,000 and $917,000 of interest expense in 2010 and 2009, respectively, was non-cash in nature due to the payment or accrual of interest on our convertible debt with shares of our common stock.

Discontinued Operations. During the third quarter of 2009, we made the decision to discontinue operations of the blood flow measurement device segment of our business as the segment was no longer considered a strategic initiative of the Company. This determination was based in large part on positive events in our other development initiatives. As a result, we recorded an impairment loss for discontinued operations of $1.7 million for the year ended December 31, 2009. Total revenues from discontinued operations were $57,000 and $129,000 in 2010 and 2009, respectively. The loss from discontinued operations was $87,000 and $176,000 for 2010 and 2009, respectively.

Liquidity and Capital Resources

Cash balances increased to $6.4 million at December 31, 2010 from $5.6 million at December 31, 2009. The net increase was primarily due to cash received for the issuance of common stock, offset by cash used to fund our operations, mainly for research and development activities.

Operating Activities. Cash used in operations increased $3.7 million to $5.2 million during 2010 compared to $1.5 million during 2009.

Accounts receivable increased to $2.0 million at December 31, 2010 from $1.3 million at December 31, 2009. The increase was primarily a result of fluctuations in timing of purchases and payments by our primary customers. We expect overall receivable levels will continue to fluctuate during 2011 depending on the timing of purchases and payments by our customers.

Inventory levels increased to $1.5 million at December 31, 2010 from $1.1 million at December 31, 2009. Gamma detection device materials and finished goods inventory levels increased as we have increased our product safety stock levels to ensure efficient and uninterrupted supply of our products to our distribution partners. During 2010, we capitalized $741,000 of pharmaceutical materials related to our Lymphoseek product; however, also during 2010, we expensed $634,000 of previously capitalized pharmaceutical materials to research and development as they were no longer considered to be usable in the production of future saleable drug product inventory. We expect inventory levels to increase over 2011 as we produce additional drug inventory in anticipation of the Lymphoseek product launch.

Accounts payable increased to $1.5 million at December 31, 2010 from $764,000 at December 31, 2009. The increase was primarily due to increased manufacturing, regulatory, and clinical activities related to advancing our Lymphoseek and RIGScan initiatives. Our payables balances will continue to fluctuate but will likely increase overall as we increase our level of development activity related to RIGScan.

Investing Activities. Investing activities used $399,000 of cash during 2010 compared to providing $327,000 during 2009. Available-for-sale securities of $494,000 matured during 2009. Capital expenditures of $367,000 during 2010 were primarily for equipment to be used in the production of Lymphoseek, office furniture, software, and computers. Capital expenditures of $96,000 during 2009 were primarily for computers, production and laboratory equipment, and software. We do not expect to incur significant additional costs for Lymphoseek production equipment. As such, we expect our overall capital expenditures for 2011 will be lower than 2010. Payments for patent and trademark costs decreased to $32,000 during 2010 compared to $71,000 during 2009.

Financing Activities. Financing activities provided $6.3 million of cash during 2010 compared to $3.2 million provided during 2009. The $6.3 million provided by financing activities in 2010 consisted primarily of proceeds from the issuance of common stock of $7.1 million, offset by payments of stock offering costs of $611,000, payments of preferred stock dividends of $111,000, payments of capital leases of $12,000, and payments of notes payable of $9,000. The $3.2 million provided by financing activities in 2009 consisted primarily of proceeds from the issuance of common stock of $3.6 million, offset by payments of stock offering costs of $238,000, payments of notes payable of $138,000, payments of debt issuance costs of $20,000, and payments of capital leases of $9,000. We do not rely to any material extent on short-term borrowings for working capital or to fund our operations.

In December 2006, we entered into a common stock purchase agreement with Fusion Capital Fund II, LLC (Fusion Capital), an Illinois limited liability company, to sell $6.0 million of our common stock to Fusion Capital over a 24-month period which ended on November 21, 2008. Upon execution of the agreement, we issued to Fusion Capital 720,000 shares of our common stock as a commitment fee. Through November 2008, we sold to Fusion Capital under the agreement 7,568,671 shares for proceeds of $1.9 million. As sales of our common stock were made under the original agreement, we issued an additional 234,000 shares of our common stock to Fusion Capital as an additional commitment fee. In December 2008, we entered into an amendment to the agreement which gave us a right to sell an additional $6.0 million of our common stock to Fusion Capital before March 1, 2011, along with the $4.1 million of the unsold balance of the $6.0 million we originally had the right to sell to Fusion Capital under the original agreement. As consideration for Fusion Capital's agreement to enter into the amendment, we issued Fusion Capital an additional 360,000 shares. Also, we agreed to issue to Fusion Capital an additional 486,000 shares of our common stock as a commitment fee pro rata as we sold the first $4.1 million of our common stock under the amended agreement. In March 2010, we sold to Fusion Capital under the amended agreement 540,541 shares for proceeds of

$1.0 million and issued an additional 120,000 shares of our common stock to Fusion Capital as an additional commitment fee related to the sale. The agreement with Fusion Capital expired as planned on March 1, 2011, and as a result, Fusion Capital may liquidate any commitment fee shares issued to it during the term of the agreement.

In July 2007, David C. Bupp, our President and CEO, and certain members of his family (the Bupp Investors) purchased a $1.0 million convertible note (the Bupp Note) and warrants. The Bupp Note bore interest at 10% per annum, had an original term of one year and was repayable in whole or in part with no penalty. The note was convertible, at the option of the Bupp Investors, into shares of our common stock at a price of $0.31 per share. As part of this transaction, we issued the Bupp Investors Series V warrants to purchase 500,000 shares of our common stock at an exercise price of $0.31 per share, expiring in July 2012.

In December 2007, we entered into a Securities Purchase Agreement (SPA) with Platinum Montaur Life Sciences, LLC (Montaur), pursuant to which we issued Montaur a 10% Series A Convertible Senior Secured Promissory Note in the principal amount of $7,000,000, $3.5 million of which was convertible into shares of our common stock at the conversion price of $0.26 per share, due December 26, 2011 (the Series A Note); and a five-year Series W warrant to purchase 6,000,000 shares of our common stock at an exercise price of $0.32 per share.

In connection with the SPA, Montaur requested that the term of the $1.0 million Bupp Note be extended approximately 42 months or until at least one day following the maturity date of the Series A Note. In consideration for the Bupp Investors' agreement to extend the term of the Bupp Note pursuant to an Amendment to the Bupp Purchase Agreement, dated December 26, 2007, we agreed to provide security for the obligations evidenced by the Amended 10% Convertible Note in the principal amount of $1,000,000, due December 31, 2011, executed by Neoprobe in favor of the Bupp Investors (the Amended Bupp Note), under the terms of a Security Agreement, dated December 26, 2007, by and between Neoprobe and the Bupp Investors (the Bupp Security Agreement). As further consideration for extending the term of the Bupp Note, we issued the Bupp Investors additional Series V warrants to purchase 500,000 shares of our common stock at an exercise price of $0.32 per share, expiring in December 2012.

In April 2008, following receipt by the Company of clearance from the United States Food and Drug Administration to commence a Phase 3 clinical trial for Lymphoseek in patients with breast cancer or melanoma, we amended the SPA related to the second tranche and issued Montaur a 10% Series B Convertible Senior Secured Promissory Note in the principal amount of $3,000,000, which was convertible into shares of our common stock at the conversion price of $0.36 per share, also due December 26, 2011 (the Series B Note, and hereinafter referred to collectively with the Series A Note as the Montaur Notes); and a five-year Series X warrant to purchase 8,333,333 shares of our common stock at an exercise price of $0.46 per share.

In December 2008, after we obtained 135 vital blue dye lymph nodes from patients who had completed the injection of the drug and surgery in a Phase 3 clinical trial of Lymphoseek in patients with breast cancer or melanoma, we issued Montaur 3,000 shares of our 8% Series A Cumulative Convertible Preferred Stock (the Series A Preferred Stock) and a five-year Series Y warrant to purchase 6,000,000 shares of our common stock at an exercise price of $0.575 per share (hereinafter referred to collectively with the Series W warrant and Series X warrant as the Montaur Warrants), for an aggregate purchase price of $3,000,000. The "Liquidation Preference Amount" for the Series A Preferred Stock was $1,000 and the "Conversion Price" of the Series A Preferred Stock was set at $0.50 on the date of issuance, thereby making the shares of Series A Preferred Stock convertible into an aggregate 6,000,000 shares of our common stock, subject to adjustment as described in the Certificate of Designations.

In July 2009, we entered into a Securities Amendment and Exchange Agreement with Montaur, pursuant to which Montaur agreed to the amendment and restatement of the terms of the Montaur Notes, the Series A Preferred Stock, and the Montaur Warrants. The Series A Note was amended to grant Montaur conversion rights with respect to the $3.5 million portion of the Series A Note that was previously not convertible. The newly convertible portion of the Series A Note was convertible into 3,600,000 shares of our common stock at $0.9722 per share. The amendments also eliminated certain price reset features of the Montaur Notes, the Series A Preferred Stock and the Montaur Warrants that had created significant non-cash derivative liabilities on the Company's balance sheet. In conjunction with this transaction, we issued Montaur a Series AA Warrant to purchase 2.4 million shares of our common stock at

an exercise price of $0.97 per share, expiring in July 2014. The change in terms of the Montaur Notes, the Series A Preferred Stock and the Montaur Warrants were treated as an extinguishment of debt for accounting purposes. Following the extinguishment, the Company's balance sheet reflected the face value of the $10 million due to Montaur pursuant to the Montaur Notes, which approximated fair value at the date of the extinguishment.

In June 2010, we entered into a Securities Exchange Agreement with Montaur, pursuant to which Montaur exchanged the Montaur Notes and the Series A Preferred Stock for 10,000 shares of Series B Convertible Preferred Stock (the Series B Preferred Stock), convertible into 32,700,000 shares of common stock. The Series B Preferred Stock is convertible at the option of Montaur, carries no dividend requirements and participates equally with our common stock in liquidation proceeds based upon the number of common shares into which the Series B Preferred Stock is then convertible. As consideration for the exchange, Neoprobe issued additional Series B Preferred Stock which is convertible into 1.3 million shares of common stock.

Also in June 2010, we entered into a Securities Exchange Agreement with the Bupp Investors, pursuant to which the Bupp Investors exchanged the Amended Bupp Note for 1,000 shares of Series C Convertible Preferred Stock (the Series C Preferred Stock), convertible into 3,226,000 shares of common stock. The Series C Preferred Stock has a 10% dividend rate, payable quarterly, and participates equally with our common stock in liquidation proceeds based upon the number of common shares into which the Series C Preferred Stock is then convertible. The exchange of the Montaur Notes, the Series A Preferred Stock and the Amended Bupp Note were treated as extinguishments for accounting purposes. As a result of these exchange transactions, all security interests in the Company's assets held by Montaur and the Bupp Investors were extinguished.

During 2009 the largest aggregate amount outstanding on the Amended Bupp Note was $1.0 million, and, prior to the extinguishment of the Amended Bupp Note on June 25, 2010, the largest aggregate amount of principal outstanding on the Amended Bupp Note during 2010 was $1.0 million. The Company paid $0 of principal outstanding on the Amended Bupp Note during 2009, and $0 of the principal outstanding on the Amended Bupp Note during 2010. The Company paid $100,000 of interest on the Amended Bupp Note during 2009, and $48,611 of interest on the Amended Bupp Note during 2010. During 2009, and prior to the extinguishment of the Amended Bupp Note on June 25, 2010, the Amended Bupp Note accrued interest at the rate of 10% per annum.

In November 2010, we entered into a Securities Purchase Agreement with institutional investors for a registered direct offering of 3,157,896 shares of our common stock at a price of $1.90 per share for total gross proceeds of $6.0 million. In addition to the common stock, we issued one-year Series CC warrants to purchase 1,578,948 shares of our common stock at an exercise price of $2.11 per share, and two-year Series DD warrants to purchase 1,578,948 shares of our common stock at an exercise price of $2.11 per share. As compensation for the services of the placement agent in connection with the offering, we paid the placement agent $420,000 (7% of the gross proceeds) and issued five-year Series EE warrants to purchase 157,895 shares of our common stock at an exercise price of $2.375 per share. The common stock, warrants, and shares of common stock underlying the warrants were issued pursuant to a shelf registration statement on Form S-3 that was declared effective by the Securities and Exchange Commission on August 3, 2010.

The Series CC and Series DD warrants originally contained language that required Neoprobe to classify the warrants as derivative liabilities, and we recorded them at their estimated fair values totaling $1.2 million. In December 2010, a portion of the Series CC and Series DD warrants were modified to remove the language that had previously required them to be classified as derivative liabilities. As a result of the modification of certain of the Series CC and Series DD warrants, we reclassified $801,000 in derivative liabilities related to those warrants to additional paid-in capital. In January 2011, certain investors agreed to modify their outstanding Series CC and Series DD warrants to remove the language that had previously required them to be classified as derivative liabilities. The net effect of marking the derivative liabilities related to the modified Series CC and Series DD warrants to market resulted in net increases in the estimated fair values of the derivative liabilities of $76,000, which were recorded as non-cash expense. As a result of the modification of the Series CC and Series DD warrants, we reclassified $549,000 in derivative liabilities related to those warrants to additional paid-in capital. Between January 1 and March 15, 2011, certain outside investors exercised 1,578,948 Series CC warrants in exchange for issuance of 1,578,948 shares of our common stock, resulting in gross proceeds of $3,331,580. Also between January 1 and March 15, 2011, certain outside investors exercised

799,474 Series DD warrants in exchange for issuance of 799,474 shares of our common stock, resulting in gross proceeds of $1,686,890. The net effect of marking the derivative liabilities related to the exercised Series CC and Series DD warrants to market resulted in net increases in the estimated fair values of the derivative liabilities of $676,000, which were recorded as non-cash expense. As a result of the Series CC and Series DD warrant exercises, we reclassified $1.1 million in derivative liabilities related to those warrants to additional paid-in capital.

Our future liquidity and capital requirements will depend on a number of factors, including our ability to expand market acceptance of our current products, our ability to complete the commercialization of new products, our ability to monetize our investment in non-core technologies, our ability to obtain milestone or development funds from potential development and distribution partners, regulatory actions by FDA and international regulatory bodies, and intellectual property protection. Our most significant near-term development priority is to complete additional clinical testing for Lymphoseek, to file the NDA and to continue our pre-commercialization activities. We believe our current funds will be adequate to sustain our operations at planned levels for the foreseeable future. We are in the process of determining the total development cost necessary to commercialize RIGScan but believe that it will require total additional commitments of approximately $5 million during 2011 to restart manufacturing and other activities necessary to prepare for the clinical trial activities as we currently contemplate them. We expect to use currently available funds to continue the initial steps of restarting manufacturing of RIGScan. We are in the process of evaluating our funding alternatives related to RIGScan, but have not ruled out funding it in connection with a partner. While we have no current plans to raise additional equity capital, we will consider all alternatives available to us as we evaluate our strategic goals and plans. We cannot assure you that we will be successful in raising additional capital at terms acceptable to the Company, or at all. We also cannot assure you that we will be able to successfully obtain regulatory approval for and commercialize new products, that we will achieve significant product revenues from our current or potential new products or that we will achieve or sustain profitability in the future. See Risk Factors.

Recent Accounting Developments

In January 2010, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2010-6, Improving Disclosures about Fair Value Measurements. ASU 2010-6 amends FASB ASC Topic 820, Fair Value Measurements and Disclosures. ASU 2010-6 requires new disclosures as follows: (1) Transfers in and out of Levels 1 and 2 and (2) Activity in Level 3 fair value measurements. An entity should disclose separately the amounts of significant transfers in and out of Level 1 and Level 2 fair value measurements and describe the reasons for the transfers. In the reconciliation of fair value measurements using significant unobservable inputs (Level 3), an entity should present separately information about purchases, sales, issuances, and settlements (that is, on a gross basis rather than as one net number). ASU 2010-6 also clarifies existing disclosures as follows: (1) Level of disaggregation and (2) Disclosures about inputs and valuation techniques. An entity should provide fair value measurement disclosures for each class of assets and liabilities. A class is often a subset of assets or liabilities within a line item in the statement of financial position. An entity needs to use judgment in determining the appropriate classes of assets and liabilities. An entity should provide disclosures about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements. Those disclosures are required for fair value measurements that fall in either Level 2 or Level 3. ASU 2010-6 is effective for interim and annual reporting periods beginning after December 15, 2009, except for the separate disclosures about purchases, sales, issuances, and settlements in the roll forward of activity in Level 3 fair value measurements. Those disclosures are effective for fiscal years beginning after December 15, 2010, and for interim periods within those fiscal years. We adopted the initial provisions of ASU 2010-6 beginning January 1, 2010. As the new provisions of ASU 2010-6 provide only disclosure requirements, the adoption of this standard did not impact our consolidated financial position, results of operations or cash flows, but did result in increased disclosures.

In December 2010, the FASB issued ASU 2010-27, Fees Paid to the Federal Government by Pharmaceutical Manufacturers. ASU 2010-27 specifies that the liability for the Company's portion of the annual fee on the pharmaceutical manufacturing industry should be estimated and recorded in full upon the first qualifying sale with a corresponding deferred cost that is amortized to expense using a straight-line method of allocation unless another method better allocates the fee over the calendar year that it is payable. ASU 2010-27 is effective for calendar years beginning after December 31, 2010, when the fee initially becomes effective. ASU 2010-27 will not impact our consolidated financial position, results of operations or cash flows until the period in which we begin sales of our pharmaceutical products. The effect the adoption of ASU 2010-27 will have on us will depend on the amount of the total annual fee and the amount of Neoprobe's annual sales relative to the total sales of all other U.S. pharmaceutical manufacturers.

Critical Accounting Policies

We consider the following accounting policies to be critical to our results of operations and financial condition.

Revenue Recognition. We currently generate revenue primarily from sales of our gamma detection products. Our standard shipping terms are FOB shipping point, and title and risk of loss passes to the customer upon delivery to a common carrier. We generally recognize sales revenue related to sales of our products when the products are shipped. Our customers have no right to return products purchased in the ordinary course of business.

The prices we charge our primary customer, Devicor, related to sales of products are subject to retroactive annual adjustment based on a fixed percentage of the actual sales prices achieved by Devicor on sales to end customers made during each fiscal year. To the extent that we can reasonably estimate the end-customer prices received by Devicor, we record sales to Devicor based upon these estimates. If we are unable to reasonably estimate end customer sales prices related to certain products sold to Devicor, we record revenue related to these product sales at the minimum (i.e., floor) price provided for under our distribution agreement with Devicor.

We also generate revenue from the service and repair of out-of-warranty products. Fees charged for service and repair on products not covered by an extended service agreement are recognized on completion of the service process when the serviced or repaired product has been returned to the customer. Fees charged for service or repair of products covered by an extended warranty agreement are deferred and recognized as revenue ratably over the life of the extended service agreement.

We generate additional revenue from grants to support various product development initiatives. We generally recognize grant revenue when expenses reimbursable under the grants have been incurred and payments under the grants become contractually due.

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 reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We base these estimates and assumptions upon historical experience and existing, known circumstances. Actual results could differ from those estimates. Specifically, management may make significant estimates in the following areas:

- Stock-Based Compensation. Stock-based payments to employees and directors, including grants of stock options, are recognized in the statements of operations based on their estimated fair values. The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model to value share-based payments. Compensation cost arising from stock-based awards is recognized as expense using the straight-line method over the vesting period.

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- Inventory Valuation. We value our inventory at the lower of cost (first-in, first-out method) or market. Our valuation reflects our estimates of excess, slow moving and obsolete inventory as well as inventory with a carrying value in excess of its net realizable value. Write-offs are recorded when product is removed from saleable inventory. We review inventory on hand at least quarterly and record provisions for excess and obsolete inventory based on several factors, including current assessment of future product demand, anticipated release of new products into the market, historical experience and product expiration. Our industry is characterized by rapid product development and frequent new product introductions. Uncertain timing of product approvals, variability in product launch strategies, regulations regarding use and shelf life, product recalls and variation in product utilization all impact the estimates related to excess and obsolete inventory.

- Fair Value of Derivative Instruments. Derivative instruments embedded in contracts, to the extent not already a free-standing contract, are bifurcated and accounted for separately. All derivatives are recorded on the consolidated balance sheet at fair value in accordance with current accounting guidelines for such complex financial instruments. Fair value of warrant liabilities is determined based on a Black-Scholes option pricing model calculation. Fair value of conversion and put option liabilities is determined based on a probability-weighted Black-Scholes option pricing model calculation. Unrealized gains and losses on the derivatives are classified in other expenses as a change in derivative liabilities in the statements of operations. We do not use derivative instruments for hedging of market risks or for trading or speculative purposes.

Other Items Affecting Financial Condition

At December 31, 2010, we had deferred tax assets in the U.S. related to net operating tax loss carryforwards and tax credit carryforwards of approximately $31.9 million and $6.0 million, respectively, available to offset or reduce future income tax liabilities, if any, through 2029. However, due to the uncertainty of realizing taxable income in the future, utilization of our tax loss and tax credit carryforwards may be limited. In addition, we believe the ultimate utilization of these tax loss and tax credit carryforwards may be further limited as a result of cumulative ownership changes as defined by Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, which have occurred at various points in our history. As a result, the related deferred tax assets have been fully reserved in our financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not applicable to smaller reporting companies.

Item 8. Financial Statements and Supplementary Data

Our consolidated financial statements, and the related notes, together with the report of BDO USA, LLP dated March 16, 2011, are set forth at pages F-1 through F-32 attached hereto.

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

None.

Item 9A. Controls and Procedures

Management's Report on Internal Control Over Financial Reporting

We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in reports filed under the Exchange Act is recorded, processed, summarized, and reported within the specified time periods. As a part of these controls, our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of December 31, 2010. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Based on our evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures are adequately designed and are effective.

Our management, including our Chief Executive Officer and Chief Financial Officer, understands that our disclosure controls and procedures do not guarantee that all errors and all improper conduct will be prevented. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute assurance that the objectives of the control systems are met. Further, a design of a control system must reflect the fact that there are resource constraints, and the benefit of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of improper conduct, if any, have been detected. These inherent limitations include the realities that judgments and decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more persons, or by management override of the control. Further, the design of any system of controls is also based in part upon assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations of a cost-effective control system, misstatements due to error or fraud may occur and may not be detected.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system was designed to provide reasonable assurance to management and the Board of Directors regarding the preparation and fair presentation of published financial statements. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Our internal control over financial reporting is a process designed 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, and includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company;
- 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 authorization of management and directors of the company; and
- 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.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2010. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework. Based on our assessment we believe that, as of December 31, 2010, our internal control over financial reporting was effective based on those criteria.

Changes in Internal Control Over Financial Reporting

During the quarter ended December 31, 2010, there were no changes in our internal control over financial reporting that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm
on Internal Control Over Financial Reporting

Board of Directors
Neoprobe Corporation
Dublin, Ohio

We have audited Neoprobe Corporation's internal control over financial reporting as of December 31, 2010, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Neoprobe Corporation'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" included in Item 9A. 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, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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 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 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 of compliance with the policies or procedures may deteriorate.

In our opinion, Neoprobe Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Neoprobe Corporation as of December 31, 2010 and 2009, and the related consolidated statements of operations, stockholders' equity (deficit), and cash flows for the years then ended and our report dated March 16, 2011 expressed an unqualified opinion on those consolidated financial statements.

/s/ BDO USA, LLP

Chicago, Illinois
March 16, 2011

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Directors

Each listed director's respective experience and qualifications described below led the Compensation, Nominating and Governance Committee (CNG Committee) of our Board of Directors to conclude that such director is qualified to serve as a member of our Board of Directors.

Directors whose terms continue until the 2011 Annual Meeting:

Carl J. Aschinger, Jr., age 72, has served as a director of our Company since June 2004 and as Chairman of the Board since July 2007. Mr. Aschinger is the Chairman of CSC Worldwide (formerly Columbus Show Case Co.), a privately-held company that manufactures showcases for the retail industry. Mr. Aschinger also serves on the Board of Directors and as Chairman of the Audit Committee of Pinnacle Data Systems, a publicly-traded company that provides software and hardware solutions to original equipment manufacturers. Mr. Aschinger is a former director of Liqui-Box Corporation and Huntington National Bank as well as other privately-held ventures and has served on boards or advisory committees of several not-for-profit organizations.

Owen E. Johnson, M.D., age 70, has served as a director of our Company since July 2007. Prior to his retirement in December 2006, Dr. Johnson served as Vice President and Senior Medical Director of UnitedHealthcare of Ohio, Inc. (UHC), a subsidiary of UnitedHealth Group, where he was involved in a number of roles and activities including new technology assessment and reimbursement establishment. During 2007, Dr. Johnson rejoined UnitedHealth Networks, a subsidiary of UnitedHealth Group, as Medical Director for their cardiac line of service. Dr. Johnson has also served on the Board and on numerous Committees of UHC as well as other related organizations. Prior to joining UHC, Dr. Johnson held several hospital appointments with Riverside Methodist Hospital in Columbus, Ohio. Dr. Johnson has also been active in numerous professional, fraternal and community organizations in the Columbus, Ohio area.

Fred B. Miller, age 71, has served as a director of our Company since January 2002. Mr. Miller serves as Chairman of the Audit Committee. Mr. Miller is the President and Chief Operating Officer of Seicon, Limited, a privately held company that specializes in developing, applying and licensing technology to reduce seismic and mechanically induced vibration. Mr. Miller also serves on the board of one other privately-held company. Until his retirement in 1995, Mr. Miller had been with Price Waterhouse LLP since 1962. Mr. Miller is a Certified Public Accountant, a member of the American Institute of Certified Public Accountants (AICPA), a past member of the Council of the AICPA and a member and past president of the Ohio Society of Certified Public Accountants. He also has served on the boards or advisory committees of several universities and not-for-profit organizations. Mr. Miller has a B.S. degree in Accounting from The Ohio State University.

Directors whose terms continue until the 2012 Annual Meeting:

Gordon A. Troup, age 57, has served as a director of our Company since July 2008. Mr. Troup served as President of the Nuclear Pharmacy Services business at Cardinal Health, Inc. (Cardinal Health), a multinational medical products and services company, from January 2003 until his retirement in December 2007. Mr. Troup joined Cardinal Health in 1990 and was appointed Group President of Pharmaceutical Distribution and Specialty Distribution Services in 1999. Prior to joining Cardinal Health, Mr. Troup was employed for 10 years by American Hospital Supply Corporation and 3 years by Zellerbach Paper, a Mead Company. Mr. Troup has a B.S. degree in Business Management from San Diego State University. Mr. Troup is a member of several national healthcare trade

organizations and is active in a number of not-for-profit organizations.

Directors whose terms continue until the 2013 Annual Meeting:

David C. Bupp, age 61, has served as President and a director of our Company since August 1992 and as Chief Executive Officer since February 1998. From August 1992 to May 1993, Mr. Bupp served as our Treasurer. In addition to the foregoing positions, from December 1991 to August 1992, he was Acting President, Executive Vice President, Chief Operating Officer and Treasurer, and from December 1989 to December 1991, he was Vice President, Finance and Chief Financial Officer. From 1982 to December 1989, Mr. Bupp was Senior Vice President, Regional Manager for AmeriTrust Company National Association, a nationally chartered bank holding company, where he was in charge of commercial and retail banking operations throughout Central Ohio. Mr. Bupp has a B.A. degree in Economics from Ohio Wesleyan University. Mr. Bupp also completed a course of study at Stonier Graduate School of Banking at Rutgers University.

Brendan A. Ford, age 52, has served as a director of our Company since July 2010. Mr. Ford is a partner in Talisman Capital Partners, a private investment partnership focusing on middle-market companies. From 1991 through 2007, Mr. Ford served in various executive positions including Executive Vice President, Business Development and Corporate Strategy with Cardinal Health, Inc., primarily in capacities related to mergers, acquisitions and related strategic activities, and was involved in over $19 billion in acquisition and disposition transactions for Cardinal. Prior to his service with Cardinal Health, Mr. Ford practiced law with Baker and Hostetler from 1986 to 1991. From 1980 to 1983, Mr. Ford was employed by Touche Ross LLP as a certified public accountant. Mr. Ford has a B.S. in Business from Miami University, and a J.D. from The Ohio State University. Mr. Ford serves as a director and board committee member for several privately held companies.

Eric K. Rowinsky, M.D., age 54, has served as a director of our Company since July 2010. In 2010, Dr. Rowinsky also co-founded Primrose Therapeutics, a start-up biotechnology company, and was a principal consultant to the Lilly-ImClone Oncology Business unit. From 2005 to December 2009, he served as the Chief Medical Officer and Executive Vice President of Clinical Development, Medical Affairs and Regulatory Affairs of ImClone Systems Incorporated, a life sciences company. Prior to that, Dr. Rowinsky held several positions at the Cancer Therapy & Research Center’s Institute of Drug Development, including Director of the Institute, Director of Clinical Research and SBC Endowed Chair for Early Drug Development, and concurrently served as Clinical Professor of Medicine in the Division of Medical Oncology at the University of Texas Health Science Center at San Antonio. Dr. Rowinsky was an Associate Professor of Oncology at the Johns Hopkins University School of Medicine and on active staff at the Johns Hopkins School of Medicine from 1987 to 1996. Dr. Rowinsky is a member of the boards of directors of Biogen Idec, Inc. and of ADVENTRX Pharmaceuticals, Inc., publicly-held life sciences companies. Dr. Rowinsky serves on the Compensation Committee at Biogen Idec. During the past five years, Dr. Rowinsky has also served as a director of Tapestry Pharmaceuticals, Inc., a life sciences company. Dr. Rowinsky has extensive research and drug development experience, oncology expertise and broad scientific and medical knowledge.

Executive Officers

In addition to Mr. Bupp, the following individuals are executive officers of our Company and serve in the position(s) indicated below:

Name	Age	Position
Anthony K. Blair	50	Vice President, Manufacturing Operations
Rodger A. Brown	60	Vice President, Regulatory Affairs and Quality Assurance
Frederick O. Cope, Ph.D.	64	Senior Vice President, Pharmaceutical Research and Clinical Development
Brent L. Larson	47	Senior Vice President; Chief Financial Officer; Treasurer and Secretary
Mark J. Pykett, V.M.D., Ph.D.	47	Executive Vice President; Chief Development Officer
Douglas L. Rash	67	Vice President, Marketing

Anthony K. Blair has served as Vice President, Manufacturing Operations of our Company since July 2004. Prior to joining our Company, Mr. Blair served as Vice President, Manufacturing Operations of Enpath Medical, Lead Technologies Division, formerly known as Biomec Cardiovascular, Inc. from 2002 to June 2004. From 1998 through 2001, Mr. Blair led the manufacturing efforts at Astro Instrumentation, a medical device contract manufacturer. From 1989 to 1998 at Ciba Corning Diagnostics (now Bayer), Mr. Blair held managerial positions including Operations Manager, Materials Manager, Purchasing Manager and Production Supervisor. From 1985 to 1989, Mr. Blair was employed by Bailey Controls and held various positions in purchasing and industrial engineering. Mr. Blair started his career at Fisher Body, a division of General Motors, in production supervision. Mr. Blair has a B.B.A. degree in management and labor relations from Cleveland State University.

Rodger A. Brown has served as Vice President, Regulatory Affairs and Quality Assurance of our Company since November 2000. From July 1998 through November 2000, Mr. Brown served as our Director, Regulatory Affairs and Quality Assurance. Prior to joining our Company, Mr. Brown served as Director of Regulatory Affairs and/ Quality Assurance for Biocore Medical Technologies, Inc. from April 1997 to April 1998. From 1981 through 1996, Mr. Brown served as Director, Regulatory Affairs/Quality Assurance for E for M Corporation, a subsidiary of Marquette Electronics, Inc.

Frederick O. Cope, Ph.D., F.A.C.N., C.N.S., has served as Senior Vice President, Pharmaceutical Research and Clinical Development of our Company since July 2010 and as Vice President, Pharmaceutical Research and Clinical Development from February 2009 to July 2010. Prior to accepting his position with the Company, Dr. Cope served as the Assistant Director for Research and Head of Program Research Development for The Ohio State University Comprehensive Cancer Center, The James Cancer Hospital and The Richard J. Solove Research Institute, from April 2001 to February 2009. Dr. Cope also served as head of the Cancer and AIDS product development and commercialization program for the ROSS/Abbott Laboratories division for 10 years, and head of human and veterinary vaccine production and improvement group for Wyeth Laboratories for seven years. Dr. Cope served a fellowship in oncology at the McArdle Laboratory for Cancer Research at the University of Wisconsin and the honored scientist in residence at the National Cancer Center Research Institute in Tokyo; he is the recipient of the Ernst W. Volwiler Research Award. Dr. Cope is also active in a number of professional and scientific organizations such as serving as an editorial reviewer for several professional journals, and as an advisor/director to the research program of Roswell Park Memorial Cancer Center. Dr. Cope received his B.Sc. from the Delaware Valley College of Science and Agriculture, his M.S. from Millersville University of Pennsylvania and his Ph.D. from the University of Connecticut with full honors.

Brent L. Larson has served as Senior Vice President of our Company since July 2010, as Chief Financial Officer and Treasurer since February 1999 and as Secretary since 2003. Prior to that, Mr. Larson served as our Vice President, Finance from July 1998 to July 2010 and as Controller from July 1996 to June 1998. Before joining our Company, Mr. Larson was employed by Price Waterhouse LLP. Mr. Larson has a B.B.A. degree in accounting from Iowa State University of Science and Technology and is a Certified Public Accountant.

Mark J. Pykett, V.M.D, Ph.D. has served as Executive Vice President and Chief Development Officer of our Company since November 2010. Prior to joining Neoprobe, Dr. Pykett served as Founding CEO of Talaris Advisors LLC, a strategic drug development company serving the biotech industry, from 2009 to November 2010. Dr. Pykett has also served as a Director of ADVENTRX Pharmaceuticals, a development-stage specialty pharmaceutical company since February 2004. Dr. Pykett serves on the Compensation Committee and the Nominating and Governance Committee at ADVENTRX. From November 2004 until January 2010, Dr. Pykett was President and Chief Operating Officer of Alseres Pharmaceuticals, Inc. (formerly Boston Life Sciences, Inc.), a publicly held company engaged in the development of therapeutic and diagnostic products primarily for disorders in the central nervous system. From May 1996 until April 2003, Dr. Pykett served as President and Chief Executive Officer and a Director of Cytomatrix, LLC, a privately held biotechnology company focused on the research, development and commercialization of novel cell-based therapies that Dr. Pykett co-founded. From April 2003 to February 2004, Dr. Pykett served as President of Cordlife and then as president and director of CyGenics from February 2004 until November 2004. In addition, Dr. Pykett served as a director of Cordlife from April 2003 through November 2005 and a Director of Oramax, LLC, a development stage dental implant company developing biomaterials for dental prostheses, from 2000 through 2006. Dr. Pykett has also served as an adjunct lecturer in cancer biology at Harvard University's School of Public Health and served on Northeastern University's Center for Enterprise Growth Corporate Advisory Board. He serves on the Boards of Directors of several private, public and not-for-profit organizations. Dr. Pykett graduated Phi Beta Kappa, summa cum laude from Amherst College, and earned a veterinary degree, Phi Zeta, summa cum laude, from the University of Pennsylvania and earned a Ph.D. in molecular biology. He also earned an M.B.A., Beta Gamma Sigma, from Northeastern University. Dr. Pykett completed post-doctoral fellowships at the University of Pennsylvania and Harvard University.

Douglas L. Rash has served as Vice President, Marketing of our Company since January 2005. Prior to that, Mr. Rash was Neoprobe's Director, Marketing and Product Management from March to December 2004. Before joining our Company, Mr. Rash served as Vice President and General Manager of MTRE North America, Inc. from 2000 to 2003. From 1994 to 2000, Mr. Rash served as Vice President and General Manager (Medical Division) of Cincinnati Sub-Zero, Inc. From 1993 to 1994, Mr. Rash was Executive Vice President of Everest & Jennings International, Ltd. During his nine-year career at Gaymar Industries, Inc. from 1984 to 1993, Mr. Rash held positions as Vice President and General Manager (Clinicare Division) and Vice President, Marketing and Sales (Acute Care Division). From 1976 to 1984, Mr. Rash held management positions at various divisions of British Oxygen Corp. Mr. Rash has a B.S. degree in Business Administration with a minor in Chemistry from Wisconsin State University.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires our officers and directors, and greater than 10% stockholders, to file reports of ownership and changes in ownership of our securities with the Securities and Exchange Commission. Copies of the reports are required by SEC regulation to be furnished to us. Based on our review of these reports and written representations from reporting persons, we believe that all reporting persons complied with all filing requirements during the fiscal year ended December 31, 2010, except for Carl Aschinger, who had one late Form 4 filing related to Company stock that he purchased on the open market in December 2010.

Code of Business Conduct and Ethics

We have adopted a code of business conduct and ethics that applies to our directors, officers and all employees. The code of business conduct and ethics is posted on our website at www.neoprobe.com. The code of business conduct and ethics may be also obtained free of charge by writing to Neoprobe Corporation, Attn: Chief Financial Officer, 425 Metro Place North, Suite 300, Dublin, Ohio 43017.

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Audit Committee

The Audit Committee of the Board of Directors selects our independent registered public accounting firm with whom the Audit Committee reviews the scope of audit and non-audit assignments and related fees, the accounting principles that we use in financial reporting, and the adequacy of our internal control procedures. The members of our Audit Committee are: Fred B. Miller (Chairman), Brendan A. Ford, Gordon A. Troup, and Owen E. Johnson, M.D., each of whom is "independent" under Section 803A of the NYSE Amex Company Guide. The Board of Directors has determined that Fred B. Miller meets the requirements of an "audit committee financial expert" as set forth in Section 407(d)(5) of Regulation S-K promulgated by the SEC. The Audit Committee held five meetings in the fiscal year ended December 31, 2010. The Board of Directors adopted a written Amended and Restated Audit Committee Charter on April 30, 2004. A copy of the Amended and Restated Audit Committee Charter is posted on the Company's website at www.neoprobe.com.

Item 11. Executive Compensation

Summary Compensation Table

The following table sets forth certain information concerning the annual and long-term compensation of our Chief Executive Officer and our other four highest paid executive officers during the last fiscal year (the Named Executives) for the last two fiscal years.

Name and Principal Position	Year	Salary	(a) Bonus	(b) Option Awards	(c) Restricted Stock Awards	(d) All Other Compensation	Total Compensation
David C. Bupp President and Chief Executive Officer	2010 2009	$ 355,000 335,000	$ 107,500 45,000	$ — —	$ 584,700 565,308	$ 8,887 8,621	$ 1,056,087 953,929
Anthony K. Blair Vice President, Manufacturing Operations	2010 2009	$ 180,000 157,000	$ 37,500 17,500	$ 72,585 65,247	$ — 54,950	$ 5,391 3,936	$ 295,476 298,633
Frederick O. Cope, Ph.D. Senior Vice President, Pharmaceutical Research and Clinical Development	2010 2009	$ 211,000 175,000	$ 51,375 25,000	$ 145,169 78,520	$ — 147,328	$ 5,980 4,360	$ 413,524 430,208
Brent L. Larson Senior Vice President and Chief Financial Officer	2010 2009	$ 195,000 184,000	$ 37,500 15,313	$ 114,926 65,247	$ — 82,426	$ 5,733 4,934	$ 353,159 351,920

Mark J. Pykett, V.M.D., Ph.D. Executive Vice President and Chief Development Officer	2010	$ 41,875	$ 6,278	$ 193,783	$ 530,700	$ —	$ 772,636
	2009	—	—	—	—	—	—

(a) Bonuses have been disclosed for the year in which they were earned (i.e., the year to which the service relates).

(b) Amount represents the aggregate grant date fair value in accordance with FASB ASC Topic 718. Assumptions made in the valuation of stock option awards are disclosed in Note 1(e) of the Notes to the Consolidated Financial Statements in this Form 10-K.

(c) Amount represents the aggregate grant date fair value in accordance with FASB ASC Topic 718. Assumptions made in the valuation of restricted stock awards are disclosed in Note 1(e) of the Notes to the Consolidated Financial Statements in this Form 10-K.

(d) Amount represents life insurance premiums and club dues paid during the fiscal year for the benefit of the Named Executives and matching contributions under the Neoprobe Corporation 401(k) Plan (the Plan). Eligible employees may make voluntary contributions and we may, but are not obligated to, make matching contributions based on 40 percent of the employee's contribution, up to 5 percent of the employee's salary. Employee contributions are invested in mutual funds administered by an independent plan administrator. Company contributions, if any, are made in the form of shares of common stock. The Plan qualifies under section 401 of the Internal Revenue Code, which provides that employee and company contributions and income earned on contributions are not taxable to the employee until withdrawn from the Plan, and that we may deduct our contributions when made.

Compensation of Mr. Bupp

Employment Agreement. David C. Bupp is employed under a 36-month employment agreement effective January 1, 2010. The employment agreement provides for an annual base salary of $355,000. Effective January 1, 2011, Mr. Bupp's annual base salary was increased to $400,000.

The Board of Directors and/or the CNG Committee will, on an annual basis, review the performance of our Company and of Mr. Bupp and may pay a bonus to Mr. Bupp as it deems appropriate, in its discretion. Such review and bonus will be consistent with any bonus plan adopted by the CNG Committee that covers the executive officers of the Company generally. For the calendar year ending December 31, 2011, the CNG Committee has determined that the maximum bonus payment to Mr. Bupp will be $150,000.

If a change in control occurs with respect to our Company and the employment of Mr. Bupp is concurrently or subsequently terminated:

- by the Company without cause (cause is defined as any willful breach of a material duty by Mr. Bupp in the course of his employment or willful and continued neglect of his duty as an employee);
- by the expiration of the term of Mr. Bupp's employment agreement; or
- by the resignation of Mr. Bupp because his title, authority, responsibilities, salary, bonus opportunities or benefits have materially diminished, a material adverse change in his working conditions has occurred, his services are no longer required in light of the Company's business plan, or we breach the agreement;

then, Mr. Bupp will be paid a severance payment of $887,500 (less amounts paid as Mr. Bupp's salary and benefits that continue for the remaining term of the agreement if his employment is terminated without cause).

For purposes of Mr. Bupp's employment agreement, a change in control includes:

- the acquisition, directly or indirectly, by a person (other than our Company, an employee benefit plan established by the Board of Directors, or a participant in a transaction approved by the Board of Directors for the principal purpose of raising additional capital) of beneficial ownership of 30% or more of our securities with voting power in the next meeting of holders of voting securities to elect the directors;
- a majority of the Directors elected at any meeting of the holders of our voting securities are persons who were not nominated by our then current Board of Directors or an authorized committee thereof;
- our stockholders approve a merger or consolidation of our Company with another person, other than a merger or consolidation in which the holders of our voting securities outstanding immediately before such merger or consolidation continue to hold voting securities in the surviving or resulting corporation (in the same relative proportions to each other as existed before such event) comprising 80% or more of the voting power for all purposes of the surviving or resulting corporation; or
- our stockholders approve a transfer of substantially all of our assets to another person other than a transfer to a transferee, 80% or more of the voting power of which is owned or controlled by us or by the holders of our voting securities outstanding immediately before such transfer in the same relative proportions to each other as existed before such event.

Mr. Bupp will be paid a severance amount of $532,500 if his employment is terminated at the end of his employment agreement or without cause. If Mr. Bupp is terminated without cause, his benefits will continue for the longer of 36 months or the full term of the agreement.

Compensation of Other Named Executives

Our Executive Officers are employed under employment agreements of varying terms as outlined below. In addition, the CNG Committee will, on an annual basis, review the performance of our Company and may pay bonuses to our executives as it deems appropriate, in its discretion. Such review and bonus will be consistent with any bonus plan adopted by the CNG Committee that covers Mr. Bupp as well as the executive officers of the Company generally.

Anthony K. Blair

Employment Agreement. Anthony Blair is employed under a 24-month employment agreement effective January 1, 2011. The employment agreement provides for an annual base salary of $195,000. For the calendar year ending December 31, 2011, the CNG Committee has determined that the maximum bonus payment to Mr. Blair will be $35,000.

If a change in control occurs with respect to our Company and the employment of Mr. Blair is concurrently or subsequently terminated:

- by the Company without cause (cause is defined as any willful breach of a material duty by Mr. Blair in the course of his employment or willful and continued neglect of his duty as an employee);
- by the expiration of the term of Mr. Blair's employment agreement; or
- by the resignation of Mr. Blair because his title, authority, responsibilities, salary, bonus opportunities or benefits have materially diminished, a material adverse change in his working conditions has occurred, his services are no longer required in light of the Company's business plan, or we breach the agreement;

then, Mr. Blair will be paid a severance payment of $292,500 and will continue his benefits for the longer of 12 months or the remaining term of his employment agreement.

For purposes of Mr. Blair's employment agreement, a change in control includes:

- the acquisition, directly or indirectly, by a person (other than our Company, an employee benefit plan established by the Board of Directors, or a participant in a transaction approved by the Board of Directors for the principal purpose of raising additional capital) of beneficial ownership of 30% or more of our securities with voting power in the next meeting of holders of voting securities to elect the directors;
- a majority of the directors elected at any meeting of the holders of our voting securities are persons who were not nominated by our then current Board of Directors or an authorized committee thereof;
- our stockholders approve a merger or consolidation of our Company with another person, other than a merger or consolidation in which the holders of our voting securities outstanding immediately before such merger or consolidation continue to hold voting securities in the surviving or resulting corporation (in the same relative proportions to each other as existed before such event) comprising 80% or more of the voting power for all purposes of the surviving or resulting corporation; or
- our stockholders approve a transfer of substantially all of the assets of our Company to another person other than a transfer to a transferee, 80% or more of the voting power of which is owned or controlled by us or by the holders of our voting securities outstanding immediately before such transfer in the same relative proportions to each other as existed before such event.

Mr. Blair will be paid a severance amount of $195,000 if his employment is terminated at the end of his employment agreement or without cause. If Mr. Blair is terminated without cause, his benefits will continue for the longer of 12 months or the full term of the agreement.

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Frederick O. Cope, Ph.D.

Employment Agreement. Frederick Cope is employed under a 24-month employment agreement effective January 1, 2011. The employment agreement provides for an annual base salary of $245,000. For the calendar year ending December 31, 2011, the CNG Committee has determined that the maximum bonus payment to Dr. Cope will be $65,000.

The terms of Dr. Cope's employment agreement are substantially identical to Mr. Blair's employment agreement, except that:

- If a change in control occurs with respect to our Company and the employment of Dr. Cope is concurrently or subsequently terminated, then Dr. Cope will be paid a severance payment of $367,500; and
- Dr. Cope will be paid a severance amount of $245,000 if his employment is terminated at the end of his employment agreement or without cause.

Brent L. Larson

Employment Agreement. Brent Larson is employed under a 24-month employment agreement effective January 1, 2011. The employment agreement provides for an annual base salary of $207,000. For the calendar year ending December 31, 2011, the CNG Committee has determined that the maximum bonus payment to Mr. Larson will be $45,000.

The terms of Mr. Larson's employment agreement are substantially identical to Mr. Blair's employment agreement, except that:

- If a change in control occurs with respect to our Company and the employment of Mr. Larson is concurrently or subsequently terminated, then Mr. Larson will be paid a severance payment of $310,500; and
- Mr. Larson will be paid a severance amount of $207,000 if his employment is terminated at the end of his employment agreement or without cause.

Mark J. Pykett, V.M.D., Ph.D.

Employment Agreement. Mark Pykett is employed under a 13½-month employment agreement effective November 15, 2010. The employment agreement provides for an annual base salary of $325,000. For the calendar year ending December 31, 2011, the CNG Committee has determined that the maximum bonus payment to Dr. Pykett will be $97,500.

The terms of Dr. Pykett's employment agreement are substantially identical to Mr. Blair's employment agreement, except that:

- If a change in control occurs with respect to our Company and the employment of Dr. Pykett is concurrently or subsequently terminated, then Dr. Pykett will be paid a severance payment of $650,000; and
- Dr. Pykett will be paid a severance amount of $162,500 if his employment is terminated at the end of his employment agreement or without cause.

Outstanding Equity Awards of Named Executives at Fiscal Year End

The following table presents certain information concerning outstanding equity awards held by the Named Executives as of December 31, 2010.

	Option Awards					Stock Awards		
	Number of Securities Underlying Unexercised Options (#)		Option Exercise	Option Expiration		Number of Unearned	Market Value of Unearned	
Name	Exercisable	Unexercisable	Price	Date	Note	Shares	Shares (x)	Note
David C. Bupp	180,000	—	$ 0.42	1/7/2012	(a)	300,000	$ 618,000	(q)
	100,000	—	$ 0.14	1/15/2013	(b)	400,000	$ 824,000	(r)
	70,000	—	$ 0.13	2/15/2013	(c)	300,000	$ 618,000	(t)
	125,000	—	$ 0.30	1/7/2014	(d)	300,000	$ 618,000	(w)
	150,000	—	$ 0.49	7/28/2014	(f)			
	200,000	—	$ 0.39	12/10/2014	(g)			
	200,000	—	$ 0.26	12/27/2015	(h)			
	300,000	—	$ 0.27	12/15/2016	(i)			
	133,333	66,667	$ 0.362	1/3/2018	(k)			
Anthony K. Blair	50,000	—	$ 0.60	7/1/2014	(e)	50,000	$ 103,000	(q)
	40,000	—	$ 0.39	12/10/2014	(g)	50,000	$ 103,000	(u)
	30,000	—	$ 0.26	12/27/2015	(h)			
	30,000	—	$ 0.27	12/15/2016	(i)			
	20,000	—	$ 0.35	7/27/2017	(j)			
	33,333	16,667	$ 0.362	1/3/2018	(k)			
	8,333	16,667	$ 0.59	1/5/2019	(l)			
	25,000	50,000	$ 1.10	10/30/2019	(n)			
	—	60,000	$ 1.90	12/21/2020	(p)			
Frederick O. Cope, Ph.D.	16,667	33,333	$ 0.65	2/16/2019	(m)	100,000	$ 206,000	(s)
	25,000	50,000	$ 1.10	10/30/2019	(n)	75,000	$ 154,500	(u)
	—	120,000	$ 1.90	12/21/2020	(p)			
Brent L. Larson	50,000	—	$ 0.42	1/7/2012	(a)	50,000	$ 103,000	(q)
	40,000	—	$ 0.14	1/15/2013	(b)	75,000	$ 154,500	(u)
	30,000	—	$ 0.13	2/15/2013	(c)			
	70,000	—	$ 0.30	1/7/2014	(d)			
	50,000	—	$ 0.49	7/28/2014	(f)			
	50,000	—	$ 0.39	12/10/2014	(g)			
	40,000	—	$ 0.26	12/27/2015	(h)			
	50,000	—	$ 0.27	12/15/2016	(i)			
	33,333	16,667	$ 0.362	1/3/2018	(k)			
	8,333	16,667	$ 0.59	1/5/2019	(l)			
	25,000	50,000	$ 1.10	10/30/2019	(n)			
	—	95,000	$ 1.90	12/21/2020	(p)			

Mark J. Pykett, V.M.D., Ph.D.	—	200,000	$ 1.70	11/12/2010	(o)	300,000	$ 618,000	(v)

(a) Options were granted 1/7/2002 and vested as to one-third on each of the first three anniversaries of the date of grant.
(b) Options were granted 1/15/2003 and vested as to one-third on each of the first three anniversaries of the date of grant.
(c) Options were granted 2/15/2003 and vested as to one-third on each of the first three anniversaries of the date of grant.
(d) Options were granted 1/7/2004 and vested as to one-third on each of the first three anniversaries of the date of grant.
(e) Options were granted 7/1/2004 and vested as to one-third on each of the first three anniversaries of the date of grant.
(f) Options were granted 7/28/2004 and vested as to one-third on each of the first three anniversaries of the date of grant.
(g) Options were granted 12/10/2004 and vested as to one-third on each of the first three anniversaries of the date of grant.
(h) Options were granted 12/27/2005 and vested as to one-third immediately and on each of the first two anniversaries of the date of grant.
(i) Options were granted 12/15/2006 and vested as to one-third on each of the first three anniversaries of the date of grant.
(j) Options were granted 7/27/2007 and vested as to one-third on each of the first three anniversaries of the date of grant.
(k) Options were granted 1/3/2008 and vested as to one-third on each of the first three anniversaries of the date of grant.
(l) Options were granted 1/5/2009 and vest as to one-third on each of the first three anniversaries of the date of grant.
(m) Options were granted 2/16/2009 and vest as to one-third on each of the first three anniversaries of the date of grant.
(n) Options were granted 10/30/2009 and vest as to one-third on each of the first three anniversaries of the date of grant.
(o) Options were granted 11/12/2010 and vest as to one-third on each of the first three anniversaries of the date of grant.
(p) Options were granted 12/21/2010 and vest as to one-fourth on each of the first four anniversaries of the date of grant.

(q) Restricted shares granted January 3, 2008. Pursuant to the terms of Restricted Stock Agreements between the Company and each grantee, the restricted shares will vest upon the approval of a New Drug Application (NDA) for Lymphoseek by the United States Food and Drug Administration (FDA). If the employment of a grantee with the Company is terminated before all of the restricted shares have vested, then pursuant to the terms of the Restricted Stock Agreements all restricted shares that have not vested at the effective date of such grantee's termination shall immediately be forfeited by the grantee. Pursuant to its authority under Section 3.2 of the Restricted Stock Agreements the CNG Committee eliminated the forfeiture provision in Section 3.2(b) of the Restricted Stock Agreements effective January 1, 2009, which provision effected the forfeiture of the shares if the vesting event did not occur before June 30, 2010.

(r) Restricted shares granted January 5, 2009. Pursuant to the terms of the Restricted Stock Agreement between the Company and Mr. Bupp, the restricted shares will vest upon the approval of a NDA for Lymphoseek by the FDA or the approval of marketing authorization for Lymphoseek by the European Medicines Agency (EMA). All of the restricted shares vest upon the occurrence of a Termination Without Cause, in the event of an End of Term Termination, or in the event of a Change of Control, as defined in Mr. Bupp's employment agreement. If the employment of Mr. Bupp with the Company is terminated for reasons other than a Termination Without Cause, an End of Term Termination, or a Change of Control before all of the restricted shares have vested, then pursuant to the terms of the Restricted Stock Agreement all restricted shares that have not vested at the effective date of Mr. Bupp's termination shall immediately be forfeited by Mr. Bupp.

(s) Restricted shares granted February 16, 2009. Pursuant to the terms of the Restricted Stock Agreement between the Company and Dr. Cope, 50% of the restricted shares will vest upon the approval of a NDA for Lymphoseek by FDA or the approval of marketing authorization for Lymphoseek by the EMA and 50% of the restricted shares will vest upon the commencement of patient enrollment in a Phase 3 clinical trial in humans of RIGScan. All of the restricted shares vest upon the occurrence of a Change of Control as defined in Dr. Cope's employment agreement. If the employment of Dr. Cope with the Company is terminated for reasons other than a Change of Control before all of the restricted shares have vested, then pursuant to the terms of the Restricted Stock Agreement all restricted shares that have not vested at the effective date of Dr. Cope's termination shall immediately be forfeited by Dr. Cope.

(t) Restricted shares granted December 1, 2009. Pursuant to the terms of the Restricted Stock Agreement between the Company and Mr. Bupp, the restricted shares will vest upon the approval of a NDA for Lymphoseek by the FDA or the approval of marketing authorization for Lymphoseek by the EMA. All of the restricted shares vest upon the occurrence of a Termination Without Cause, in the event of an End of Term Termination, or in the event of a Change of Control, as defined in the Restricted Stock Agreement. If the employment of Mr. Bupp with the Company is terminated for reasons other than a Termination Without Cause, an End of Term Termination, or a Change of Control before all of the restricted shares have vested, then pursuant to the terms of the Restricted Stock Agreement all restricted shares that have not vested at the effective date of Mr. Bupp's termination shall immediately be forfeited by Mr. Bupp.

(u) Restricted shares granted December 1, 2009. Pursuant to the terms of Restricted Stock Agreements between the Company and each grantee, the restricted shares will vest upon the approval of a NDA for Lymphoseek by the FDA or the approval of marketing authorization for Lymphoseek by the EMA. All of the restricted shares vest upon the occurrence of a Change of Control as defined in the Restricted Stock Agreement. If the employment of a grantee with the Company is terminated for reasons other than a Change of Control before all of the restricted shares have vested, then pursuant to the terms of the Restricted Stock Agreements all restricted shares that have not vested at the effective date of such grantee's termination shall immediately be forfeited by the grantee.

(v) Restricted shares granted November 15, 2010. Pursuant to the terms of the Restricted Stock Agreement between the Company and Dr. Pykett, 125,000 of the restricted shares will vest upon the approval of a NDA for Lymphoseek by FDA or the approval of marketing authorization for Lymphoseek by the EMA and 175,000 of the restricted shares will vest upon the approval of a NDA for a RIGS technology product by FDA or the approval of marketing authorization for a RIGS technology product by the EMA. All of the restricted shares vest upon the

occurrence of a Change of Control as defined in Dr. Pykett's employment agreement. If the employment of Dr. Pykett with the Company is terminated for reasons other than a Change of Control before all of the restricted shares have vested, then pursuant to the terms of the Restricted Stock Agreement all restricted shares that have not vested at the effective date of Dr. Pykett's termination shall immediately be forfeited by Dr. Pykett.

(w) Restricted shares granted December 20, 2010. Pursuant to the terms of the Restricted Stock Agreement between the Company and Mr. Bupp, the restricted shares will vest upon the approval of a Phase 3 clinical program for a RIGS technology product by the FDA or the approval of marketing authorization for a RIGS technology product by the EMA. All of the restricted shares vest upon the occurrence of a Termination Without Cause, in the event of an End of Term Termination, or in the event of a Change of Control, as defined in the Restricted Stock Agreement. If the employment of Mr. Bupp with the Company is terminated for reasons other than a Termination Without Cause, an End of Term Termination, or a Change of Control before all of the restricted shares have vested, then pursuant to the terms of the Restricted Stock Agreement all restricted shares that have not vested at the effective date of Mr. Bupp's termination shall immediately be forfeited by Mr. Bupp.

(x) Estimated by reference to the closing market price of the Company's common stock on December 31, 2010, pursuant to Instruction 3 to Item 402(p)(2) of Regulation S-K. The closing price of the Company's common stock on December 31, 2010, was $2.06.

Compensation of Non-Employee Directors

Each non-employee director received an annual cash retainer of $25,000 and earned an additional $2,500 per board meeting attended in person or $500 per telephonic board meeting during the fiscal year ended December 31, 2010. The Chairmen of the Company's Board of Directors and Audit Committee each received an additional annual retainer of $10,000 for their services in those capacities during 2010. Members of the Executive Committee each received an additional annual retainer of $5,000 for their services on the committee. Members of all committees of the Company's Board of Directors earned an additional $500 per committee meeting, whether attended in person or telephonically. We also reimbursed non-employee directors for travel expenses for meetings attended during 2010.

Upon election to the Board of Directors at the Company's Annual Meeting on July 16, 2010, Brendan A. Ford and Eric K. Rowinsky, M.D. each received 30,000 shares of restricted stock as a part of the Company's annual stock incentive grants, in accordance with the provisions of the Neoprobe Corporation Second Amended and Restated 2002 Stock Incentive Plan. The restricted stock granted will vest upon the approval of a New Drug Application for Lymphoseek by the United States Food and Drug Administration or the approval of marketing authorization for Lymphoseek by the European Medicines Agency. The aggregate number of equity awards outstanding at February 28, 2011 for each Director is set forth in the footnotes to the beneficial ownership table provided in Part III, Item 12 of this Form 10-K. Directors who are also officers or employees of Neoprobe do not receive any compensation for their services as directors.

The following table sets forth certain information concerning the compensation of non-employee Directors for the fiscal year ended December 31, 2010.

Name	(a) Fees Earned or Paid in Cash	(b),(c) Option Awards	(d),(e) Restricted Stock Awards	Total Compensation
Carl J. Aschinger, Jr.	$ 57,000	$—	$ —	$ 57,000
Reuven Avital (f)	18,500	—	—	18,500
Kirby I. Bland, M.D. (g)	34,500	—	—	34,500
Brendan A. Ford	24,500	—	57,570	82,070
Owen E. Johnson, M.D.	37,000	—	—	37,000
Fred B. Miller	56,500	—	—	56,500
Eric K. Rowinsky, M.D.	19,000	—	57,570	76,570
Gordon A. Troup	46,500	—	—	46,500
J. Frank Whitley, Jr. (f)	18,000	—	—	18,000

(a) Amount represents fees earned during the fiscal year ended December 31, 2010 (i.e., the year to which the service relates). Quarterly retainers and meeting attendance fees are paid during the quarter following the quarter in which they are earned.

(b) Amount represents the aggregate grant date fair value in accordance with FASB ASC Topic 718. Assumptions made in the valuation of stock option awards are disclosed in Note 1(e) of the Notes to the Consolidated Financial Statements in this Form 10-K.

(c) At December 31, 2010, the non-employee directors held an aggregate of 985,000 options to purchase shares of common stock of the Company. Mr. Aschinger held 150,000 options, Mr. Avital held 170,000 options, Dr. Bland held 180,000 options, Dr. Johnson held 40,000 options, Mr. Miller held 255,000 options, Mr. Troup held 20,000 options, and Mr. Whitley held 170,000 options.

(d)

Amount represents the aggregate grant date fair value in accordance with FASB ASC Topic 718. Assumptions made in the valuation of restricted stock awards are disclosed in Note 1(e) of the Notes to the Consolidated Financial Statements in this Form 10-K.

(e) At December 31, 2010, the non-employee directors held an aggregate of 180,000 shares of unvested restricted stock. Messrs. Aschinger, Ford, Miller, and Troup, and Drs. Johnson and Rowinsky, each held 30,000 shares of unvested restricted stock,

(f) Messrs. Avital and Whitley retired from our Board of Directors effective July 16, 2010, the date of the 2010 Annual Meeting. There were no matters of disagreement between either Mr. Avital or Mr. Whitley and the Company concerning the Company's operations, policies or practices, which caused the decision of either to retire from the Board.

(g) Dr. Bland resigned from our Board of Directors effective December 1, 2010, due to his positions on certain advisory panels for the National Institutes of Health and his service as an officer in certain national surgical societies. Independence guidelines for these organizations discourage, and in some cases prohibit, members from holding decision making positions with for-profit entities such as Neoprobe. Dr. Bland therefore decided to retire from the Board to avoid potential future conflicts of interest. There were no matters of disagreement between Dr. Bland and the Company concerning the Company's operations, policies or practices, which caused the decision of Dr. Bland to retire from the Board.

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

Equity Compensation Plan Information

The following table sets forth additional information as of December 31, 2010, concerning shares of our common stock that may be issued upon the exercise of options and other rights under our existing equity compensation plans and arrangements, divided between plans approved by our stockholders and plans or arrangements not submitted to our stockholders for approval. The information includes the number of shares covered by, and the weighted average exercise price of, outstanding options and other rights and the number of shares remaining available for future grants excluding the shares to be issued upon exercise of outstanding options, warrants, and other rights.

	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	(c) Number of Securities Remaining Available for Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by security holders(1)	5,734,500	$ 0.58	2,295,182
Equity compensation plans not approved by security holders	—	—	—
Total	5,734,500	$ 0.58	2,295,182

(1) Our Board of Directors approved an amendment of the Second Amended and Restated 2002 Stock Incentive Plan (the Plan) at a meeting held on December 20, 2010, which amendment will: (1) increase the total number of shares available for grant under the Plan to 10,000,000 shares; and (2) extend the expiration date for the Plan from March 7, 2012, to March 7, 2015, following ratification of the Third Amended and Restated 2002 Stock Incentive Plan by the Company’s stockholders at the Company's 2011 annual meeting of stockholders.

Security Ownership of Principal Stockholders, Directors, Nominees and Executive Officers and Related Stockholder Matters

The following table sets forth, as of February 28, 2011, certain information with respect to the beneficial ownership of shares of our common stock by: (i) each person known to us to be the beneficial owner of more than 5% of our outstanding shares of common stock, (ii) each director or nominee for director of our Company, (iii) each of the Named Executives (see "Executive Compensation – Summary Compensation Table"), and (iv) our directors and executive officers as a group.

Beneficial Owner	Number of Shares Beneficially Owned (*)		Percent of Class (**)	
Carl J. Aschinger, Jr.	388,620	(a)		(n)
Anthony K. Blair	350,211	(b)		(n)
David C. Bupp	5,203,367	(c)	5.6	%
Frederick O. Cope, Ph.D.	65,839	(d)		(n)
Brendan A. Ford	30,000	(e)		(n)
Owen E. Johnson, M.D.	110,000	(f)		(n)
Brent L. Larson	719,507	(g)		(n)
Fred B. Miller	396,000	(h)		(n)
Mark J. Pykett, V.M.D., Ph.D.	—	(i)		(n)
Eric K. Rowinsky, M.D.	—	(j)		(n)
Gordon A. Troup	60,000	(k)		(n)
All directors and officers as a group (13 persons)	7,914,539	(l)(o)	8.4	%
Platinum Montaur Life Sciences, LLC	7,133,129	(m)		8.1%

(*) Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission which generally attribute beneficial ownership of securities to persons who possess sole or shared voting power and/or investment power with respect to those securities. Unless otherwise indicated, voting and investment power are exercised solely by the person named above or shared with members of such person's household.

(**) Percent of class is calculated on the basis of the number of shares outstanding on February 28, 2011, plus the number of shares the person has the right to acquire within 60 days of February 28, 2011.

(a) This amount includes 150,000 shares issuable upon exercise of options which are exercisable within 60 days and 320 shares held in a trust account for which Mr. Aschinger is the custodian, but does not include 47,000 shares of unvested restricted stock.

(b) This amount includes 261,667 shares issuable upon exercise of options which are exercisable within 60 days and 38,544 shares in Mr. Blair's account in the 401(k) Plan, but it does not include 100,000 shares of unvested restricted stock and 118,333 shares issuable upon exercise of options which are not exercisable within 60 days.

(c) This amount includes 1,525,000 shares issuable upon exercise of options which are exercisable within 60 days, 770,000 warrants which are exercisable within 60 days, preferred stock convertible into 1,613,000 shares of our common stock, 213,746 shares and warrants that are held by Mr. Bupp's wife for which he disclaims beneficial ownership and 125,972 shares in Mr. Bupp's account in the 401(k) Plan, but it does not include 1,300,000 shares of unvested restricted stock.

(d) This amount includes 58,333 shares issuable upon exercise of options which are exercisable within 60 days and 2,506 shares in Dr. Cope's account in the 401(k) Plan, but it does not include 175,000 shares of unvested restricted stock and 186,667 shares issuable upon exercise of options which are not exercisable within 60 days.

(e) This amount does not include 47,000 shares of unvested restricted stock.

(f) This amount includes 40,000 shares issuable upon exercise of options which are exercisable within 60 days but does not include 47,000 shares of unvested restricted stock.

(g) This amount includes 471,667 shares issuable upon exercise of options which are exercisable within 60 days and 92,928 shares in Mr. Larson's account in the 401(k) Plan, but it does not include 125,000 shares of unvested restricted stock and 153,333 shares issuable upon exercise of options which are not exercisable within 60 days.

(h) This amount includes 255,000 shares issuable upon exercise of options which are exercisable within 60 days and 91,000 shares held by Mr. Miller's wife for which he disclaims beneficial ownership, but does not include 47,000 shares of unvested restricted stock.

(i) This amount does not include 300,000 shares of unvested restricted stock and 200,000 shares issuable upon exercise of options which are not exercisable within 60 days.

(j) This amount does not include 47,000 shares of unvested restricted stock.

(k) This amount includes 20,000 shares issuable upon exercise of options which are exercisable within 60 days, but does not include 47,000 shares of unvested restricted stock.

(l) This amount includes 3,330,001 shares issuable upon exercise of options which are exercisable within 60 days, 770,000 warrants which are exercisable within 60 days, preferred stock convertible into 1,613,000 shares of our common stock, 305,066 shares that are held by spouses of our Directors and Officers or in trusts for which they are custodian but for which they disclaim beneficial ownership, and 273,896 shares held in the 401(k) Plan on behalf of certain officers, but it does not include 2,052,000 shares of unvested restricted stock and 849,999 shares issuable upon the exercise of options which are not exercisable within 60 days. The Company itself is the trustee of the Neoprobe 401(k) Plan and may, as such, share investment power over common stock held in such plan. The trustee disclaims any beneficial ownership of shares held by the 401(k) Plan. The 401(k) Plan holds an aggregate total of 624,627 shares of common stock. The 13 persons referenced in this disclosure include each director and named executive officer listed in the table, and Messrs. Brown and Rash, who we have referenced above under the heading "Executive Officer," but who do not qualify as "named executive officers" as defined in Item 401(a)(3) of Regulation S-K.

(m) Based on information filed on Schedule 13G with the Securities and Exchange Commission on February 22, 2011 and information supplied subsequently by holder. The number of shares beneficially owned by Platinum-Montaur Life Sciences, LLC (Montaur), 152 W. 57th Street, 54th Floor, New York, NY 10019, does not include 32,700,000 shares of common stock issuable upon conversion of 1,000 shares of Series B Convertible Preferred Stock, 6,000,000 shares of common stock issuable upon exercise of a Series W Warrant issued to Montaur on December 26, 2007, as amended (the Series W Warrant), 8,333,333 shares of common stock issuable upon exercise of a Series X Warrant issued to Montaur on April 16, 2008 (the Series X Warrant), and 2,400,000 shares of common stock issuable upon exercise of a Series AA Warrant issued to Montaur on July 24, 2009 (the Series AA Warrant). The Certificates of Designation of the Preferred Stock, the Series W Warrant, the Series X Warrant and the Series AA Warrant each provide that the holder of shares of the Preferred Stock, the Series W Warrant, the Series X Warrant and the Series AA Warrant, respectively, may not convert any of the preferred stock or exercise any of the warrants to the extent that such conversion or exercise would result in the holder and its affiliates together beneficially owning more than 9.99% of the outstanding shares of Common Stock, except on 61 days' prior written notice to Neoprobe that the holder waives such limitation.

(n) Less than one percent.

(o) The address of all directors and executive officers is c/o Neoprobe Corporation, 425 Metro Place North, Suite 300, Dublin, Ohio 43017-1367.

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

Director Independence

Our Board of Directors has adopted the definition of "independence" as described under the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley) Section 301, Rule 10A-3 under the Securities Exchange Act of 1934 (the Exchange Act) and Section 803A of the NYSE Amex Company Guide. Our Board of Directors has determined that Messrs. Aschinger, Ford, Miller, and Troup, and Drs. Johnson and Rowinsky meet the independence requirements.

See Liquidity and Capital Resources in Part II, Item 7 of this Form 10-K for information about our related party transactions.

Item 14. Principal Accountant Fees and Services

Audit Fees. The aggregate fees billed and expected to be billed for professional services rendered by BDO USA, LLP for the audit of the Company's annual consolidated financial statements for the 2010 fiscal year, the reviews of the financial statements included in the Company's Quarterly Reports on Form 10-Q for the 2010 fiscal year, consents related to the Company's registration statements filed during the 2010 fiscal year, and consulting services related to the Company's modification of certain debt and equity instruments during the 2010 fiscal year were $267,171 (including

direct engagement expenses). The aggregate fees billed and expected to be billed for professional services rendered by BDO USA, LLP for the audit of the Company's annual consolidated financial statements for the 2009 fiscal year, the reviews of the financial statements included in the Company's Quarterly Reports on Form 10-Q for the 2009 fiscal year, consents related to the Company's registration statements filed during the 2009 fiscal year, and consulting services related to the Company's modification of certain debt and equity instruments during the 2009 fiscal year were $183,400 (including direct engagement expenses).

Audit-Related Fees. No fees were billed by BDO USA, LLP for audit-related services for the 2010 or 2009 fiscal years.

Tax Fees. The aggregate fees billed and expected to be billed for tax-related services rendered by BDO USA, LLP during the 2010 fiscal year were $23,410 (including direct engagement expenses). No fees were billed by BDO USA, LLP for tax-related services for the 2009 fiscal year.

All Other Fees. No fees were billed by BDO USA, LLP for services other than the audit, audit-related and tax services for the 2010 or 2009 fiscal years.

Pre-Approval Policy. The Audit Committee is required to pre-approve all auditing services and permitted non-audit services (including the fees and terms thereof) to be performed for the Company by its independent auditor or other registered public accounting firm, subject to the de minimis exceptions for permitted non-audit services described in Section 10A(i)(1)(B) of the Securities Exchange Act of 1934 that are approved by the Audit Committee prior to completion of the audit.

PART IV

Item 15. Exhibits, Financial Statement Schedules

Exhibit Number	Exhibit Description
3.1	Amended and Restated Certificate of Incorporation of Neoprobe Corporation as corrected February 18, 1994 and amended June 27, 1994, June 3, 1996, March 17, 1999, May 9, 2000, June 13, 2003, July 27, 2004, June 22, 2005 and November 20, 2006 (incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form SB-2 filed December 7, 2006).
3.2	Amended and Restated By-Laws dated July 21, 1993, as amended July 18, 1995, May 30, 1996 and July 26, 2007 (filed as Exhibit 3.2 to the Company's Current Report on Form 8-K dated August 3, 2007, and incorporated herein by reference).
4.1	Neoprobe Corporation Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of Series B Cumulative Convertible Preferred Stock (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed June 28, 2010).
4.2	Neoprobe Corporation Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of Series C 10% Cumulative Convertible Preferred Stock (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed June 28, 2010).
10.1	Amended and Restated Stock Option and Restricted Stock Purchase Plan dated March 3, 1994 (incorporated by reference to Exhibit 10.2.26 to the Company's December 31, 1993 Form 10–K).
10.2	1996 Stock Incentive Plan dated January 18, 1996 as amended March 13, 1997 (incorporated by reference to Exhibit 10.2.37 to the Company's December 31, 1997 Form 10–K).
10.3	Neoprobe Corporation Second Amended and Restated 2002 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed June 27, 2008).
10.4	Neoprobe Corporation Third Amended and Restated 2002 Stock Incentive Plan.*
10.5	Form of Stock Option Agreement under the Neoprobe Corporation Second Amended and Restated 2002 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 21, 2006).
10.6	Form of Restricted Stock Award and Agreement under the Neoprobe Corporation Second Amended and Restated 2002 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed January 9, 2008).
10.7	Employment Agreement dated January 1, 2010, by and between the Company and David C. Bupp (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed January 6, 2010).

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10.8 Form of Employment Agreement. This Agreement is one of four substantially identical employment agreements and is accompanied by a schedule which identifies material details in which each individual agreement differs from the form filed herewith (incorporated by reference to the Company's Current Report on Form 8-K filed December 27, 2010).

10.9 Schedule identifying material differences between the employment agreements incorporated by reference as Exhibit 10.8 to this Annual Report on Form 10-K (incorporated by reference to the Company's Current Report on Form 8-K filed December 27, 2010).

10.10 Technology Transfer Agreement dated July 29, 1992 between the Company and The Dow Chemical Corporation (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the Commission) (incorporated by reference to Exhibit 10.10 to the Company's Form S-1 filed October 15, 1992).

10.11 Cooperative Research and Development Agreement between the Company and the National Cancer Institute (incorporated by reference to Exhibit 10.3.31 to the Company's September 30, 1995 Form 10–QSB).

10.12 License dated May 1, 1996 between the Company and The Dow Chemical Company (incorporated by reference to Exhibit 10.3.45 to the Company's June 30, 1996 Form 10–QSB).

10.13 License Agreement dated May 1, 1996 between the Company and The Dow Chemical Company (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the Commission) (incorporated by reference to Exhibit 10.3.46 to the Company's June 30, 1996 Form 10–QSB).

10.14 License Agreement dated January 30, 2002 between the Company and the Regents of the University of California, San Diego, as amended on May 27, 2003 and February 1, 2006 (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the Commission) (incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-KSB filed March 31, 2006).

10.15 Evaluation License Agreement dated March 31, 2005 between the Company and the Regents of the University of California, San Diego (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the Commission) (incorporated by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-KSB filed March 31, 2006).

10.16 Distribution Agreement between the Company and Ethicon Endo-Surgery, Inc. dated October 1, 1999 (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the Commission) (incorporated by reference to Exhibit 10.13 to the Company's Annual Report on Form 10-KSB filed March 16, 2007).

10.17 First Amendment to Distribution Agreement, dated December 14, 2007, by and between the Company and Ethicon Endo-Surgery, Inc. (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the Commission) (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 20, 2007).

10.18

Product Supply Agreement between the Company and TriVirix International, Inc., dated February 5, 2004 (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the Commission) (incorporated by reference to Exhibit 10.17 to the Company's December 31, 2004 Form 10-KSB).

10.19 Supply and Distribution Agreement, dated November 15, 2007, by and between the Company and Cardinal Health 414, LLC (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the Commission) (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed November 21, 2007).

10.20 Manufacture and Supply Agreement, dated November 30, 2009, between the Company and Reliable Biopharmaceutical Corporation (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the Commission) (incorporated by reference to Exhibit 10.1 to the Company's June 30, 2010 Form 10-Q).

10.21 Warrant to Purchase Common Stock of Neoprobe Corporation dated March 8, 2004 between the Company and David C. Bupp (incorporated by reference to Exhibit 10.28 to the Company's December 31, 2003 Form 10-KSB).

10.22 Registration Rights Agreement dated April 2, 2003 between the Company, David C. Bupp and Donald E. Garlikov (incorporated by reference to Exhibit 99(i) to the Company's Current Report on Form 8-K filed April 2, 2003).

10.23 Common Stock Purchase Agreement between the Company and Fusion Capital Fund II, LLC dated December 1, 2006 (incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed December 4, 2006).

10.24 First Amendment to Common Stock Purchase Agreement between the Company and Fusion Capital Fund II, LLC, dated December 24, 2008 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 31, 2008).

10.25 Registration Rights Agreement dated December 1, 2006, between the Company and Fusion Capital Fund II, LLC (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed December 4, 2006).

10.26 Amended Neoprobe Corporation 10% Convertible Promissory Note Due December 31, 2011, executed in favor of David C. Bupp, Cynthia B. Gochoco and Walter H. Bupp, as joint tenants with right of survivorship (incorporated by reference to Exhibit 10.11 to the Company's Current Report on Form 8-K filed January 2, 2008).

10.27 Security Agreement, dated December 26, 2007, by and between the Company and David C. Bupp, Cynthia B. Gochoco and Walter H. Bupp, as joint tenants with right of survivorship (incorporated by reference to Exhibit 10.12 to the Company's Current Report on Form 8-K filed January 2, 2008).

10.28 Series V Warrant to Purchase Common Stock of Neoprobe Corporation issued to David C. Bupp, Cynthia B. Gochoco and Walter H. Bupp, as joint tenants with right of survivorship (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed July 9, 2007).

10.29 Additional Series V Warrant to Purchase Common Stock of Neoprobe Corporation issued to David C. Bupp, Cynthia B. Gochoco and Walter H. Bupp, as joint tenants with right of survivorship (incorporated by reference to Exhibit 10.13 to the Company's Current Report on Form 8-K filed January 2, 2008).

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Registration Rights Agreement, dated July 3, 2007, by and among Neoprobe Corporation and David C. Bupp, Cynthia B. Gochoco and Walter H. Bupp, as joint tenants with right of survivorship (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed July 9, 2007).

10.31 Securities Purchase Agreement, dated as of December 26, 2007, by and between the Company and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed January 2, 2008).

10.32 Amendment and Waiver for Securities Purchase Agreement, dated April 16, 2008, between Neoprobe Corporation and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed April 18, 2008).

10.33 Agreement Modifying the Interest and Dividend Payment Dates of the Neoprobe Corporation Series A and B Promissory Notes and Series A Preferred Stock, and Exercise and Conversion Price Adjustment Provisions of the Neoprobe Corporation Series X and Y Warrants and Series A Preferred Stock, dated March 31, 2009, by and between Neoprobe Corporation and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed April 6, 2009).

10.34 Securities Amendment and Exchange Agreement, dated July 24, 2009, by and between the Company and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed July 29, 2009).

10.35 Amended and Restated Neoprobe Corporation 10% Series A Convertible Senior Secured Promissory Note in the principal amount of $7,000,000, due December 26, 2011 (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed July 29, 2009).

10.36 Amended and Restated Neoprobe Corporation 10% Series B Convertible Senior Secured Promissory Note in the principal amount of $3,000,000, due December 26, 2011 (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed July 29, 2009).

10.37 Amended and Restated Series W Warrant to Purchase Shares of Common Stock of Neoprobe Corporation issued to Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed July 29, 2009).

10.38 Amended and Restated Series X Warrant to Purchase Shares of Common Stock of Neoprobe Corporation issued to Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed July 29, 2009).

10.39 Amended and Restated Series Y Warrant to Purchase Shares of Common Stock of Neoprobe Corporation issued to Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed July 29, 2009).

10.40 Series AA Warrant to Purchase Shares of Common Stock of Neoprobe Corporation issued to Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.7 to the Company's Current Report on Form 8-K filed July 29, 2009).

10.41 Registration Rights Agreement, dated December 26, 2007, between the Company and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.7 to the Company's Current Report on Form 8-K filed January 2, 2008).

10.42 Second Amendment to Registration Rights Agreement, dated April 16, 2008, between Neoprobe Corporation and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.2 to

the Company's Current Report on Form 8-K filed April 18, 2008).

10.43	Third Amendment to Registration Rights Agreement, dated July 10, 2008, between Neoprobe Corporation and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.55 to pre-effective amendment No. 2 to the Company's Registration Statement on Form S-1, filed July 24, 2008, Registration file No. 333-150650).
10.44	Fourth Amendment to Registration Rights Agreement, dated December 5, 2008, between Neoprobe Corporation and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 9, 2008).
10.45	Fifth Amendment to Registration Rights Agreement, dated December 21, 2009, between Neoprobe Corporation and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 22, 2009).
10.46	Security Agreement, dated December 26, 2007, between the Company and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.8 to the Company's Current Report on Form 8-K filed January 2, 2008).
10.47	Securities Exchange Agreement, dated June 22, 2010, by and between Neoprobe Corporation and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed June 28, 2010).
10.48	Securities Exchange Agreement, dated June 22, 2010, by and among Neoprobe Corporation, and David C. Bupp and Cynthia B. Gochoco, both individually and as co-executors of the Estate of Walter H. Bupp (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed June 28, 2010).
10.49	Letter Agreement, dated November 7, 2010, by and among Neoprobe Corporation and Rodman & Renshaw, LLC (incorporated by reference to Exhibit 1.1 to the Company's Current Report on Form 8-K filed November 12, 2010).
10.50	Securities Purchase Agreement, dated November 7, 2010, by and among Neoprobe Corporation and each purchaser identified on the signature pages thereto (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed November 12, 2010).
10.51	Form of Neoprobe Corporation Series CC Common Stock Purchase Warrant (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed November 12, 2010).
10.52	Form of Neoprobe Corporation Series DD Common Stock Purchase Warrant (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed November 12, 2010).
10.53	Form of Neoprobe Corporation Series EE Common Stock Purchase Warrant (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed November 12, 2010).
10.54	Patent, Trademark, and Copyright Security Agreement, dated December 25, 2007, by and among Neoprobe Corporation, Cardiosonix Ltd., Cira Biosciences, Inc. and Platinum-Montaur Life Sciences, LLC (incorporated by reference to Exhibit 10.9 to the Company's Current Report on Form 8-K filed January 2, 2008).
21.1	Subsidiaries of the registrant.*

23.1 Consent of BDO USA, LLP.*

24.1	Power of Attorney.*
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
32.1	Certification of Chief Executive Officer of Periodic Financial Reports pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350.*
32.2	Certification of Chief Financial Officer of Periodic Financial Reports pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350.*

* Filed herewith.

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.

Dated: March 16, 2011

NEOPROBE CORPORATION
(the Company)

By: /s/ David C. Bupp
David C. Bupp, President and
Chief Executive Officer

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	Date
/s/David C. Bupp David C. Bupp	Director, President and Chief Executive Officer (principal executive officer)	March 16, 2011
/s/ Brent L. Larson* Brent L. Larson	Vice President, Finance and Chief Financial Officer (principal financial officer)	March 16, 2011
/s/ Carl J. Aschinger, Jr.* Carl J. Aschinger, Jr.	Chairman, Director	March 16, 2011
/s/ Brendan A. Ford* Brendan A. Ford	Director	March 16, 2011
/s/ Owen E. Johnson* Owen E. Johnson	Director	March 16, 2011
/s/ Fred B. Miller* Fred B. Miller	Director	March 16, 2011
/s/ Eric K. Rowinsky* Eric K. Rowinsky	Director	March 16, 2011
/s/ Gordon A. Troup* Gordon A. Troup	Director	March 16, 2011

*By: /s/ David C. Bupp
David C. Bupp,
Attorney-in-fact

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SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

NEOPROBE CORPORATION

FORM 10-K ANNUAL REPORT

FOR THE FISCAL YEARS ENDED:

DECEMBER 31, 2010 AND 2009

FINANCIAL STATEMENTS

NEOPROBE CORPORATION and SUBSIDIARY

Index to Financial Statements

Report of Independent Registered Public Accounting Firm

Board of Directors
Neoprobe Corporation
Dublin, Ohio

We have audited the accompanying consolidated balance sheets of Neoprobe Corporation as of December 31, 2010 and 2009 and the related consolidated statements of operations, stockholders' equity (deficit) and cash flows for the years then ended. 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, assessing the accounting principles used and the 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, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Neoprobe Corporation at December 31, 2010 and 2009, and the results of its operations and cash flows for the years then ended, 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), Neoprobe Corporation's internal control over financial reporting as of December 31, 2010, based on criteria established in Internal Control–Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated March 16, 2011 expressed an unqualified opinion thereon.

/s/ BDO USA, LLP

Chicago, Illinois
March 16, 2011

Neoprobe Corporation and Subsidiaries
Consolidated Balance Sheets

December 31, 2010 and 2009

	2010	2009
ASSETS		
Current assets:		
Cash	$6,420,506	$5,639,842
Accounts receivable, net	2,048,111	1,331,908
Inventory	1,458,588	1,143,697
Prepaid expenses and other	305,798	501,718
Total current assets	10,233,003	8,617,165
Property and equipment	2,370,241	1,990,603
Less accumulated depreciation and amortization	1,850,614	1,693,290
	519,627	297,313
Patents and trademarks	552,470	524,224
Less accumulated amortization	449,783	445,650
	102,687	78,574
Other assets	7,421	24,707
Total assets	$10,862,738	$9,017,759

Continued

Neoprobe Corporation and Subsidiaries
Consolidated Balance Sheets, continued

	2010	2009
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable	$1,523,377	$763,966
Accrued liabilities and other	1,298,697	1,078,312
Notes payable to finance companies	62,411	—
Deferred revenue, current portion	654,430	560,369
Derivative liabilities, current portion	405,524	—
Total current liabilities	3,944,439	2,402,647
Deferred revenue	672,924	534,119
Note payable to Bupp Investors, net of discount of $54,093	—	945,907
Notes payable to investor	—	10,000,000
Derivative liabilities	2,077,799	1,951,664
Other liabilities	35,831	53,274
Total liabilities	6,730,993	15,887,611
Commitments and contingencies		
Preferred stock; $.001 par value; 5,000,000 shares authorized; 3,000 Series A shares, $1,000 face value, issued and outstanding at December 31, 2009	—	3,000,000
Stockholders' equity (deficit):		
Preferred stock; $.001 par value; 5,000,000 shares authorized; 10,000 Series B shares and 1,000 Series C shares issued and outstanding at December 31, 2010	11	—
Common stock; $.001 par value; 150,000,000 shares authorized; 86,319,913 and 80,936,711 shares issued and outstanding at December 31, 2010 and 2009, respectively	86,320	80,937
Additional paid-in capital	254,915,713	182,747,897
Accumulated deficit	(250,870,299)	(192,698,686)
Total stockholders' equity (deficit)	4,131,745	(9,869,852)
Total liabilities and stockholders' equity (deficit)	$10,862,738	$9,017,759

See accompanying notes to consolidated financial statements.

Neoprobe Corporation and Subsidiaries
Consolidated Statements of Operations

	Years Ended December 31,	
	2010	2009
Revenues:		
Net sales	$9,983,174	$9,418,032
License and grant revenue	717,392	100,000
Total revenues	10,700,566	9,518,032
Cost of goods sold	3,206,709	3,134,740
Gross profit	7,493,857	6,383,292
Operating expenses:		
Research and development	9,221,421	4,967,861
Selling, general and administrative	4,583,503	3,240,337
Total operating expenses	13,804,924	8,208,198
Loss from operations	(6,311,067)	(1,824,906)
Other income (expense):		
Interest income	8,804	18,749
Interest expense	(554,988)	(1,533,047)
Change in derivative liabilities	(1,336,234)	(18,132,274)
Loss on extinguishment of debt	(41,717,380)	(16,240,592)
Other	32,594	(3,422)
Total other expense, net	(43,567,204)	(35,890,586)
Loss from continuing operations	(49,878,271)	(37,715,492)
Discontinued operations:		
Impairment loss	—	(1,713,822)
Loss from operations	(86,597)	(176,406)
Net loss	(49,964,868)	(39,605,720)
Preferred stock dividends	(8,206,745)	(240,000)
Loss attributable to common stockholders	$(58,171,613)	$(39,845,720)
Loss per common share (basic and diluted):		
Continuing operations	$(0.72)	$(0.51)
Discontinued operations	$(0.00)	$(0.03)
Attributable to common stockholders	$(0.72)	$(0.54)
Weighted average shares outstanding:		
Basic and diluted	80,726,498	73,771,871

See accompanying notes to consolidated financial statements.

Neoprobe Corporation and Subsidiaries
Consolidated Statements of Stockholders' Equity (Deficit)

	Preferred Stock		Common Stock		Additional Paid-In		Accumulated Other Comprehensive	
	Shares	Amount	Shares	Amount	Capital	Accumulated Deficit	Income (Loss)	Total
Balance, December 31, 2008	—	$ —	70,862,641	$ 70,863	$ 145,742,044	$ (148,840,015)	$ 1,383	$ (3,025,725)
Effect of adopting new provisions of FASB ASC Topic 815	—	—	—	—	(8,948,089)	(4,012,951)	—	(12,961,040)
Issued restricted stock to employees and directors	—	—	1,260,000	1,260	—	—	—	1,260
Cancelled restricted stock	—	—	(9,000)	(9)	9	—	—	—
Issued stock to 401(k) plan at $0.41	—	—	80,883	81	33,392	—	—	33,473
Issued stock upon exercise of warrants	—	—	6,948,507	6,949	6,534,985	—	—	6,541,934
Issued stock upon exercise of stock options	—	—	400,441	400	124,216	—	—	124,616
Issued stock in payment of interest on convertible debt and dividends on convertible preferred stock	—	—	1,393,239	1,393	1,029,940	—	—	1,031,333
Paid preferred stock issuance costs	—	—	—	—	(6,323)	—	—	(6,323)
Paid common stock issuance costs	—	—	—	—	(207,000)	—	—	(207,000)
Effect of change in terms of notes payable, preferred stock	—	—	—	—	37,999,312	—	—	37,999,312

and warrants								
Stock compensation expense	—	—	—	—	445,411	—	—	445,411
Preferred stock dividends	—	—	—	—	—	(240,000)	—	(240,000)
Comprehensive loss:								
Net loss	—	—	—	—	—	(39,605,720)	—	(39,605,720)
Unrealized loss on available-for-sale securities	—	—	—	—	—	—	(1,383)	(1,383)
Total comprehensive loss	—	—	—	—	—	—	—	(39,607,103)
Balance, December 31, 2009	—	—	80,936,711	80,937	182,747,897	(192,698,686)	—	(9,869,852)
Issued stock in payment of interest on convertible debt and dividends on convertible preferred stock	—	—	347,832	348	476,319	—	—	476,667
Issued stock upon exercise of options, net of costs	—	—	350,156	350	(64,055)	—	—	(63,705)
Issued stock in connection with stock purchase agreement, net of costs	—	—	660,541	661	776,797	—	—	777,458
Issued stock to 401(k) plan at $0.76	—	—	53,499	53	40,570	—	—	40,623
Issued Series B and Series C convertible preferred stock, net of costs	11,000	11	—	—	64,636,810	—	—	64,636,821
Cancelled restricted stock	—	—	(4,500)	(5)	5	—	—	—
Issued restricted stock	—	—	660,000	660	—	—	—	660
Issued warrants in connection	—	—	—	—	279,367	—	—	279,367

with consulting agreement								
Issued stock upon exercise of warrants and other	—	—	157,778	158	316,660	—	—	316,818
Issued common stock and warrants in connection with direct offering, net of costs	—	—	3,157,896	3,158	4,306,793	—	—	4,309,951
Effect of change in terms of warrants	—	—	—	—	800,878	—	—	800,878
Stock compensation expense	—	—	—	—	597,672	—	—	597,672
Preferred stock dividends, including deemed dividends	—	—	—	—	—	(8,206,745)	—	(8,206,745)
Comprehensive loss:								
Net loss	—	—	—	—	—	(49,964,868)	—	(49,964,868)
Balance, December 31, 2010	11,000	$ 11	86,319,913	$ 86,320	$ 254,915,713	$ (250,870,299)	$ —	$ 4,131,745

See accompanying notes to consolidated financial statements.

Neoprobe Corporation and Subsidiaries
Consolidated Statements of Cash Flows

	Years Ended December 31,	
	2010	2009
Cash flows from operating activities:		
Net loss	$(49,964,868)	$(39,605,720)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization of equipment	215,462	202,703
Amortization of intangible assets	7,998	131,046
Loss on disposal and abandonment of assets	7,476	18,794
Amortization of debt discount and debt offering costs	16,109	428,060
Issuance of common stock in payment of interest and dividends	476,667	791,333
Stock compensation expense	597,672	445,411
Change in derivative liabilities	1,336,234	18,132,274
Loss on extinguishment of debt	41,717,380	16,240,592
Issuance of warrants in connection with consulting agreement	279,367	—
Impairment loss on discontinued operations	—	1,713,822
Other	40,623	33,473
Change in operating assets and liabilities:		
Accounts receivable	(707,914)	296,813
Inventory	(381,382)	(653,043)
Prepaid expenses and other assets	39,232	105,262
Accounts payable	759,411	38,146
Accrued liabilities and other liabilities	157,899	121,277
Deferred revenue	232,866	77,704
Net cash used in operating activities	(5,169,768)	(1,482,053)
Cash flows from investing activities:		
Maturities of available-for-sale securities	—	494,000
Purchases of equipment	(366,629)	(96,331)
Proceeds from sales of equipment	—	251
Patent and trademark costs	(32,111)	(71,344)
Net cash (used in) provided by investing activities	(398,740)	326,576
Cash flows from financing activities:		
Proceeds from issuance of common stock	7,092,163	3,641,010
Payment of stock offering costs	(611,264)	(244,001)
Payment of preferred stock dividends	(111,389)	—
Payment of debt issuance costs	—	(20,183)
Payment of notes payable	(8,710)	(137,857)
Payments under capital leases	(11,628)	(9,487)
Net cash provided by financing activities	6,349,172	3,229,482
Net increase in cash	780,664	2,074,005
Cash, beginning of year	5,639,842	3,565,837

Cash, end of year	$6,420,506	$5,639,842

See accompanying notes to consolidated financial statements.

Notes to the Consolidated Financial Statements

1. Organization and Summary of Significant Accounting Policies

a. Organization and Nature of Operations: Neoprobe Corporation (Neoprobe, the Company, or we), a Delaware corporation, is engaged in the development and commercialization of innovative surgical and diagnostic products that enhance patient treatment by meeting the critical decision making needs of physicians. We currently manufacture a line of gamma radiation detection equipment used in the application of sentinel lymph node biopsy (SLNB).

Our gamma detection device products are currently marketed throughout most of the world through a distribution arrangement with Devicor Medical Products, Inc. (Devicor). Prior to July 2010, our gamma detection device products were marketed through a distribution arrangement with Ethicon Endo-Surgery, Inc. (EES), a Johnson & Johnson company. In July 2010, Devicor acquired EES' breast biopsy business, including an assignment of the distribution agreement with Neoprobe. For the year ended December 31, 2010, 96% of net sales were made to Devicor or EES. The loss of this customer would have a significant adverse effect on our operating results. For the year ended December 31, 2009, 92% of net sales were made to EES.

We also have developmental and/or intellectual property rights related to two drugs that could be used in connection with gamma detection devices in cancer surgeries. The first, Lymphoseek®, is intended to be used in determining the spread of certain solid tumor cancers into the lymphatic system. The second, RIGScanTM, is intended to be used to help surgeons locate cancerous or disease-involved tissue during colorectal cancer surgeries. Both of these drug products are still in development and must be cleared for marketing by the appropriate regulatory bodies before they can be sold in any markets.

In January 2005 we formed a new corporation, Cira Biosciences, Inc. (Cira Bio), to explore the development of patient-specific cellular therapies that have shown positive patient responses in a variety of clinical settings. Cira Bio is combining our activated cellular therapy (ACT) technology for patient-specific oncology treatment with similar technology licensed from Cira LLC, a privately held company, for treating viral and autoimmune diseases. Neoprobe owns approximately 90% of the outstanding shares of Cira Bio with the remaining shares being held by the principals of Cira LLC.

b. Principles of Consolidation: Our consolidated financial statements include the accounts of Neoprobe, our wholly-owned subsidiary, Cardiosonix, and our majority-owned subsidiary, Cira Bio. All significant inter-company accounts were eliminated in consolidation.

In August 2009, the Company's Board of Directors decided to discontinue the operations of and attempt to sell our Cardiosonix subsidiary. This decision was based on the determination that the blood flow measurement device segment was no longer considered a strategic initiative of the Company, due in large part to positive events in our other device product and drug development initiatives. Our statements of operations have been reclassified, as required, for all periods presented to reflect Cardiosonix as a discontinued operation. Cash flows associated with the operation of Cardiosonix have been combined within operating, investing and financing cash flows, as appropriate, in our consolidated statements of cash flows. See Note 2.

c. 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 reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

d. Financial Instruments and Fair Value: The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value, giving the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

Notes to the Consolidated Financial Statements

Level 1 – Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2 – Quoted prices in markets that are not active or financial instruments for which all significant inputs are observable, either directly or indirectly; and

Level 3 – Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. In determining the appropriate levels, we perform a detailed analysis of the assets and liabilities whose fair value is measured on a recurring basis. At each reporting period, all assets and liabilities for which the fair value measurement is based on significant unobservable inputs or instruments which trade infrequently and therefore have little or no price transparency are classified as Level 3. In estimating the fair value of our derivative liabilities, we used the Black-Scholes option pricing model and, where necessary, other macroeconomic, industry and Company-specific conditions. In addition, we considered non-performance risk and determined that such risk is minimal. See Note 3.

The following methods and assumptions were used to estimate the fair value of each class of financial instruments:

(1) Cash, accounts receivable, accounts payable, and accrued liabilities: The carrying amounts approximate fair value because of the short maturity of these instruments.

(2) Note payable to finance company: The fair value of our debt is estimated by discounting the future cash flows at rates currently offered to us for similar debt instruments of comparable maturities by banks or finance companies. At December 31, 2010, the carrying value of this instrument approximated fair value. We had no notes payable to finance companies at December 31, 2009.

(3) Note payable to Bupp Investors: The carrying value of our debt is presented as the face amount of the note less the unamortized discount related to the initial estimated fair value of the warrants to purchase common stock issued in connection with the note. At December 31, 2009, the note payable to the Bupp Investors had an estimated fair value of $3.9 million based on the closing market price of our common stock. During June 2010, the Bupp Investors exchanged their note for preferred stock, resulting in extinguishment of the debt. See Note 13.

(4) Notes payable to investor: The carrying value of our debt at December 31, 2009 is presented as the face amount of the notes. At December 31, 2009, the notes payable to investor had an estimated fair value of $31.0 million based on the closing market price of our common stock. During June 2010, the investor exchanged their notes for preferred stock, resulting in extinguishment of the debt. See Note 13.

(5) Derivative liabilities: Derivative liabilities are recorded at fair value. Fair value of warrant liabilities is determined based on a Black-Scholes option pricing model calculation. Fair value of conversion and put option liabilities is determined based on a probability-weighted Black-Scholes option pricing model calculation. Unrealized gains and losses on the derivatives are classified in other expenses as a change in derivative liabilities in the statements of operations. During June 2010, certain investors exchanged their notes for preferred stock, resulting in extinguishment of our remaining put option liabilities. See Note 14.

Notes to the Consolidated Financial Statements

e. Stock-Based Compensation: At December 31, 2010, we have instruments outstanding under three stock-based compensation plans; the Amended and Restated Stock Option and Restricted Stock Purchase Plan (the Amended Plan), the 1996 Stock Incentive Plan (the 1996 Plan), and the Second Amended and Restated 2002 Stock Incentive Plan (the 2002 Plan). Currently, under the 2002 Plan, we may grant incentive stock options, nonqualified stock options, and restricted stock awards to full-time employees and directors, and nonqualified stock options and restricted stock awards may be granted to our consultants and agents. Total shares authorized under each plan are 2 million shares, 1.5 million shares and 7 million shares, respectively. An additional 3 million shares have been authorized under the 2002 Plan by the Company's board of directors, subject to ratification by stockholders at the next annual stockholders' meeting. Although instruments are still outstanding under the Amended Plan and the 1996 Plan, these plans have expired and no new grants may be made from them. Under all three plans, the exercise price of each option is greater than or equal to the closing market price of our common stock on the day prior to the date of the grant.

Stock options granted under the Amended Plan, the 1996 Plan and the 2002 Plan generally vest on an annual basis over one to four years. Outstanding stock options under the plans, if not exercised, generally expire ten years from their date of grant or 90 days from the date of an optionee's separation from employment with the Company. We issue new shares of our common stock upon exercise of stock options.

Stock-based payments to employees and directors, including grants of stock options, are recognized in the statement of operations based on their estimated fair values. The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option pricing model to value share-based payments. Expected volatilities are based on the Company's historical volatility, which management believes represents the most accurate basis for estimating expected volatility under the current circumstances. Neoprobe uses historical data to estimate forfeiture rates. The expected term of stock options granted is based on the vesting period and the contractual life of the options. The risk-free rate is based on the U.S. Treasury yield in effect at the time of the grant. The assumptions used to calculate fair value for the years ended December 31, 2010 and 2009 are noted in the following table:

	2010	2009
Expected volatility	61%-68 %	73%-91 %
Weighted-average volatility	66 %	81 %
Expected dividends	—	—
Expected term (in years)	6.0-6.3	5.5-6.0
Risk-free rate	1.7%-2.4%	1.8%-2.7%

Compensation cost arising from stock-based awards is recognized as expense using the straight-line method over the vesting period. Restricted shares generally vest upon occurrence of a specific event or achievement of goals as defined in the grant agreements. As a result, we record compensation expense related to grants of restricted stock based on management's estimates of the probable dates of the vesting events. See Note 4.

f. Cash and Cash Equivalents: Cash equivalents are highly liquid instruments such as U.S. Treasury bills, bank certificates of deposit, corporate commercial paper and money market funds which have maturities of less than 3 months from the date of purchase. The Company held no cash equivalents at December 31, 2010 or 2009.

g. Inventory: All components of inventory are valued at the lower of cost (first-in, first-out) or market. We adjust inventory to market value when the net realizable value is lower than the carrying cost of the inventory. Market value is determined based on recent sales activity and margins achieved.

From time to time, we capitalize certain inventory costs associated with our Lymphoseek product prior to regulatory approval and product launch based on management's judgment of probable future commercial use and net realizable

value of the inventory. We could be required to permanently write down previously capitalized costs related to pre-approval or pre-launch inventory upon a change in such judgment, due to a denial or delay of approval by regulatory bodies, a delay in commercialization, or other potential factors. Conversely, our gross margins may be favorably impacted if some or all of the inventory previously expensed becomes available and is used for commercial sale. See Note 7.

Notes to the Consolidated Financial Statements

h. Property and Equipment: Property and equipment are stated at cost, less accumulated depreciation and amortization. Property and equipment under capital leases are stated at the present value of minimum lease payments. Depreciation is computed using the straight-line method over the estimated useful lives of the depreciable assets ranging from 2 to 7 years, and includes amortization related to equipment under capital leases, which is amortized over the shorter of the estimated useful life of the leased asset or the term of the lease. Maintenance and repairs are charged to expense as incurred, while renewals and improvements are capitalized. See Note 8.

i. Intangible Assets: Intangible assets consist primarily of patents and trademarks. Intangible assets are stated at cost, less accumulated amortization. Patent costs are amortized using the straight-line method over the estimated useful lives of the patents of approximately 5 to 15 years. Patent application costs are deferred pending the outcome of patent applications. Costs associated with unsuccessful patent applications and abandoned intellectual property are expensed when determined to have no recoverable value. We evaluate the potential alternative uses of all intangible assets, as well as the recoverability of the carrying values of intangible assets, on a recurring basis. See Note 9.

j. Impairment or Disposal of Long-Lived Assets: Long-lived assets and certain identifiable intangibles are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future undiscounted cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. See Notes 8 and 9.

k. Other Assets: We defer costs associated with the issuance of notes payable and amortize those costs over the period of the notes using the effective interest method. In 2009, we incurred $20,000 of debt issuance costs related to notes payable. During 2010 and 2009, we expensed $13,000 and $524,000, respectively, of deferred debt issuance costs as a result of debt modification activities. Other assets at December 31, 2009 include deferred debt issuance costs of $17,000. See Note 13.

l. Deferred Revenue: Deferred revenue consists primarily of non-refundable license fees and reimbursement of past research and development expenses which EES paid us as consideration for extending our distribution agreement with them. In addition, deferred revenue includes revenues from the sale of extended warranties covering our medical devices over periods of one to five years. We recognize revenue from extended warranty sales on a pro-rata basis over the period covered by the extended warranty. See Note 12.

m. Derivative Instruments: Derivative instruments embedded in contracts, to the extent not already a free-standing contract, are bifurcated from the debt instrument and accounted for separately. All derivatives are recorded on the consolidated balance sheet at fair value in accordance with current accounting guidelines for such complex financial instruments. Derivative liabilities with expiration dates within one year are classified as current, while those with expiration dates in more than one year are classified as long term. We do not use derivative instruments for hedging of market risks or for trading or speculative purposes. See Note 14.

n. Revenue Recognition:

(1) Product Sales: We derive revenues primarily from sales of our medical devices. Our standard shipping terms are FOB shipping point, and title and risk of loss passes to the customer upon delivery to a common carrier. We generally recognize sales revenue when the products are shipped and the earnings process has been

completed. However, in cases where product is shipped but the earnings process is not yet completed, revenue is deferred until it has been determined that the earnings process has been completed. Our customers generally have no right to return products purchased in the ordinary course of business.

Notes to the Consolidated Financial Statements

Sales prices on gamma detection products sold to Devicor are subject to retroactive annual adjustment based on a fixed percentage of the actual sales prices achieved by Devicor on sales to end customers made during each fiscal year, subject to a minimum (i.e., floor) price. To the extent that we can reasonably estimate the end customer prices received by Devicor, we record sales to Devicor based upon these estimates. To the extent that we are not able to reasonably estimate end customer sales prices related to certain products sold to Devicor, we record revenue related to these product sales at the floor price provided for under our distribution agreement with Devicor.

We recognize revenue related to the sales of products to be used for demonstration units when products are shipped. Our distribution agreements do not permit return of purchased demonstration units in the ordinary course of business nor do we have any performance obligations other than normal product warranty obligations. To the extent that the earnings process has not been completed, revenue is deferred.

(2) Extended Warranty Revenue: We derive revenues from the sale of extended warranties covering our medical devices over periods of one to five years. We recognize revenue from extended warranty sales on a pro-rata basis over the period covered by the extended warranty. Expenses related to the extended warranty are recorded when incurred.

(3) Service Revenue: We derive revenues from the repair and service of our medical devices that are in use beyond the term of the original warranty and that are not covered by an extended warranty. We recognize revenue from repair and service activities once the activities are complete and the repaired or serviced device has been shipped back to the customer.

(4) License Revenue: In December 2007, Neoprobe and EES executed an amendment to their distribution agreement which extended the agreement through the end of 2013. As consideration for extending the distribution agreement through the end of 2013, EES paid us $500,000 in December 2007, representing a non-refundable license fee and reimbursement of past research and development expenses. We recognized $100,000 of this payment as license revenue during each of the years ended December 31, 2010 and 2009, and we intend to recognize the remaining $300,000 as license revenue on a straight-line basis over the remaining term of the agreement, from January 2011 through December 2013.

(5) Grant Revenue: We derive revenues from grants to support various product development initiatives. We generally recognize grant revenue when expenses reimbursable under the grants have been incurred and payments under the grants become contractually due.

o. Research and Development Costs: All costs related to research and development activities are expensed as incurred.

p. Income Taxes: Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Due to the uncertainty surrounding the realization of the deferred tax assets in future tax returns, all of the deferred tax assets have been fully offset by a valuation allowance at December 31, 2010 and 2009. See Note 16.

Current accounting standards include guidance on the accounting for uncertainty in income taxes recognized in the financial statements. Such standards also prescribe a recognition threshold and measurement model for the financial statement recognition of a tax position taken, or expected to be taken, and provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The ultimate deductibility of all tax positions is highly certain, although there is uncertainty about the timing of such deductibility. As a result, no liability for uncertain tax positions was recorded as of December 31, 2010 or 2009 and we do not expect any significant changes in the next twelve months. Should we need to accrue interest or penalties on uncertain tax positions, we would recognize the interest as interest expense and the penalties as a selling, general and administrative expense. As of December 31, 2010, tax years 2007-2010 remained subject to examination by federal and state tax authorities.

Notes to the Consolidated Financial Statements

q. Recent Accounting Developments: In January 2010, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2010-6, Improving Disclosures about Fair Value Measurements. ASU 2010-6 amends FASB ASC Topic 820, Fair Value Measurements and Disclosures. ASU 2010-6 requires new disclosures as follows: (1) Transfers in and out of Levels 1 and 2 and (2) Activity in Level 3 fair value measurements. An entity should disclose separately the amounts of significant transfers in and out of Level 1 and Level 2 fair value measurements and describe the reasons for the transfers. In the reconciliation of fair value measurements using significant unobservable inputs (Level 3), an entity should present separately information about purchases, sales, issuances, and settlements (that is, on a gross basis rather than as one net number). ASU 2010-6 also clarifies existing disclosures as follows: (1) Level of disaggregation and (2) Disclosures about inputs and valuation techniques. An entity should provide fair value measurement disclosures for each class of assets and liabilities. A class is often a subset of assets or liabilities within a line item in the statement of financial position. An entity needs to use judgment in determining the appropriate classes of assets and liabilities. An entity should provide disclosures about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements. Those disclosures are required for fair value measurements that fall in either Level 2 or Level 3. ASU 2010-6 is effective for interim and annual reporting periods beginning after December 15, 2009, except for the separate disclosures about purchases, sales, issuances, and settlements in the roll forward of activity in Level 3 fair value measurements. Those disclosures are effective for fiscal years beginning after December 15, 2010, and for interim periods within those fiscal years. We adopted the initial provisions of ASU 2010-6 beginning January 1, 2010. As the new provisions of ASU 2010-6 provide only disclosure requirements, the adoption of this standard did not impact our consolidated financial position, results of operations or cash flows, but did result in increased disclosures.

In December 2010, the FASB issued ASU 2010-27, Fees Paid to the Federal Government by Pharmaceutical Manufacturers. ASU 2010-27 specifies that the liability for the Company's portion of the annual fee on the pharmaceutical manufacturing industry should be estimated and recorded in full upon the first qualifying sale with a corresponding deferred cost that is amortized to expense using a straight-line method of allocation unless another method better allocates the fee over the calendar year that it is payable. ASU 2010-27 is effective for calendar years beginning after December 31, 2010, when the fee initially becomes effective. ASU 2010-27 will not impact our consolidated financial position, results of operations or cash flows until the period in which we begin sales of our pharmaceutical products. The effect the adoption of ASU 2010-27 will have on us will depend on the amount of the total annual fee and the amount of Neoprobe's annual sales relative to the total sales of all other U.S. pharmaceutical manufacturers.

2. Discontinued Operations

In August 2009, the Company's Board of Directors decided to discontinue the operations of and attempt to sell our Cardiosonix subsidiary. This decision was based on the determination that the blood flow measurement device segment was no longer considered a strategic initiative of the Company, due in large part to positive events in our other device product and drug development initiatives. We are in the process of identifying potential buyers, but our efforts thus far have not resulted in any definitive offers.

As a result of our decision to hold Cardiosonix for sale, we reclassified certain assets and liabilities as assets and liabilities associated with discontinued operations and reduced them to their estimated fair value at that time. In accordance with current accounting guidance, we recorded an impairment loss of $1.7 million, primarily related to $1.3 million of intangible assets, $416,000 of inventory, and $30,000 of equipment. The impairment loss was included in the loss from discontinued operations for the year ended December 31, 2009.

Notes to the Consolidated Financial Statements

We have reclassified all related revenues and expenses to discontinued operations for all periods presented. Until a sale is completed, we expect to continue to generate minimal revenues from sales of our remaining inventory and incur minimal expenses related to our blood flow measurement device business. In addition to the impairment loss, the following amounts have been segregated from continuing operations and included in discontinued operations in the consolidated statements of operations:

	Years Ended December 31,	
	2010	2009
Net sales	$ 57,302	$ 129,128
Cost of goods sold	23,866	50,844
Gross profit	33,436	78,284
Operating expenses:		
Research and development	74,487	38,374
Selling, general and administrative	45,017	216,318
Total operating expenses	119,504	254,692
Other income (expense)	(529)	2
Loss from discontinued operations	$ (86,597)	$ (176,406)

Cash flows associated with the operation of Cardiosonix were not significant and have been combined within operating, investing and financing cash flows, as appropriate, in our consolidated statements of cash flows.

Notes to the Consolidated Financial Statements

3. Fair Value Hierarchy

The following tables set forth, by level, financial liabilities measured at fair value on a recurring basis:

Liabilities Measured at Fair Value on a Recurring Basis as of December 31, 2010

Description	Quoted Prices in Active Markets for Identical Assets and Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Balance as of December 31, 2010
Liabilities:				
Derivative liabilities related to warrants, current portion	$ —	$ 405,524	$ —	$ 405,524
Derivative liabilities related to warrants, long-term portion	—	2,077,799	—	2,077,799
Total derivative liabilities	$ —	$ 2,483,323	$ —	$ 2,483,323

Liabilities Measured at Fair Value on a Recurring Basis as of December 31, 2009

Description	Quoted Prices in Active Markets for Identical Assets and Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Balance as of December 31, 2009
Liabilities:				
Derivative liabilities related to warrants	$ —	$ 985,664	$ —	$ 985,664
Derivative liabilities related to put options	—	—	966,000	966,000
Total derivative liabilities	$ —	$ 985,664	$ 966,000	$ 1,951,664

There were no transfers in or out of our Level 1 and Level 2 fair value measurements during year ended December 31, 2010. During the year period ended December 31, 2009, we transferred $7.7 million into our Level 2 liabilities. The transfer was a result of the required January 1, 2009 adoption of a new accounting standard which clarified the determination of whether equity-linked instruments, such as warrants to purchase our common stock, are considered indexed to our own stock. As a result of adopting the new standard, certain warrants to purchase our common stock that were previously treated as equity were reclassified as derivative liabilities.

Notes to the Consolidated Financial Statements

The following tables set forth a summary of changes in the fair value of our Level 3 liabilities for the years ended December 31, 2010 and 2009:

Year Ended December 31, 2010

Description	Balance at December 31, 2009	Unrealized Losses	Purchases, Issuances and Settlements	Transfers In and/or (Out)	Balance at December 31, 2010
Liabilities:					
Derivative liabilities related to put options	$ 966,000	$ —	$ (966,000)	$ —	$ —

Year Ended December 31, 2009

Description	Balance at December 31, 2008	Unrealized Losses	Adoption of New Accounting Standard (Note 14)	Transfers In and/or (Out)	Balance at December 31, 2009
Liabilities:					
Derivative liabilities related to conversion and put options	$ 853,831	$ 7,596,329	$ 5,304,487	$ (12,788,647)	$ 966,000

4. Stock-Based Compensation

For the years ended December 31, 2010 and 2009, our total stock-based compensation expense was approximately $598,000 and $445,000, respectively. We have not recorded any income tax benefit related to stock-based compensation for the years ended December 31, 2010 and 2009.

A summary of the status of our stock options as of December 31, 2010, and changes during the year then ended, is presented below:

	Year Ended December 31, 2010			
	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding at beginning of year	5,689,500	$ 0.44		
Granted	615,000	1.83		
Exercised	(491,667)	0.42		
Forfeited	(18,333)	0.74		
Expired	(60,000)	0.75		
Outstanding at end of year	5,734,500	$ 0.58	5.1 years	$ 8,471,410
Exercisable at end of year	4,581,833	$ 0.39	4.1 years	$ 7,635,470

The weighted average grant-date fair value of options granted in 2010 and 2009 was $1.13 and $0.68, respectively. During 2010, 491,667 stock options with an aggregate intrinsic value of $697,662 were exercised in exchange for issuance of 350,156 shares of our common stock, resulting in gross proceeds of $32,550. During 2009, 465,000 stock options with an aggregate intrinsic value of $282,250 were exercised in exchange for issuance of 400,441 shares of our common stock, resulting in gross proceeds of $148,750. During 2010 and 2009, the aggregate fair value of stock options vested was $668,000 and $343,000, respectively.

Notes to the Consolidated Financial Statements

A summary of the status of our unvested restricted stock as of December 31, 2010, and changes during the year then ended, is presented below:

	Year Ended December 31, 2010	
	Number of Shares	Weighted Average Grant-Date Fair Value
Unvested at beginning of year	1,719,000	$ 0.76
Granted	660,000	1.86
Vested	—	—
Forfeited	(4,500)	0.65
Unvested at end of year	2,374,500	$ 1.07

During 2009, 5,000 shares of restricted stock vested with an aggregate fair value of $6,000.

As of December 31, 2010, there was approximately $2.3 million of total unrecognized compensation cost related to unvested stock-based awards, which we expect to recognize over remaining weighted average vesting terms of 1.9 years. See Note 1(e).

5. Earnings Per Share

Basic earnings (loss) per share is calculated by dividing net income (loss) attributable to common stockholders by the weighted-average number of common shares and, except for periods with a loss from operations, participating securities outstanding during the period. Diluted earnings (loss) per share reflects additional common shares that would have been outstanding if dilutive potential common shares had been issued. Potential common shares that may be issued by the Company include convertible securities, options and warrants.

The following table sets forth the reconciliation of the weighted average number of common shares outstanding to those used to compute basic and diluted earnings (loss) per share for the years ended December 31, 2010 and 2009:

	Basic and Diluted Earnings Per Share Years Ended December 31,	
	2010	2009
Outstanding shares	86,319,913	80,936,711
Effect of weighting changes in outstanding shares	(3,218,915)	(5,445,840)
Unvested restricted stock	(2,374,500)	(1,719,000)
Adjusted shares	80,726,498	73,771,871

Earnings (loss) per common share for the years ended December 31, 2010 and 2009 excludes the effects of 64,121,457 and 58,840,844 common share equivalents, respectively, since such inclusion would be anti-dilutive. The excluded shares consist of common shares issuable upon exercise of outstanding stock options and warrants, and upon the conversion of convertible debt and convertible preferred stock.

The Company’s unvested stock awards contain nonforfeitable rights to dividends or dividend equivalents, whether paid or unpaid (referred to as “participating securities”). Therefore, the unvested stock awards are included in the number of

shares outstanding for both basic and diluted earnings per share calculations, except in the event of a net loss from operations. Due to our net loss, 2,374,500 and 1,719,000 shares of unvested restricted stock were excluded in determining basic and diluted loss per share for the years ended December 31, 2010 and 2009, respectively.

Notes to the Consolidated Financial Statements

6.Accounts Receivable and Concentrations of Credit Risk

Accounts receivable at December 31, 2010 and 2009, net of allowance for doubtful accounts of $1,200 and $1,000, respectively, consist of the following:

	2010	2009
Trade	$ 1,872,215	$ 1,321,687
Other	175,896	10,221
	$ 2,048,111	$ 1,331,908

We estimate an allowance for doubtful accounts based on a review and assessment of specific accounts receivable and write off accounts when deemed uncollectible. At December 31, 2010, approximately 87% of net accounts receivable were due from Devicor and EES. At December 31, 2009, approximately 82% of net accounts receivable were due from EES. We do not believe we are exposed to significant credit risk related to Devicor based on the overall financial strength and credit worthiness of the customer. We believe that we have adequately addressed other credit risks in estimating the allowance for doubtful accounts.

7. Inventory

The components of net inventory at December 31, 2010 and 2009 are as follows:

	2010	2009
Pharmaceutical materials	$ 482,000	$ 525,000
Gamma detection device materials	302,323	137,695
Pharmaceutical work-in-process	150,000	—
Gamma detection device finished goods	524,265	481,002
	$ 1,458,588	$ 1,143,697

During 2010 and 2009, we capitalized $741,000 and $525,000, respectively, of inventory costs associated with our Lymphoseek product. During 2010, we wrote off $634,000 of previously capitalized Lymphoseek inventory due to changes in our projections of the probability of future commercial use for the specific lots previously capitalized or the consumption of the Lymphoseek material in previously unanticipated product development activities. During 2010 and 2009, we also wrote off $65,000 and $2,000, respectively, of excess and obsolete gamma detection device materials.

8. Property and Equipment

The major classes of property and equipment are as follows:

	Useful Life	2010	2009
Production machinery and equipment	5 years	$ 825,823	$ 613,659
Other machinery and equipment, primarily research equipment, loaners and computers	2 – 5 years	823,296	765,340
Furniture and fixtures	7 years	423,769	353,863
Software	3 years	213,326	183,059
Leasehold improvements	Life of Lease1	84,027	74,682
		$ 2,370,241	$ 1,990,603

1 We amortize leasehold improvements over the life of the lease, which in all cases is shorter than the estimated useful life of the asset.

Property and equipment includes $40,000 of equipment under capital leases with accumulated amortization of $21,000 and $10,000 at December 31, 2010 and 2009, respectively. During 2010 and 2009, we recorded $215,000 and $203,000, respectively, of depreciation and amortization related to property and equipment. During 2010 and 2009, we recorded losses of $7,000 and $18,000, respectively, on the disposal of property and equipment.

Notes to the Consolidated Financial Statements

9. Intangible Assets

The major classes of intangible assets are as follows:

		December 31, 2010		December 31, 2009	
	Weighted Average Remaining Life1	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Patents and trademarks	3.2 yrs	$ 552,470	$ 449,783	$ 524,224	$ 445,650

1 The weighted average remaining life is calculated for issued patents and does not include pending patent applications or trademarks which are not currently being amortized.

During 2010 and 2009, we recorded $8,000 and $18,000, respectively, of intangible asset amortization in general and administrative expenses. Also during 2010 and 2009, we wrote off $4,000 and $1,000, respectively, of intangible assets related to patents and trademarks that were determined to have no recoverable value.

The estimated future amortization expenses for the next five fiscal years are as follows:

	Estimated Amortization Expense
For the year ended 12/31/2011	$ 1,372
For the year ended 12/31/2012	1,002
For the year ended 12/31/2013	284
For the year ended 12/31/2014	265
For the year ended 12/31/2015	236

10. Accrued Liabilities and Other

Accrued liabilities and other at December 31, 2010 and 2009 consist of the following:

	2010	2009
Contracted services and other	$ 769,879	$ 549,840
Compensation	324,852	259,859
Interest and dividends	126,111	168,333
Warranty reserve	56,110	61,400
Liabilities associated with discontinued operations	13,125	18,743
Capital lease obligations, current portion	8,620	11,265
Inventory purchases	—	8,872
	$ 1,298,697	$ 1,078,312

11. Product Warranty

We warrant our products against defects in design, materials, and workmanship generally for a period of one year from the date of sale to the end customer, except in cases where the product has a limited use as designed. Our

accrual for warranty expenses is adjusted periodically to reflect actual experience and is included in accrued liabilities and other on the consolidated balance sheets. Devicor reimburses us for a portion of warranty expense incurred based on end customer sales they make during a given fiscal year. Payments charged against the reserve are disclosed net of Devicor's estimated reimbursement.

Notes to the Consolidated Financial Statements

The activity in the warranty reserve account for the years ended December 31, 2010 and 2009 is as follows:

	2010	2009
Warranty reserve at beginning of year	$ 61,400	$ 62,261
Provision for warranty claims and changes in reserve for warranties	53,726	98,894
Payments charged against the reserve	(59,016)	(99,755)
Warranty reserve at end of year	$ 56,110	$ 61,400

12. Deferred Revenue

Deferred revenue at December 31, 2010 and 2009 consists of the following:

	2010	2009
Non-refundable license fees	$ 300,000	$ 400,000
Extended warranty revenue	1,027,354	694,488
	1,327,354	1,094,488
Less current portion	654,430	560,369
Deferred revenue, long-term portion	$ 672,924	$ 534,119

During 2010 and 2009, we recognized license revenue of $100,000 in each year, and we intend to recognize the remaining $300,000 as license revenue on a straight-line basis over the remaining term of the agreement, from January 2011 through December 2013.

13. Convertible Securities

In July 2007, David C. Bupp, our President and CEO, and certain members of his family (the Bupp Investors) purchased a $1.0 million convertible note (the Bupp Note) and warrants. The Bupp Note bore interest at 10% per annum, had an original term of one year and was repayable in whole or in part with no penalty. The note was convertible, at the option of the Bupp Investors, into shares of our common stock at a price of $0.31 per share. As part of this transaction, we issued the Bupp Investors Series V warrants to purchase 500,000 shares of our common stock at an exercise price of $0.31 per share, expiring in July 2012.

In December 2007, we entered into a Securities Purchase Agreement (SPA) with Platinum Montaur Life Sciences, LLC (Montaur), pursuant to which we issued Montaur a 10% Series A Convertible Senior Secured Promissory Note in the principal amount of $7,000,000, $3.5 million of which was convertible into shares of our common stock at the conversion price of $0.26 per share, due December 26, 2011 (the Series A Note); and a five-year Series W warrant to purchase 6,000,000 shares of our common stock at an exercise price of $0.32 per share.

In connection with the SPA, Montaur requested that the term of the $1.0 million Bupp Note be extended approximately 42 months or until at least one day following the maturity date of the Series A Note. In consideration for the Bupp Investors' agreement to extend the term of the Bupp Note pursuant to an Amendment to the Bupp Purchase Agreement, dated December 26, 2007, we agreed to provide security for the obligations evidenced by the Amended 10% Convertible Note in the principal amount of $1,000,000, due December 31, 2011, executed by Neoprobe in favor of the Bupp Investors (the Amended Bupp Note), under the terms of a Security Agreement, dated December 26, 2007, by and between Neoprobe and the Bupp Investors (the Bupp Security Agreement). As further consideration for extending the term of the Bupp Note, we issued the Bupp Investors additional Series V warrants to purchase 500,000 shares of our common stock at an exercise price of $0.32 per share, expiring in December 2012.

Notes to the Consolidated Financial Statements

In April 2008, following receipt by the Company of clearance from the United States Food and Drug Administration to commence a Phase 3 clinical trial for Lymphoseek in patients with breast cancer or melanoma, we amended the SPA related to the second tranche and issued Montaur a 10% Series B Convertible Senior Secured Promissory Note in the principal amount of $3,000,000, which was convertible into shares of our common stock at the conversion price of $0.36 per share, also due December 26, 2011 (the Series B Note, and hereinafter referred to collectively with the Series A Note as the Montaur Notes); and a five-year Series X warrant to purchase 8,333,333 shares of our common stock at an exercise price of $0.46 per share.

In December 2008, after we obtained 135 vital blue dye lymph nodes from patients who had completed the injection of the drug and surgery in a Phase 3 clinical trial of Lymphoseek in patients with breast cancer or melanoma, we issued Montaur 3,000 shares of our 8% Series A Cumulative Convertible Preferred Stock (the Series A Preferred Stock) and a five-year Series Y warrant to purchase 6,000,000 shares of our common stock at an exercise price of $0.575 per share (hereinafter referred to collectively with the Series W warrant and Series X warrant as the Montaur Warrants), for an aggregate purchase price of $3,000,000. The “Liquidation Preference Amount” for the Series A Preferred Stock was $1,000 and the “Conversion Price” of the Series A Preferred Stock was set at $0.50 on the date of issuance, thereby making the shares of Series A Preferred Stock convertible into an aggregate 6,000,000 shares of our common stock, subject to adjustment as described in the Certificate of Designations.

In July 2009, we entered into a Securities Amendment and Exchange Agreement with Montaur, pursuant to which Montaur agreed to the amendment and restatement of the terms of the Montaur Notes, the Series A Preferred Stock, and the Montaur Warrants. The Series A Note was amended to grant Montaur conversion rights with respect to the $3.5 million portion of the Series A Note that was previously not convertible. The newly convertible portion of the Series A Note was convertible into 3,600,000 shares of our common stock at $0.9722 per share. The amendments also eliminated certain price reset features of the Montaur Notes, the Series A Preferred Stock and the Montaur Warrants that had created significant non-cash derivative liabilities on the Company’s balance sheet. In conjunction with this transaction, we issued Montaur a Series AA Warrant to purchase 2.4 million shares of our common stock at an exercise price of $0.97 per share, expiring in July 2014. The change in terms of the Montaur Notes, the Series A Preferred Stock and the Montaur Warrants were treated as an extinguishment of debt for accounting purposes. Following the extinguishment, the Company’s balance sheet reflected the face value of the $10 million due to Montaur pursuant to the Montaur Notes, which approximated fair value at the date of the extinguishment.

In June 2010, we entered into a Securities Exchange Agreement with Montaur, pursuant to which Montaur exchanged the Montaur Notes and the Series A Preferred Stock for 10,000 shares of Series B Convertible Preferred Stock (the Series B Preferred Stock), convertible into 32,700,000 shares of common stock. The Series B Preferred Stock is convertible at the option of Montaur, carries no dividend requirements and participates equally with our common stock in liquidation proceeds based upon the number of common shares into which the Series B Preferred Stock is then convertible. As consideration for the exchange, Neoprobe issued additional Series B Preferred Stock which is convertible into 1.3 million shares of common stock. Also in June 2010, we entered into a Securities Exchange Agreement with the Bupp Investors, pursuant to which the Bupp Investors exchanged the Amended Bupp Note for 1,000 shares of Series C Convertible Preferred Stock (the Series C Preferred Stock), convertible into 3,226,000 shares of common stock. The Series C Preferred Stock has a 10% dividend rate, payable quarterly until December 31, 2011, and participates equally with our common stock in liquidation proceeds based upon the number of common shares into which the Series C Preferred Stock is then convertible. The exchange of the Montaur Notes, the Series A Preferred Stock and the Amended Bupp Note were treated as extinguishments for accounting purposes. As a result, the Company recognized a loss on extinguishment of debt of $47.1 million, including the write-off of $966,000 in put option derivative liabilities, and recorded a deemed dividend of $8.0 million during the second quarter of 2010. As a result of these exchange transactions, all security interests in the Company’s assets held by Montaur and the Bupp Investors were extinguished.

During the years ended December 31, 2010 and 2009, we recorded interest expense of $16,000 and $428,000, respectively, related to amortization of the debt discounts and deferred financing costs related to our convertible notes.

Notes to the Consolidated Financial Statements

14. Derivative Instruments

Effective January 1, 2009, we adopted a new accounting standard which clarified the determination of whether equity-linked instruments (or embedded features), such as our convertible securities and warrants to purchase our common stock, are considered indexed to our own stock. As a result of adopting the new standard, certain embedded features of our convertible securities which were extinguished in the second quarter of 2010, as well as warrants to purchase our common stock, that were previously treated as equity were recorded as derivative liabilities. We do not use derivative instruments for hedging of market risks or for trading or speculative purposes.

The impact of the January 1, 2009 adoption of the new accounting standard is summarized in the following table:

	December 31, 2008	Impact of New Accounting Standard Adoption	January 1, 2009
Other assets	$ 594,449	$ 2,104	$ 596,553
Total assets	$ 9,619,450		$ 9,621,554
Notes payable to investors, net of discounts	$ 4,998,851	(54,396)	$ 4,944,455
Derivative liabilities	853,831	13,017,540	13,871,371
Total liabilities	$ 9,645,175		$ 22,608,319
Additional paid-in capital	$ 145,742,044	(8,948,089)	$ 136,793,955
Accumulated deficit	(148,840,015)	(4,012,951)	(152,852,966)
Total stockholders' deficit	$ (3,025,725)		$ (15,986,765)

Convertible Notes – other assets increased $2,104, notes payable to investors, net of discount, increased $518,229, derivative liabilities increased $4,146,392, additional paid-in capital decreased $2,843,781, and accumulated deficit increased $1,818,736.
Convertible Preferred Stock – derivative liabilities increased $1,158,095, additional paid-in capital decreased $1,550,629, and accumulated deficit decreased $392,534.
Warrants – notes payable to investors, net of discount, decreased $572,625, derivative liabilities increased $7,713,053, additional paid-in capital decreased $4,553,679, and accumulated deficit increased $2,586,749.

In July 2009, we entered into a Securities Amendment and Exchange Agreement with Montaur, pursuant to which Montaur agreed to the amendment and restatement of the terms of the Montaur Notes, the Series A Preferred Stock, and the Montaur Warrants as discussed in Note 13. As a result, the Company reclassified $27.0 million in derivative liabilities related to the Montaur Notes, the Series A Preferred Stock, and the Montaur Warrants to additional paid-in capital. Also in July 2009, Montaur exercised 2,844,319 of their Series Y warrants, which resulted in a decrease in the related derivative liability of $2.2 million. In June 2010, we entered into a Securities Exchange Agreement with Montaur, pursuant to which Montaur exchanged the Montaur Notes and the Series A Preferred Stock for 10,000 shares of Series B Convertible Preferred Stock. As a result of this exchange transaction, the Company wrote off $966,000 in put option derivative liabilities during the second quarter of 2010.

In November 2010, we entered into agreements with certain institutional investors, pursuant to which the investors purchased $6.0 million of our common stock at $1.90 per share. In addition to the common stock, we issued two series of warrants to the investors: (1) one-year Series CC warrants to purchase 1,578,948 shares of our common stock

at an exercise price of $2.11 per share, and (2) two-year Series DD warrants to purchase 1,578,948 shares of our common stock at an exercise price of $2.11 per share. The Series CC and Series DD warrants originally contained language that required Neoprobe to classify the warrants as derivative liabilities, and we recorded them at their estimated fair values totaling $1.2 million. On December 23, 2010, a portion of the Series CC and Series DD warrants were modified to remove the language that had previously required them to be classified as derivative liabilities. As a result of the modification of certain of the Series CC and Series DD warrants, we reclassified $801,000 in derivative liabilities related to those warrants to additional paid-in capital. See Note 23(a).

Notes to the Consolidated Financial Statements

During 2010, 120,000 Series V warrants and 60,000 Series Z warrants were exercised. The Company reclassified $280,000 in derivative liabilities related to these warrants to additional paid-in capital.

The net effect of marking the Company's derivative liabilities to market during the years ended December 31, 2010 and 2009 resulted in net increases in the estimated fair values of the derivative liabilities of $1.3 million and $18.1 million, respectively, which were recorded as non-cash expense. The total estimated fair value of the derivative liabilities was $2.5 million and $2.0 million as of December 31, 2010 and 2009, respectively.

15. Equity

a. Common Stock Purchase Agreement: In December 2006, we entered into a Common Stock Purchase Agreement with Fusion Capital Fund II, LLC (Fusion Capital), an Illinois limited liability company, to sell $6.0 million of our common stock to Fusion Capital over a 24-month period which ended on November 21, 2008. Through November 21, 2008, we sold 7,568,671 shares of our common stock to Fusion Capital under the agreement for proceeds of $1.9 million. In December 2008, we entered into the First Amendment to the Common Stock Purchase Agreement (the First Amendment) which gave us a right to sell an additional $6.0 million of our common stock to Fusion Capital before March 1, 2011, along with the $4.1 million of the unsold balance of the $6.0 million we originally had the right to sell to Fusion Capital under the original agreement.

In December 2006, we issued 720,000 shares of our common stock to Fusion Capital as a commitment fee upon execution of the agreement. In connection with sales of our common stock, we issued an additional 234,000 shares of our common stock to Fusion Capital as an additional commitment fee. In connection with entering into the First Amendment, we issued an additional 360,000 shares in consideration for Fusion Capital's entering into the amendment. Also, as an additional commitment fee, we agreed to issue to Fusion Capital pro rata an additional 486,000 shares of our common stock as we sell the first $4.1 million of our common stock to Fusion Capital under the agreement as amended.

In March 2010, we sold 540,541 shares of our common stock to Fusion Capital for proceeds of $1.0 million under the amended agreement. In connection with this sale, we issued 120,000 shares of our common stock to Fusion Capital as an additional commitment fee. Subsequent to this sale, the remaining aggregate amount of our common stock we can sell to Fusion Capital under the amended agreement is approximately $9.1 million. We have reserved a total of 10,113,459 shares of our common stock in respect to potential sales of common stock we may make to Fusion Capital in the future under the amended agreement.

b. Securities Purchase Agreement: In November 2010, we entered into a Securities Purchase Agreement with institutional investors for a registered direct offering of 3,157,896 shares of our common stock at a price of $1.90 per share for total gross proceeds of $6.0 million. In addition to the common stock, we issued one-year Series CC warrants to purchase 1,578,948 shares of our common stock at an exercise price of $2.11 per share, and two-year Series DD warrants to purchase 1,578,948 shares of our common stock at an exercise price of $2.11 per share. As compensation for the services of the placement agent in connection with the offering, we paid the placement agent $420,000 (7% of the gross proceeds) and issued five-year Series EE warrants to purchase 157,895 shares of our common stock at an exercise price of $2.375 per share. The common stock, warrants, and shares of common stock underlying the warrants were issued pursuant to a shelf registration statement on Form S-3 that was declared effective by the Securities and Exchange Commission in August 2010.

c. Stock Warrants: At December 31, 2010, there are 21.2 million warrants outstanding to purchase our common stock. The warrants are exercisable at prices ranging from $0.31 to $2.375 per share with a weighted average exercise price per share of $0.75. See Note 23(b).

Notes to the Consolidated Financial Statements

The following table summarizes information about our outstanding warrants at December 31, 2010:

	Exercise Price	Number of Warrants	Expiration Date
Series V	$ 0.31	380,000	July 2012
Series V	0.32	450,000	December 2012
Series W	0.32	6,000,000	December 2012
Series X	0.46	8,333,333	April 2013
Series Z	0.70	30,000	August 2013
Series Z	0.85	30,000	August 2013
Series AA	0.97	2,400,000	July 2014
Series BB	2.00	300,000	July 2015
Series CC	2.11	1,578,948	November 2011
Series DD	2.11	1,578,948	November 2012
Series EE	2.375	157,895	August 2015
	$ 0.75	21,239,124	

During 2009, David C. Bupp, our President and CEO, exercised 50,000 Series Q warrants in exchange for issuance of 50,000 shares of our common stock, resulting in gross proceeds of $25,000. The remaining 325,000 Series Q warrants held by Mr. Bupp expired during the year. During the same period, another Bupp Investor exercised 50,000 Series V warrants in exchange for issuance of 50,000 shares of our common stock, resulting in gross proceeds of $16,000. Also during 2009, certain outside investors exercised a total of 1,480,000 Series U warrants on a cashless basis in exchange for issuance of 848,507 shares of our common stock.

In July 2009, in conjunction with entering into a Securities Amendment and Exchange Agreement, Montaur exercised 2,844,319 Series Y warrants in exchange for issuance of 2,844,319 shares of our common stock, resulting in gross proceeds of $1.6 million. In September 2009, Montaur exercised their remaining 3,155,681 Series Y warrants in exchange for issuance of 3,155,681 shares of our common stock, resulting in additional gross proceeds of $1.8 million.

During 2010, a Bupp Investor exercised 120,000 Series V warrants in exchange for issuance of 120,000 shares of our common stock, resulting in gross proceeds of $37,200. Also during 2010, certain outside investors exercised a total of 60,000 Series Z warrants on a cashless basis in exchange for issuance of 37,778 shares of our common stock.

In July 2010, we issued five-year Series BB Warrants to purchase 300,000 shares of our common stock at an exercise price of $2.00 per share to an investment advisory firm in connection with a consulting agreement.

See Note 15 for a discussion of Series CC, Series DD, and Series EE warrant transactions during 2010.

c. Common Stock Reserved: As of December 31, 2010, we have reserved 62,899,624 shares of authorized common stock for the exercise of all outstanding options, warrants, and convertible preferred stock.

Notes to the Consolidated Financial Statements

16.Income Taxes

As of December 31, 2010 and 2009, our deferred tax assets in the U.S. were approximately $37.9 million and $34.2 million, respectively, prior to any limitations under Sections 382 and 383 of the Internal Revenue Code (IRC), as discussed below. The components of our deferred tax assets are summarized as follows:

	As of December 31,	
	2010	2009
Deferred tax assets:		
U.S. net operating loss carryforwards	$ 30,121,076	$ 27,513,699
R&D credit carryforwards	6,006,233	5,067,722
Temporary differences	1,745,473	1,617,390
Deferred tax assets before valuation allowance	37,872,782	34,198,811
Valuation allowance	(37,872,782)	(34,198,811)
Net deferred tax assets	$ —	$ —

Current accounting standards require a valuation allowance against deferred tax assets if, based on the weight of available evidence, it is more likely than not that some or all of the deferred tax assets may not be realized. Due to the uncertainty surrounding the realization of these deferred tax assets in future tax returns, all of the deferred tax assets have been fully offset by a valuation allowance at December 31, 2010 and 2009.

As of December 31, 2010 and 2009, we had U.S. net operating loss carryforwards of approximately $88.6 million and $92.6 million, respectively. At December 31, 2010 and 2009, we had U.S. R&D credit carryforwards of approximately $6.0 million and $5.1 million, respectively. U.S. net operating loss carryforwards of $9.5 million and $9.0 million and R&D credit carryforwards of $156,000 and $311,000 expired during 2010 and 2009, respectively. The details of our U.S. net operating loss and R&D credit carryforward amounts and expiration dates are summarized as follows:

	As of December 31, 2010	
Expiration	U.S. Net Operating Loss Carryforwards	U.S. R&D Credit Carryforwards
2011	$ 16,551,856	$ 346,305
2012	20,797,107	1,064,623
2013	17,142,781	1,173,387
2014	—	130,359
2015	—	71,713
2016	—	39,128
2017	1,282,447	5,350
2018	337,714	2,905
2019	1,237,146	22,861
2020	3,246,062	218,332
2021	3,127,238	365,541
2022	2,863,443	342,898
2023	2,826,656	531,539
2024	13,753,769	596,843
2025	5,425,180	1,094,449

Total carryforwards	$ 88,591,399	$ 6,006,233

As of December 31, 2010 and 2009, Cardiosonix had tax loss carryforwards in Israel of approximately $12.3 and $12.2 million, respectively, primarily related to net operating loss carryforwards available to offset future taxable income, if any. Under current Israeli tax law, net operating loss carryforwards do not expire. Due to the uncertainty surrounding the realization of the related deferred tax assets in future tax returns, all of the deferred tax assets have been fully offset by a valuation allowance at December 31, 2010 and 2009. Current accounting standards require that reduction in the amount of an acquired valuation allowance be recorded as a reduction of income tax expense.

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Under Sections 382 and 383 of the IRC of 1986, as amended, the utilization of U.S. net operating loss and R&D tax credit carryforwards may be limited under the change in stock ownership rules of the IRC. As a result of ownership changes as defined by Sections 382 and 383, which have occurred at various points in our history, we believe utilization of our net operating loss carryfowards and tax credit carryforwards will likely be significantly limited under certain circumstances.

Reconciliations between the statutory federal income tax rate and our effective tax rate are as follows:

	Years Ended December 31,			
	2010		2009	
	Amount	%	Amount	%
Benefit at statutory rate	$ (16,988,055)	(34.0)%	$ (13,465,945)	(34.0)%
Adjustments to valuation allowance	3,410,056	6.8 %	7,816,084	19.7 %
Loss on extinguishment of debt	14,179,468	28.4 %	5,343,694	13.5 %
Other	(601,469)	(1.2)%	306,167	0.8 %
Benefit per financial statements	$ —		$ —	

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17.Segments

We report information about our operating segments using the “management approach” in accordance with current accounting standards. This information is based on the way management organizes and reports the segments within the enterprise for making operating decisions and assessing performance. Our reportable segments are identified based on differences in products, services and markets served. There were no inter-segment sales. We own or have rights to intellectual property involving two primary types of medical device products, including oncology instruments currently used primarily in the application of sentinel lymph node biopsy, and blood flow measurement devices. We also own or have rights to intellectual property related to several drug and therapy products.

The information in the following table is derived directly from each reportable segment’s financial reporting.

($ amounts in thousands) 2010	Gamma Detection Devices	Drug and Therapy Products	Corporate	Total
Net sales:				
United States1	$ 9,801	$ —	$ —	$ 9,801
International	182	—	—	182
License and grant revenue	100	617	—	717
Research and development expenses	568	8,653	—	9,221
Selling, general and administrative expenses, excluding depreciation and amortization2	216	—	4,144	4,360
Depreciation and amortization	115	30	78	223
Income (loss) from operations3	5,977	(8,066)	(4,222)	(6,311)
Other expense, net4	—	—	(43,567)	(43,567)
Income (loss) from continuing operations	5,977	(8,066)	(47,789)	(49,878)
Loss from discontinued operations	—	—	(87)	(87)
Total assets, net of depreciation and amortization:				
United States operations	3,094	862	6,900	10,856
Discontinued operations	—	—	7	7
Capital expenditures	1	225	141	367

($ amounts in thousands) 2009	Gamma Detection Devices	Drug and Therapy Products	Corporate	Total
Net sales				
United States1	$ 8,946	$ —	$ —	$ 8,946
International	472	—	—	472
License and other revenue	100	—	—	100
Research and development expenses	1,074	3,894	—	4,968
Selling, general and administrative expenses, excluding depreciation and amortization2	134	—	2,900	3,034
Depreciation and amortization	142	4	60	206
Income (loss) from operations3	5,033	(3,898)	(2,960)	(1,825)
Other expense, net 4	—	—	(35,891)	(35,891)
Income (loss) from continuing operations	5,033	(3,898)	(38,851)	(37,716)
Loss from discontinued operations	—	—	(1,890)	(1,890)

Total assets, net of depreciation and amortization:				
United States operations	2,199	554	6,238	8,991
Discontinued operations	—	—	27	27
Capital expenditures	16	—	80	96

1All sales to Devicor and EES are made in the United States. Devicor distributes the product globally through its international affiliates.

2General and administrative expenses, excluding depreciation and amortization, represent costs that relate to the general administration of the Company and as such are not currently allocated to our individual reportable segments. Marketing and selling expenses are allocated to our individual reportable segments.

3Income (loss) from operations does not reflect the allocation of selling, general and administrative expenses, excluding depreciation and amortization, to our individual reportable segments.

4Amounts consist primarily of interest income, interest expense and changes in derivative liabilities which are not currently allocated to our individual reportable segments.

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18.Agreements

a. Supply Agreements: In February 2004, we entered into a product supply agreement with Nortech Systems, Inc. (Nortech, formerly TriVirix International) for the manufacture of certain of our medical device products. The term of this agreement expired in February 2010, but was automatically extended through February 2011, and may continue to be automatically extended for successive one-year periods. Either party has the right to terminate the agreement at any time upon 180 days prior written notice, or may terminate the agreement upon a material breach or repeated non-material breaches by the other. Total purchases under the product supply agreement were $1.7 million and $1.5 million for the years ended December 31, 2010 and 2009, respectively. As of December 31, 2010, we have issued purchase orders under the agreement with TriVirix for $1.4 million of our products for delivery through December 2011. In February 2011, the term of this agreement was once again automatically extended through February 2012.

In November 2009, we entered into a manufacture and supply agreement with Reliable Biopharmaceutical Corporation (Reliable) for the manufacture and supply of the active pharmaceutical ingredient (API) of Lymphoseek. The initial ten-year term of the agreement expires in November 2019, with options to extend the agreement for successive three-year terms. Either party has the right to terminate the agreement upon mutual written agreement, or upon material breach by the other party which is not cured within 60 days from the date of written notice of the breach. Total purchases under the manufacture and supply agreement were $1.0 million for the year ended December 31, 2010. As of December 31, 2010, we have issued purchase orders under the agreement with Reliable for $8,000 of our products for delivery through May 2011.

b. Marketing and Distribution Agreement: During 1999, we entered into a distribution agreement with EES covering our gamma detection devices used in surgical radiation detection. Under the agreement, EES received a non-exclusive worldwide license to our SLNB intellectual property to make and sell other products that may be developed using our SLNB intellectual property. The term of the license is the same as that of the agreement. We manufactured and sold our current line of gamma detection device products exclusively to EES, who distributed the products globally, except in Japan. EES agreed to purchase minimum quantities of our products over the first three years of the term of the agreement and to reimburse us for certain research and development costs and a portion of our warranty costs. We are obligated to continue certain product maintenance activities and to provide ongoing regulatory support for the products.

In December 2007, Neoprobe and EES executed an amendment to the distribution agreement which extended the agreement through the end of 2013. As consideration for extending the distribution agreement through the end of 2013, EES paid us $500,000 in December 2007, representing a non-refundable license fee and reimbursement of past research and development expenses. We recognized $100,000 of this payment as license revenue during both 2010 and 2009, and we intend to recognize the remaining $300,000 as license revenue on a straight-line basis over the remaining term of the agreement, from January 2011 through December 2013. In July 2010, Devicor acquired EES' breast biopsy business, including an assignment of the distribution agreement with Neoprobe. The agreement continues under the same terms with Devicor.

Devicor may terminate the agreement if we fail to supply products for specified periods, commit a material breach of the agreement, suffer a change of control to a competitor of Devicor, or become insolvent. If termination were due to failure to supply or a material breach by us, Devicor would have the right to use our intellectual property and regulatory information to manufacture and sell the products exclusively on a global basis for the remaining term of the agreement with no additional financial obligation to us. If termination is due to insolvency or a change of control that does not affect supply of the products, Devicor has the right to continue to sell the products on an exclusive global basis for a period of six months or require us to repurchase any unsold products in its inventory.

If we terminate the agreement as a result of a material breach by Devicor, they would be required to pay us a royalty on all products developed and sold by Devicor using our SLNB intellectual property. In addition, we are entitled to a royalty on any SLNB product commercialized by Devicor that does not infringe any of our existing intellectual property.

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c. Research and Development Agreements: Cardiosonix's research and development efforts have been partially financed through grants from the Office of the Chief Scientist of the Israeli Ministry of Industry and Trade (the OCS). Through the end of 2004, Cardiosonix received a total of $775,000 in grants from the OCS. In return for the OCS's participation, Cardiosonix is committed to pay royalties to the Israeli Government at a rate of 3% to 5% of the sales of its products, if any, up to 300% of the total grants received, depending on the portion of manufacturing activity that takes place in Israel. In January 2006, the OCS consented to the transfer of manufacturing as long as we comply with the terms of the OCS statutes under Israeli law. We are not aware of any future performance obligations related to the grants received from the OCS. We do not believe we will be obligated to pay the OCS any amounts greater than any royalties due on future sales in the event that future sales are not sufficient to generate adequate revenue to completely cover the full amount of the grant. However, under certain limited circumstances, the OCS may withdraw its approval of a research program or amend the terms of its approval. Upon withdrawal of approval, Cardiosonix may be required to refund the grant, in whole or in part, with or without interest, as the OCS determines. Through December 2010, we have paid the OCS a total of $79,000 in royalties related to sales of products developed under this program. As of December 31, 2010, we have accrued obligations for royalties totaling less than $1,000.

During January 2002, we completed a license agreement with the University of California, San Diego (UCSD) for a proprietary compound that we believe can be used as a lymph node locating agent in SLNB procedures. The license agreement is effective until the later of the expiration date of the longest-lived underlying patent or January 30, 2023. Under the terms of the license agreement, UCSD has granted us the exclusive rights to make, use, sell, offer for sale and import licensed products as defined in the agreement and to practice the defined licensed methods during the term of the agreement. In consideration for the license rights, we agreed to pay UCSD a license issue fee of $25,000 and license maintenance fees of $25,000 per year. We also agreed to pay UCSD milestone payments related to commencement of clinical trials and successful regulatory clearance for marketing of the licensed products, a 5% royalty on net sales of licensed products subject to a $25,000 minimum annual royalty, fifty percent of all sublicense fees and fifty percent of sublicense royalties. We also agreed to reimburse UCSD for all patent-related costs. Total costs related to the UCSD license agreement were $36,000 and $63,000 in 2010 and 2009, respectively, and were recorded in research and development expenses.

During April 2008, we completed a license agreement with UCSD for an expanded field of use allowing Lymphoseek to be developed as an optical or ultrasound agent. The license agreement is effective until the expiration date of the longest-lived underlying patent. Under the terms of the license agreement, UCSD has granted us the exclusive rights to make, use, sell, offer for sale and import licensed products as defined in the agreement and to practice the defined licensed methods during the term of the agreement. We may also sublicense the patent rights, subject to certain sublicense terms as defined in the agreement. In consideration for the license rights, we agreed to pay UCSD a license issue fee of $25,000 and license maintenance fees of $25,000 per year. We also agreed to pay UCSD milestone payments related to commencement of clinical trials and successful regulatory clearance for marketing of the licensed products, a 5% royalty on net sales of licensed products subject to a $25,000 minimum annual royalty, fifty percent of all sublicense fees and fifty percent of sublicense royalties. We also agreed to reimburse UCSD for all patent-related costs. Total costs related to the UCSD license agreement were $27,000 and $26,000 in 2010 and 2009, respectively, and were recorded in research and development expenses.

Notes to the Consolidated Financial Statements

During January 2005, we completed a license agreement with The Ohio State University (OSU), Cira LLC, and Cira Bio for certain technology relating to activated cellular therapy. The license agreement is effective until the expiration date of the longest-lived underlying patent. Under the terms of the license agreement, OSU has granted the licensees the exclusive rights to make, have made, use, lease, sell and import licensed products as defined in the agreement and to utilize the defined licensed practices. We may also sublicense the patent rights. In consideration for the license rights, we agreed to pay OSU a license fee of $5,000 on January 31, 2006. We also agreed to pay OSU additional license fees related to initiation of Phase 2 and Phase 3 clinical trials, a royalty on net sales of licensed products subject to a minimum annual royalty of $100,000 beginning in 2012, and a percentage of any non-royalty license income. Also during January 2005, we completed a business venture agreement with Cira LLC that defines each party's responsibilities and commitments with respect to Cira Bio and the license agreement with OSU. In connection with the execution of the option, Cira Ltd. also agreed to assign all interests in the ACT technology in the event of the closing of such a financing transaction.

d. Employment Agreements: We maintain employment agreements with seven of our officers. The employment agreements contain termination and/or change in control provisions that would entitle each of the officers to 2 to 2.5 times their current annual salaries, vest outstanding restricted stock and options to purchase common stock, and continue certain benefits if there is a termination without cause or change in control of the Company (as defined) and their employment terminates. As of December 31, 2010, our maximum contingent liability under these agreements in such an event is approximately $3.3 million. The employment agreements also provide for severance, disability and death benefits. See Note 23(c).

19. Leases

We lease certain office equipment under capital leases which expire from 2011 to 2013. We also lease office space under an operating lease that expires in January 2013.

The future minimum lease payments for the years ending December 31 are as follows:

	Capital Leases	Operating Leases
2011	$ 10,848	$ 139,395
2012	6,900	143,256
2013	5,750	8,930
	23,498	$ 291,581
Less amount representing interest	3,950	
Present value of net minimum lease payments	19,548	
Less current portion	8,620	
Capital lease obligations, excluding current portion	$ 10,928	

Total rental expense was $125,000 and $115,000 for the years ended December 31, 2010 and 2009, respectively.

20. Employee Benefit Plan

We maintain an employee benefit plan under Section 401(k) of the Internal Revenue Code. The plan allows employees to make contributions and we may, but are not obligated to, match a portion of the employee's contribution with our common stock, up to a defined maximum. We accrued expenses of $48,000 and $41,000 during 2010 and 2009, respectively, related to common stock to be contributed to the plan in 2011 and 2010, respectively.

21. Supplemental Disclosure for Statements of Cash Flows

During the years ended December 31, 2010 and 2009, we paid interest aggregating $136,000 and $163,000, respectively. During the years ended December 31, 2010 and 2009, we issued 347,832 and 1,393,239 shares of our common stock, respectively, as payment of interest on our convertible debt and dividends on our convertible preferred stock. Also during 2010 and 2009, we issued 53,499 and 80,883 shares of our common stock, respectively, as matching contributions to our 401(k) Plan. During the years ended December 31, 2010 and 2009, we transferred $79,000 and $43,000, respectively, of inventory to fixed assets related to the creation and maintenance of a pool of service loaner equipment. During 2010, we prepaid $71,000 in insurance through the issuance of a note payable to a finance company with an interest rate of 7.0%. During 2009, we purchased equipment under capital leases totaling $20,000. During the year ended December 31, 2010, we reclassified $223,000 of deferred stock offering costs to additional paid-in capital related to the issuance of our common stock to Fusion Capital. See Note 15(a). Also during the year ended December 31, 2010, we recorded a deemed dividend of $8.0 million related to the exchange of the Series A Preferred Stock for Series B Preferred Stock. See Note 13.

Notes to the Consolidated Financial Statements

22. Contingencies

We are subject to legal proceedings and claims that arise in the ordinary course of business. In our opinion, the amount of ultimate liability, if any, with respect to these actions will not materially affect our financial position.

23. Subsequent Events

a. Change in Terms of Stock Warrants: In January 2011, certain Bupp Investors agreed to modify their outstanding Series V warrants to remove the language that had previously required them to be classified as derivative liabilities. The net effect of marking the derivative liabilities related to the modified Series V warrants to market resulted in net increases in the estimated fair values of the derivative liabilities of $48,000, which were recorded as non-cash expense. As a result of the modification of the Series V warrants, we reclassified $1.4 million in derivative liabilities related to those warrants to additional paid-in capital.

Also in January 2011, certain investors agreed to modify their outstanding Series CC and Series DD warrants to remove the language that had previously required them to be classified as derivative liabilities. The net effect of marking the derivative liabilities related to the modified Series CC and Series DD warrants to market resulted in net increases in the estimated fair values of the derivative liabilities of $76,000, which were recorded as non-cash expense. As a result of the modification of the Series CC and Series DD warrants, we reclassified $549,000 in derivative liabilities related to those warrants to additional paid-in capital.

b. Stock Warrant Exercises: Between January 1 and March 15, 2011, certain outside investors exercised 1,578,948 Series CC warrants in exchange for issuance of 1,578,948 shares of our common stock, resulting in gross proceeds of $3,331,580. Also between January 1 and March 15, 2011, certain outside investors exercised 799,474 Series DD warrants in exchange for issuance of 799,474 shares of our common stock, resulting in gross proceeds of $1,686,890. The net effect of marking the derivative liabilities related to the exercised Series CC and Series DD warrants to market resulted in net increases in the estimated fair values of the derivative liabilities of $676,000, which were recorded as non-cash expense. As a result of the Series CC and Series DD warrant exercises, we reclassified $1.1 million in derivative liabilities related to those warrants to additional paid-in capital. See Note 15(b).

c. Employment Agreements: During January 2011, we entered into new 2-year employment agreements with five of our officers. The new agreements have substantially similar terms to the officers' previous agreements, except that the change in control provisions would entitle each of the officers to 1.5 times their current annual salaries. See Note 18(d).

Notes to the Consolidated Financial Statements

24.Supplemental Information (Unaudited)

The following summary financial data are derived from our consolidated financial statements that have been audited by our independent registered public accounting firm. These data are qualified in their entirety by, and should be read in conjunction with, our Consolidated Financial Statements and Notes thereto included herein.

(Amounts in thousands, except per share data)	Years Ended December 31,				
	2010	2009	2008	2007	2006
Statement of Operations Data:					
Net sales	$ 9,983	$ 9,418	$ 7,418	$ 6,773	$ 5,445
License and grant revenue	717	100	172	—	—
Gross profit	7,494	6,383	4,744	3,872	3,291
Research and development expenses	9,221	4,968	4,286	2,506	3,095
Selling, general and administrative expenses	4,584	3,240	2,965	2,380	2,467
Loss from operations	(6,311)	(1,825)	(2,508)	(1,015)	(2,270)
Other expenses, net	(43,567)	(35,891)	(2,124)	(3,325)	(1,283)
Loss from continuing operations	(49,878)	(37,715)	(4,632)	(4,340)	(3,553)
Discontinued operations	(87)	(1,890)	(534)	(748)	(1,188)
Net loss	(49,965)	(39,606)	(5,166)	(5,088)	(4,741)
Preferred stock dividends	(8,207)	(240)	—	—	—
Loss attributable to common stockholders	$ (58,172)	$ (39,846)	$ (5,166)	$ (5,088)	$ (4,741)
Loss per common share (basic and diluted):					
Continuing operations	$ (0.72)	$ (0.51)	$ (0.07)	$ (0.07)	$ (0.06)
Discontinued operations	$ (0.00)	$ (0.03)	$ (0.01)	$ (0.01)	$ (0.02)
Loss attributable to common stockholders	$ (0.72)	$ (0.54)	$ (0.08)	$ (0.08)	$ (0.08)
Shares used in computing loss per common share: (1)					
Basic and diluted	80,726	73,772	68,594	62,921	58,587

	As of December 31,				
	2010	2009	2008	2007	2006
Balance Sheet Data:					
Total assets	$ 10,863	$ 9,018	$ 9,619	$ 7,063	$ 8,034
Long-term obligations	2,787	13,485	7,323	8,836	4,922
Accumulated deficit	(250,870)	(192,699)	(148,840)	(140,777)	(135,688)

(1) Basic earnings (loss) per share is calculated by dividing net income (loss) by the weighted-average number of common shares and, except for periods of loss, participating securities outstanding during the period. Diluted earnings (loss) per share reflects additional common shares that would have been outstanding if dilutive potential common shares had been issued. Potential common shares that may be issued by the Company include convertible securities, options and warrants. See Note 5.