

Edgar Filing: NEOPROBE CORP - Form POS AM

NEOPROBE CORP
Form POS AM
April 03, 2006

As filed with the Securities and Exchange Commission on April 3, 2006

Registration No. 333-110858

=====

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Post-effective Amendment No. 2
to
FORM SB-2
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

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

Delaware (State or other jurisdiction of incorporation or organization)	2835 (Primary standard industrial classification number)	31-1080091 (IRS employer identification number)
--	---	--

425 Metro Place North, Suite 300
Dublin, Ohio 43017-1367
(614) 793-7500
(Address and telephone number of principal executive offices)

425 Metro Place North, Suite 300
Dublin, Ohio 43017-1367
(Address of principal place of business)

Brent L. Larson, Vice President, Finance and
Chief Financial Officer
Neoprobe Corporation
425 Metro Place North, Suite 300
Dublin, Ohio 43017-1367
(614) 793-7500
(Name, address and telephone number of agent for service)

Copies to:

William J. Kelly, Jr., Esq.
Porter, Wright, Morris & Arthur LLP
41 South High Street
Columbus, Ohio 43215
Telephone No. (614) 227-2000
Telecopier No. (614) 227-2100
wjkelly@porterwright.com

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

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

Edgar Filing: NEOPROBE CORP - Form POS AM

registration statement for the same offering.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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

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

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.

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

SUBJECT TO COMPLETION, DATED APRIL 3, 2006.

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

SECOND AMENDED

PROSPECTUS

NEOPROBE CORPORATION

21,817,257 Shares of Common Stock

This prospectus relates to the sale of up to 21,817,257 shares of our common stock by persons who have purchased shares of our common stock or who may purchase shares of our common stock through the conversion of debt or the exercise of warrants as more fully described herein. The aforementioned persons are sometimes referred to in this prospectus as the selling stockholders. The prices at which the selling stockholders may sell the shares will be determined by the prevailing market price for the shares or in negotiated transactions. We will not receive proceeds from the sale of our shares by the selling stockholders.

Edgar Filing: NEOPROBE CORP - Form POS AM

Our common stock is quoted on the Nasdaq Over-The-Counter Bulletin Board under the symbol NEOP. On March 31, 2006, the last reported sale price for our common stock as reported on the Nasdaq Over-The-Counter Bulletin Board was \$0.29 per share.

Each selling stockholder may be considered an "underwriter" within the meaning of the Securities Act of 1933, as amended.

THE SECURITIES OFFERED IN THIS PROSPECTUS INVOLVE A HIGH DEGREE OF RISK. YOU SHOULD CONSIDER THE RISK FACTORS BEGINNING ON PAGE 4 BEFORE PURCHASING OUR COMMON STOCK.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is [April __, 2006.]

Table of Contents

Prospectus Summary.....	2
Risk Factors.....	4
Cautionary Note Regarding Forward-Looking Statements.....	14
Use of Proceeds.....	14
Market for Common Equity and Related Stockholder Matters.....	15
Management's Discussion and Analysis of Financial Condition and Results of Operations.....	15
Description of Business.....	27
Description of Property.....	44
Our Management.....	45
Security Ownership of Certain Beneficial Owners and Management.....	54
Certain Relationships and Related Party Transactions.....	55
Description of Capital Stock.....	56
Acquisition of Common Stock by Selling Stockholders.....	59
Selling Stockholders.....	60
Plan of Distribution.....	65
Legal Opinion.....	66
Experts.....	66
Additional Information.....	67
Index to Financial Statements.....	F-1

Unless otherwise specified, the information in this prospectus is set forth as of March 15, 2006, and we anticipate that changes in our affairs will occur after such date. We have not authorized any person to give any information or to make any representations, other than as contained in this prospectus, in connection with the offer contained in this prospectus. If any person gives you any information or makes representations in connection with this offer, do not rely on it as information we have authorized. This prospectus is not an offer to sell our common stock in any state or other jurisdiction to any person to whom it is unlawful to make such offer.

PROSPECTUS SUMMARY

The following summary highlights selected information from this prospectus and may not contain all the information that is important to you. To understand our business and this offering fully, you should read this entire prospectus carefully, including the financial statements and the related notes beginning on page F-1. When we refer in this prospectus to the "company," "we," "us," and "our," we mean Neoprobe Corporation, a Delaware corporation, together with our subsidiaries. This prospectus contains forward-looking statements and information relating to Neoprobe Corporation. See Cautionary Note Regarding Forward Looking Statements on page 14.

Our Company

We are a biomedical company that develops and commercializes innovative products that enhance patient care and improve patient outcome by meeting the critical intraoperative diagnostic information needs of physicians and therapeutic treatment needs of patients. 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(R)) technology. At that point, an evaluation of the status of the regulatory pathway for our RIGS products coupled with our limited financial resources caused us to suspend development activities related to our radiopharmaceutical business and to retrench our organization to focus on our medical device business. After achieving profitability in 2000 following this retrenchment, we set out on a strategy to expand our medical device portfolio outside the cancer field. In December 2001, we took a major step in executing this strategy with the acquisition of Biosonix Ltd., a private Israeli company limited by shares, which we subsequently renamed Cardiosonix Ltd. (Cardiosonix).

Cardiosonix is commercializing the Quantix(R) line of blood flow measurement devices for a variety of diagnostic and surgical applications in the cardiac and vascular management arena. The decision to expand beyond our product focus on oncology was based on our belief that the Cardiosonix products would diversify the markets we address. We believe the Cardiosonix product line has significant market potential and a path of market adoption similar to our gamma detection devices, but one that also has significant operational synergies in development, regulation and manufacturing to that of our gamma devices.

In addition, although our strategic focus expanded to include cardiac and vascular blood flow management, we continued to look for other avenues to reinvigorate our radiopharmaceutical development. During 2004, our efforts resulted in a number of positive events that caused us to take steps to re-activate development of our radiopharmaceutical and therapeutic initiatives. As a result, we now have two of our radiopharmaceutical products, Lymphoseek™ and RIGScan(R) CR, on the verge of entering Phase II and Phase III, and Phase III clinical trials, respectively. In early 2005, we also formed a new subsidiary, Cira Biosciences, Inc. (Cira Bio), to evaluate the current market

Edgar Filing: NEOPROBE CORP - Form POS AM

opportunities for another technology platform, activated cellular therapy (ACT). Our unique virtual business model combines revenue generation from medical devices with the capital infusions we received in late 2004 to allow us to fund Lymphoseek development while we look for a development partner to assist us in the final clinical and commercial development for RIGScan CR and to evaluate the commercial opportunities for ACT.

The Offering

During April 2003, we completed a bridge loan agreement with our President and CEO, David Bupp. Under the terms of the agreement, Mr. Bupp advanced us \$250,000. In consideration for the loan, we issued a note to Mr. Bupp in the principal amount of \$250,000. The note was secured by general assets of the company, excluding accounts receivable. In addition, we issued Mr. Bupp 375,000 warrants to purchase our common stock at an exercise price of \$0.13 per share, expiring in April 2008. The note bore interest at 8.5% per annum, payable monthly, and was originally due on June 30, 2004. On March 8, 2004, at the request of the Board of Directors, Mr. Bupp agreed to extend the due date of the note from June 30, 2004 to June 30, 2005. In exchange for extending the due date of the note, we issued Mr. Bupp an additional 375,000 warrants to purchase our common stock at an exercise price of \$0.50 per share, expiring in March 2009. On December 13, 2004, we repaid the balance of the note to Mr. Bupp. This prospectus covers the resale of the original 375,000 shares of common stock issuable pursuant to the warrants granted to Mr. Bupp in April 2003.

2

During April 2003, we also completed a convertible bridge loan agreement with Donald E. Garlikov for an additional \$250,000. In consideration for the loan, we issued a note to Mr. Garlikov in the principal amount of \$250,000. The note was secured by general assets of the company, excluding accounts receivable. In addition, we issued Mr. Garlikov 500,000 warrants to purchase our common stock at an exercise price of \$0.13 per share, expiring in April 2008. Under the terms of the agreement, the note bore interest at 9.5% per annum, payable monthly, and was due on June 30, 2004. During January 2004, Mr. Garlikov converted the entire balance of the note into 1.1 million shares of common stock according to the conversion terms of the agreement. Mr. Garlikov's 500,000 warrants remain outstanding. This prospectus covers the resale of the shares of common stock issued upon the conversion of the note and the 500,000 shares of common stock issuable upon the exercise of the warrants granted to Mr. Garlikov.

During 2003, we engaged the services of two investment banking firms to assist us in raising capital, Alberdale Capital, LLC (Alberdale) and Trautman Wasserman & Company, Inc. (Trautman Wasserman). In exchange for Alberdale's services, we paid them a monthly retainer of \$10,000, half in cash and half in common stock, and we agreed to pay them additional compensation upon the successful completion of a private placement of our securities. We terminated the agreement with Alberdale in September 2003, but issued them a total of 150,943 shares of common stock in payment for one half of their retainer. In addition, warrants to purchase 78,261 shares of our common stock were issued in exchange for their assistance in arranging an accounts receivable financing transaction. The warrants had an exercise price of \$0.28 per share, and were exercised on a cashless basis in exchange for 53,500 shares of our common stock in 2004. In exchange for the services of Trautman Wasserman, we agreed to pay a retainer of \$10,000, payable in cash and common stock, and to pay further compensation upon successful completion of a private placement. We issued Trautman Wasserman a total of 27,199 shares of common stock in payment for one half of their

Edgar Filing: NEOPROBE CORP - Form POS AM

retainer. The services of Trautman Wasserman were terminated in September 2003. This prospectus covers the resale of these shares and the shares of common stock issuable pursuant to the warrants. The warrants have an exercise price of \$0.28 per share.

In November 2003, we executed common stock purchase agreements with third parties introduced to us by a third investment banking firm, Rockwood, Inc., for the purchase of 12,173,914 shares of our common stock at a price of \$0.23 per share for net proceeds of \$2.4 million. In addition, we issued the purchasers warrants to purchase 6,086,959 shares of common stock at an exercise price of \$0.28 per share, expiring in October 2008, and issued the placement agents warrants to purchase 1,354,348 shares of our common stock on similar terms. During 2004, the warrant holders exercised a total of 3,230,066 warrants in exchange for 3,197,854 shares of our common stock. Of the warrants exercised in 2004, 3,134,783 were exercised in exchange for 3,134,783 shares of our common stock resulting in net proceeds of \$871,398. The remaining 95,283 warrants exercised in 2004 were exercised on a cashless basis in exchange for 63,071 shares of our common stock. During the first quarter of 2005, certain investors and placement agents exercised a total of 206,865 warrants and we realized proceeds of \$57,922. This prospectus covers the resale of the 12,173,914 shares of common stock purchased by the purchasers and the 7,441,307 shares of common stock issuable pursuant to the warrants granted to the purchasers and the placement agents and their assignees.

An investment in our common stock is highly speculative and involves a high degree of risk. See Risk Factors beginning on page 4.

3

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.

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 \$131 million as of December 31, 2005. Although we were profitable in 2000 and in 2001, we incurred substantial losses in the years prior to that, and in 2002 through 2005. The 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 operating expenses in the foreseeable future, primarily related to the completion of development and commercialization of the Cardiosonix product line but also potentially related to RIGS and Lymphoseek. 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.

Edgar Filing: NEOPROBE CORP - Form POS AM

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 gamma detection devices is currently limited to a surgical procedure (ILM) used in the treatment and diagnosis of two primary types of cancer: melanoma and breast cancer. The success of our gamma detection devices greatly depends on the medical community's ongoing adoption of ILM, and on our devices for use in ILM, as a reliable, safe and cost effective alternative to current treatments and procedures. The adoption rate for ILM appears to be leveling off and may not meet our growth expectations. Although we continue to believe that ILM has significant advantages over other currently competing procedures, broad-based clinical adoption of ILM will likely not occur until after the completion of ongoing international trials related to breast cancer. Even if the results of these trials are positive, we cannot assure you that ILM will attain rapid and widespread acceptance. 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 future success now also greatly depends on the success of the Cardiosonix product line. Cardiosonix' products are just beginning to be marketed commercially. The market for these products is in an early stage of development and may never fully develop as we expect. The long-term commercial success of the Cardiosonix product line will require widespread acceptance of our products as safe, efficient and cost-effective. Widespread acceptance would represent a significant change in current medical practice patterns. Other cardiac monitoring procedures, such as pulmonary artery catheterization, are generally accepted in the medical community and have a long standard of use. It is possible that the Cardiosonix product line will never achieve the broad market acceptance necessary to become a commercial success.

Our radiopharmaceutical product candidates 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.

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. Our most advanced product candidates, Lymphoseek and RIGScan CR are preparing to enter the Phase III stage of clinical trials. Historically, the results from preclinical testing and early clinical trials have often not been 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, our collaborative partners or FDA might delay or halt any clinical trials for our product candidates for various reasons, including:

4

- o ineffectiveness of the product candidate;
- o discovery of unacceptable toxicities or side effects;
- o development of disease resistance or other physiological factors; o

Edgar Filing: NEOPROBE CORP - Form POS AM

- o delays in patient enrollment; or
- o other reasons that are internal to the businesses of our potential collaborative partners, which reasons they may not share with us.

The results of the clinical trials may 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:

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

We do not currently have collaborative agreements covering Lymphoseek or RIGScan CR. We cannot assure you that we will be successful in securing collaborative partners, 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 rely on third parties for the worldwide marketing and distribution of our gamma detection and blood flow measurement 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. Our blood flow products are marketed and sold in the U.S. and a number of foreign markets through other distribution partners specific to those markets. Further, our Quantix line of blood flow products has only recently been introduced, and we have only limited experience in marketing or selling these devices. 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.

Edgar Filing: NEOPROBE CORP - Form POS AM

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 product candidates has been approved for sale in the United States or 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 approval 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:

- o delay marketing of potential products for a considerable period of time;
- o limit the indicated uses for which potential products may be marketed;
- o impose costly requirements on our activities; and
- o 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 applicable 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 similar risks to those associated with FDA approval process.

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 approval 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 approval, the manufacturing, labeling,

Edgar Filing: NEOPROBE CORP - Form POS AM

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:

- o restrictions on the products, manufacturers or manufacturing processes;
- o warning letters;

6

- o civil or criminal penalties;
- o fines;
- o injunctions;
- o product seizures or detentions;
- o import bans;
- o voluntary or mandatory product recalls and publicity requirements;
- o suspension or withdrawal of regulatory approvals;
- o total or partial suspension of production; and
- o 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 and blood flow 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 and on two blood flow products, the Quantix/ND and Quantix/OR. We may not be able to obtain clearance to market for 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 products and our business will suffer if they do not perform.

We rely on independent contract manufacturers for the manufacture of our current line of gamma detection systems and for our Quantix line of blood flow monitoring products. Our business will suffer if our contract manufacturers have production delays or quality problems. Furthermore, medical device manufacturers are subject to the QSR of FDA, international quality standards, and other

Edgar Filing: NEOPROBE CORP - Form POS AM

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 EES for gamma 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 in part 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. 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.

7

We may develop our manufacturing capacity in part by expanding our current facilities or building new facilities. Either of these activities would require substantial additional funds and we would need to hire and train significant numbers of employees to staff these facilities. We may not be able to develop manufacturing facilities that are sufficient to produce drug materials for clinical trials or commercial use. 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 products and product candidates could limit our potential product revenue.

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

Edgar Filing: NEOPROBE CORP - Form POS AM

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, control the escalation of healthcare expenditures within the economy and use healthcare reimbursement policies to balance the federal budget.

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. Because our common stock is not listed on a major stock market, many investors may not be willing or allowed to purchase it or may demand steep discounts. 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. If we are unable to raise additional funds when we need them, we may have to severely curtail our operations.

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

During 2003 and 2004, we completed several financings in which we issued common stock, convertible notes, warrants and other securities convertible into common stock to certain private investors and as required under the terms of those transactions, we filed registration statements with the United States Securities and Exchange Commission (SEC) under which the investors may resell common stock acquired in these transactions, as well as common stock acquired on the exercise of the warrants and convertible securities held by them, to the public.

The selling stockholders under these registration statements may sell none, some or all of the shares of common stock acquired from us, as well as common stock acquired on the exercise of the warrants and convertible securities held by them. We have no way of knowing whether or when the selling stockholders will

Edgar Filing: NEOPROBE CORP - Form POS AM

sell the shares covered by these registration statements. Depending upon market liquidity at the time, a sale of shares covered by these registration statements 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 under these registration statements, 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.

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 issue, and in

Edgar Filing: NEOPROBE CORP - Form POS AM

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.

The patents underlying our radiopharmaceutical products and ACT technology are exclusively licensed to us by third parties, and the relevant license agreements require us to use diligence in the development and commercialization of products using the licensed patents. Our failure to meet the diligence requirements in any license agreement may result in our loss of some or all of our license rights to the patents licensed thereunder.

The government grants Cardiosonix has received for research and development expenditures restrict our ability to manufacture blood flow monitoring products and transfer technologies outside of Israel and require us to satisfy specified conditions. If we fail to satisfy these conditions, we may be required to refund grants previously received together with interest and penalties, and may be subject to criminal charges.

Cardiosonix received grants from the government of Israel through the Office of the Chief Scientist (OCS) of the Ministry of Industry and Trade for the financing of a portion of its research and development expenditures associated with our blood flow monitoring products. From 1998 to 2001, Cardiosonix received grants totaling \$775,000 from the OCS. The terms of the OCS grants may affect our efforts to transfer manufacturing of products developed using these grants outside of Israel without special approvals. In January 2006, the OCS consented to the transfer of manufacturing as long as Neoprobe complies with the terms of the OCS statutes under Israeli law. As long as we maintain at least 10% Israeli content in our blood flow devices, we will pay a royalty rate of 4% on sales of applicable blood flow devices and must repay the OCS a total of \$1.2 million in royalties. However, should the amount of Israeli content of our blood flow device products decrease below 10%, the royalty rate could increase to 5% and the total royalty payments due could increase to \$2.3 million. This may impair our ability to effectively outsource manufacturing or engage in similar arrangements for those products or technologies. In addition, if we fail to comply with any of the conditions imposed by the OCS, we may be required to refund any grants previously received together with interest and penalties, and may be subject to criminal charges. In recent years, the government of Israel has accelerated the rate of repayment of OCS grants related to other grantees and may further accelerate them in the future.

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

Edgar Filing: NEOPROBE CORP - Form POS AM

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.

10

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

Our business has experienced developments the past two 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 and downsizings to what we consider to be the minimal support structure necessary to operate a publicly traded company. 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 medical device 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 secured indebtedness imposes significant restrictions on us, and a default could cause us to cease operations.

All of our material assets, except the intellectual property associated with our Lymphoseek, RIGS and ACT products under development, have been pledged as collateral for the \$8.1 million in principal amount of our 8% Series A Convertible Notes due December 12, 2008 (the Notes). In addition to the security interest in our assets, the Notes carry substantial covenants that impose significant requirements on us, including, among others, requirements that:

- o we pay all principal, interest and other charges on the Notes when due;
- o we use the proceeds from the sale of the Notes only for permitted purposes, such as Lymphoseek development and general corporate purposes;
- o we nominate and recommend for election as a director a person designated by the holders of the Notes;
- o we keep reserved out of our authorized shares of common stock sufficient shares to satisfy our obligation to issue shares on conversion of the Notes and the exercise of the warrants issued in connection with the sale of the Notes;
- o we achieve annual revenues on a consolidated basis of at least \$5.4 million in 2005, \$6.5 million in 2006, and \$9.0 million in each year thereafter;
- o we maintain minimum cash balances of \$4.5 million at the end of the first six months of 2005, \$4.0 million at the end of the second six months of 2005, and \$3.5 million at the end of each six-month period thereafter; and

Edgar Filing: NEOPROBE CORP - Form POS AM

- o we indemnify the purchasers of the Notes against certain liabilities.

Additionally, with certain exceptions, the Notes prohibit us from:

- o amending our organizational or governing agreements and documents, entering into any merger or consolidation, dissolving the company or liquidating its assets, or acquiring all or any substantial part of the business or assets of any other person;
- o engaging in transactions with any affiliate;
- o entering into any agreement inconsistent with our obligations under the Notes and related agreements;
- o incurring any indebtedness, capital leases, or contingent obligations outside the ordinary course of business;
- o granting or permitting liens against or security interests in our assets;
- o making any material dispositions of our assets outside the ordinary course of business;
- o declaring or paying any dividends or making any other restricted payments; or
- o making any loans to or investments in other persons outside of the ordinary course of business.

Our ability to comply with these provisions may be affected by changes in our business condition or results of our operations, or other events beyond our control. The breach of any of these covenants would result in a default under the Notes, permitting the holders of the Notes to accelerate their maturity and to sell the assets securing them. Such actions by the holders of the Notes could cause us to cease operations or seek bankruptcy protection.

11

Our common stock is traded over the counter, which may deprive stockholders of the full value of their shares.

Our common stock is quoted via the National Association of Securities Dealers' Over The Counter Bulletin Board (OTCBB). As such, our common stock may have fewer market makers, lower trading volumes and larger spreads between bid and asked prices than securities listed on an exchange such as the New York Stock Exchange or the NASDAQ Stock Market. These factors may result in higher price volatility and less market liquidity for the common stock.

A low market price may severely limit the potential market for our common stock.

Our common stock is currently trading at a price substantially below \$5.00 per share, subjecting trading in the stock to certain SEC rules requiring additional disclosures by broker-dealers. These rules generally apply to any non-NASDAQ equity security that has a market price share of less than \$5.00 per share, subject to certain exceptions (a "penny stock"). Such rules require the delivery, prior to any penny stock transaction, of a disclosure schedule explaining the penny stock market and the risks associated therewith and impose various sales practice requirements on broker-dealers who sell penny stocks to persons other than established customers and institutional or wealthy investors. For these types of transactions, the broker-dealer must make a special suitability determination for the purchaser and have received the purchaser's written consent to the transaction prior to the sale. The broker-dealer also must disclose the commissions payable to the broker-dealer, current bid and

Edgar Filing: NEOPROBE CORP - Form POS AM

offer quotations for the penny stock and, if the broker-dealer is the sole market maker, the broker-dealer must disclose this fact and the broker-dealer's presumed control over the market. Such information must be provided to the customer orally or in writing before or with the written confirmation of trade sent to the customer. Monthly statements must be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks. The additional burdens imposed upon broker-dealers by such requirements could discourage broker-dealers from effecting transactions in our common stock.

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 \$0.20 per share and as high as \$0.72 per share during the twelve-month period ended December 31, 2005. Some of the factors leading to the volatility include:

- o price and volume fluctuations in the stock market at large which do not relate to our operating performance;
- o fluctuations in our operating results;
- o financing arrangements we may enter that require the issuance of a significant number of shares in relation to the number of shares currently outstanding;
- o announcements of technological innovations or new products which we or our competitors make;
- o FDA and/or international regulatory actions;
- o developments with respect to patents or proprietary rights;
- o public concern as to the safety of products that we or others develop; and
- o 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.

Until recently, the trading volume for our common stock has been relatively limited. A consistently active trading market for our common stock may not occur on the OTCBB. The average daily trading volume for our common stock on the OTCBB for the twelve-month period ended December 31, 2005 was approximately 168,000 shares.

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.

Edgar Filing: NEOPROBE CORP - Form POS AM

Because we will not pay dividends, 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.

13

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus 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:

- o general economic and business conditions, both nationally and in our markets,
- o our history of losses,
- o our expectations and estimates concerning future financial performance, financing plans and the impact of competition,
- o our ability to implement our growth strategy,
- o anticipated trends in our business,
- o advances in technologies, and
- o other risk factors set forth under "Risk Factors" in this prospectus.

In addition, in this prospectus, we use words such as "anticipates," "believes," "plans," "expects," "future," "intends," 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 prospectus. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements.

USE OF PROCEEDS

This prospectus relates to shares of our common stock that may be offered and sold from time to time by the selling stockholders. We will receive no proceeds from the sale of shares of common stock in this offering.

14

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Edgar Filing: NEOPROBE CORP - Form POS AM

Our common stock trades on the OTCBB under the trading symbol NEOP. 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 2005:			
First Quarter	\$ 0.72	\$ 0.37	\$ 0.46
Second Quarter	0.46	0.30	0.35
Third Quarter	0.40	0.25	0.30
Fourth Quarter	0.32	0.20	0.25
Fiscal Year 2004:			
First Quarter	\$ 1.10	\$ 0.28	\$ 0.90
Second Quarter	1.11	0.41	0.60
Third Quarter	0.60	0.35	0.53
Fourth Quarter	0.61	0.37	0.59

As of March 20, 2006, we had approximately 830 holders of common stock of record.

We have not paid any dividends on our common stock and do not anticipate paying cash dividends 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, below.

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

The following discussion should be read together with our Financial Statements and the Notes related to those statements, as well as the other financial information included in the Form SB-2 Registration Statement, of which this prospectus is a part. 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 the Risk Factors section of this prospectus beginning on page 4.

The Company

Neoprobe Corporation is a biomedical technology company that provides innovative surgical and diagnostic products that enhance patient care. We currently market two lines of medical devices; our neo2000(R) gamma detection systems and the Quantix(R) line of blood flow measurement devices of our subsidiary, Cardiosonix. In addition to our medical device products, we have two radiopharmaceutical products, RIGScan(R) CR and LymphoseekTM, in the 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 Executive Summary 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 gamma device product line and

Edgar Filing: NEOPROBE CORP - Form POS AM

on our ability to successfully commercialize the blood flow products of our subsidiary, Cardiosonix. We cannot assure you, however, 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 continue to be optimistic about the longer-term potential for our other proprietary, procedural-based technologies such as Lymphoseek and RIGS(R) (radio-immuno-guided surgery); however, these technologies are not anticipated to generate any significant revenue for us during 2006. In addition, we cannot assure you that these products will ever obtain marketing clearance from the appropriate regulatory bodies.

15

We believe that the future prospects for Neoprobe are steadily improving as we continue to make progress in all of our lines of business. We expect revenue from our gamma device line to continue to provide a strong revenue base in 2006, and we expect revenue from our Quantix blood flow measurement products to increase substantially in the coming year as the product refinements introduced during 2005 related to our Quantix/ORTM system are evaluated by increasing numbers of surgeons around the world.

We expect 2006 to be a year of positive developments for Neoprobe primarily due to our anticipation that Lymphoseek will enter into and complete pivotal clinical trial activities. We expect to spend approximately \$3.5 million in out-of-pocket expenses on the development of Lymphoseek over the next twelve to eighteen months in order to complete manufacturing validation and scale-up, to complete Phase II and pivotal clinical trials and to prepare for the submission of a new drug application to the U.S. Food and Drug Administration (FDA) which we expect to submit during the first quarter of 2007. We also expect to incur development expenses in 2006 related to innovations we are working on related to our device product lines as well, although we do not currently expect our out-of-pocket expenses to exceed \$1 million related to these projects. We may also incur some development expenses in 2006 related to our RIGS radiopharmaceutical product development although we intend to defer any major expenses until we identify a partner to assist us in the development and commercialization of RIGScan CR. As a result, although we expect to see positive movement in all our lines of business in 2006, we will likely show a loss for the year primarily due to our drug product development efforts.

As of December 31, 2005, our cash and investments on hand totaled \$6.5 million. During 2005, we used \$3.0 million in cash to fund our operations. We believe our currently available capital resources will be adequate to sustain our device operations at planned levels through 2006. If we decide to seek additional funding to support the development of our products and additional financing is not available when required or is not available on acceptable terms, or we are unable to arrange a suitable strategic opportunity, we may need to modify our business plan. We cannot assure you that the additional capital we require will be available on acceptable terms, if at all. We cannot assure you that we will be able to successfully commercialize products or that we will achieve significant product revenues from our current or potential new products. In addition, we cannot assure you that we will achieve or sustain profitability in the future.

Our Outlook for our Gamma Detection Device Products

We believe our core gamma detection device business line will continue to achieve positive results. Our belief is based on continued interest in the

Edgar Filing: NEOPROBE CORP - Form POS AM

research community in lymphatic mapping. The National Cancer Institute (NCI) recently sponsored two large randomized clinical trials (research studies) for breast cancer comparing sentinel lymph node biopsy (SLNB) with conventional axillary lymph node dissection. The trials were conducted by the National Surgical Adjuvant Breast and Bowel Project (NSABP) and the American College of Surgeons Oncology Group (ACOSOG). NSABP and ACOSOG are both NCI-sponsored Clinical Trials Cooperative Groups, which are networks of institutions and physicians across the country who jointly conduct trials. Although several studies have examined the correlation between the sentinel node and the remaining axillary nodes, these are the first two large randomized multi-center trials that will compare the long-term results of sentinel lymph node removal with full axillary node dissection. Both of these trials are now closed. However, final data from these studies likely will not be presented for another two years. We expect the results from these clinical trials, when announced, will have a positive impact on helping us to penetrate the remaining market for breast cancer and melanoma. We also believe that the surgical community will continue to adopt the SLNB application while a standard of care determination is still pending. We also believe that Lymphoseek, our lymphatic targeting agent, should it become commercially available, could significantly improve the adoption of SLNB in future years in areas beyond melanoma and breast cancer.

16

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 neo2000. As a result, we may be reaching saturation within this segment of the market, except for potential replacement sales. As such, our marketing focus in all major global markets for gamma detection devices will continue to be among local/regional hospitals, which typically lag behind leading research centers and major hospitals in adapting to new technologies. A decline in the adoption of SLNB or the development of alternative technologies by competitors may negatively impact our sales volumes, and therefore, revenues and net income in 2006.

During March 2006, our primary gamma device marketing partner, Ethicon Endo-Surgery, Inc. (EES), a Johnson & Johnson company, exercised the second of its two options to extend the termination date of our distribution agreement with them through the end of 2008. As of December 31, 2005, we had approximately \$1.7 million in committed orders from EES that extend through late April 2006. We believe that total quantities of base neo2000 systems expected to be purchased by EES during 2006 should be consistent with 2005 purchase levels. We cannot assure you, however, that EES' product purchases beyond those firmly committed through mid-2006 will indeed occur or that the prices we realize will not be affected by increased competition.

Under the terms of our distribution agreement with EES, the transfer prices we receive on product sales to EES are based on a fixed percentage of their end-customer sales price, 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. The average end-customer sales prices received by EES for our gamma detection devices remained relatively steady and strong for 2005 as compared to 2004 and as a result, the transfer price that we received from selling to EES during 2005 was 22% above the floor pricing for the base system configuration. While we continue to believe in the technical and user-friendly superiority of our products, the competitive landscape continues to evolve and we may lose market share or experience price erosion as a result.

Edgar Filing: NEOPROBE CORP - Form POS AM

A loss of market share or significant price erosion would have a direct negative impact on net income. Although the average price for 2005 was consistent with 2004, sales prices during the second half of 2005 were lower than the first half of the year. If such price erosion should continue into 2006, there is some level of downside pricing risk associated with future sales of our gamma detection devices to EES that may erode some or all of the 22% premium we received in excess of the floor price. However, we believe the anticipated steady volumes coupled will result in continued profitability for our gamma device business line for 2006, even at floor prices.

Our Outlook for our Drugs and Therapeutics

The primary focus of our drug and therapeutic development efforts during 2005 centered around preparing for the start of a pivotal clinical trial for Lymphoseek and this is expected to continue in 2006. Lymphoseek is intended to be used in biopsy procedures for the detection of cancer cells in lymph nodes in a variety of tumor types including breast, melanoma, prostate, gastric and colon cancers. Our Lymphoseek development was focused on three primary areas: drug manufacturing and scale-up, completion of non-clinical safety testing and refinement of a clinical development plan. If approved, Lymphoseek would be the first radiopharmaceutical specifically designed to target lymphatic tissue.

We have recently submitted the Phase II protocol amendment and non-clinical testing data to FDA and are preparing to submit responses to the Chemistry, Manufacturing and Control (CMC) questions asked by FDA. Following review of these items by FDA, we hope to receive approval begin patient enrollment in the Phase II trial in the second quarter and to be in a position to report preliminary results approximately ninety days after the commencement of patient enrollment. While preparing for the Phase II study, we began working with regulatory agencies in Europe to determine the pathway to seek marketing clearance for Lymphoseek in Europe. As a result of those discussions, it is our intention to pursue marketing clearance for Lymphoseek through the centralized authority, the European Agency for the Evaluation of Medicinal Products (EMEA) in London. We intend to review with the EMEA the Phase III protocol design that will be discussed with FDA with the intention of including European sites in the Phase III study. An investigator's meeting was held with the Phase II clinical investigators at the recently completed Society of Surgical Oncology (SSO) meeting in March 2006 in preparation for the initiation of patient enrollment in the Phase II study. In addition, the SSO meeting also gave us the opportunity to meet with and recruit potential investigators for the planned Phase III study of Lymphoseek to be initiated later in 2006. We cannot assure you, however, that this product will achieve regulatory approval, or if approved, that it will achieve market acceptance.

Over the past few years, we have made progress in advancing our RIGScan CR development program while incurring little in the way of research expenses. Our RIGS technology, which had been essentially inactive since the failure to gain approval following our original license application in 1997, has been the subject of renewed interest due primarily to the analysis of survival data related to patients who participated in the original Phase III clinical studies that were completed in 1996. We believe there are development milestones that can be achieved prior to the need for significant capital investment in RIGScan CR such as preparing the request for a special protocol assessment (SPA) and completing a final protocol review. However, we continue to believe it will be necessary for Neoprobe to identify a development partner or an alternative

Edgar Filing: NEOPROBE CORP - Form POS AM

funding source in order to prepare for and to fund the pivotal clinical testing that will be necessary to gain marketing clearance for RIGScan CR. We have engaged in discussions with various parties regarding such a partnership. At the present time, while we have parties who have indicated an interest in entering into a development relationship, we do not believe these efforts will result in a partnership until further clarity can be added to the RIGScan regulatory approval pathway, such as perhaps obtaining a positive SPA determination from FDA. 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 for the RIGS technology and do not know if a partner will be obtained on a timely basis on terms acceptable to us, or at all. We also cannot assure you that FDA or the EMEA will clear our RIGS products for marketing or that any such products will be successfully introduced or achieve market acceptance.

In early 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 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 licenses to several pending patent applications.

During 2005, Cira Bio engaged the Battelle Memorial Institute to complete a technology and manufacturing process assessment of the cellular therapy approach. Cira Bio intends to raise the necessary capital to move this technology platform forward; however, Cira Bio has not yet identified a potential source of capital. The means by which this funding is obtained will likely dilute Neoprobe's ownership interest in Cira Bio; however, we believe that moving forward such a promising technology will only yield positive results for the Neoprobe shareholders and the patients who could benefit from these treatments. However, we do not know if we will be successful in obtaining additional funding, on terms acceptable to us, or at all. In addition, should Cira Bio not be successful in obtaining sufficient capital by December 31, 2006, the technology rights for the oncology applications of ACT would revert back to Neoprobe and the technology rights for the viral and autoimmune applications would revert back to Cira LLC.

Our Outlook for our Blood Flow Measurement Products

We have two blood flow measurement devices, the Quantix/OR and the Quantix/NDTM, that have regulatory clearance to market in the U.S. and European Union (EU) as well as certain other foreign markets. The Quantix/OR is primarily intended to measure blood flow in cardiac bypass graft and other similar procedures while the Quantix/ND is designed to measure blood flow in neurovascular settings. Our efforts concerning the Quantix products in 2006 will be primarily focused on marketing our Quantix/OR system while we work with thought leaders to determine the ultimate market viability of the Quantix/ND. Currently, we have in place or have executed or reached agreement in principle with distributors and/or master distributors for the Quantix/OR covering the United States, all major market countries in the EU as well substantially all countries that comprise the Pacific Rim of Asia. In addition, we have distribution arrangements in place covering major portions of Central and South America. Our primary focus is to secure marketing and distribution partners who possess appropriate expertise in marketing medical devices, preferably ultrasound or cardiac care devices, into

Edgar Filing: NEOPROBE CORP - Form POS AM

our primary target markets, the cardiovascular, vascular surgery and neurosurgical markets.

18

We anticipate spending a significant amount of time and effort in 2006 to market the Cardiosonix blood flow products to a wider market. We will need to continue the management of relationships with thought leaders in the cardiac surgery and neurosurgical fields to gain broader exposure to the advantages of our technology. We anticipate continuing to place blood flow systems with industry thought leaders to obtain critical commercial feedback during the widespread market launch. The market education process we envision will likely take some time to develop in the manner we desire. In addition, the sales cycle for medical devices such as our blood flow products is typically a four to six month cycle. As such, significant end customer sales, if they occur, will likely lag the signing of distribution arrangements.

We expect sales of blood flow products for 2006 to be higher than 2005 although such sales are difficult to gauge in situations where the use of the product is dependent on changes in surgical practice as well as subject to the sales cycles, etc. outlined above. We are also investigating alternative pricing strategies such as per use fees or leasing that may affect the adoption rates for our blood flow measurement devices. As a result, we anticipate that the product development and market support costs we will incur in 2006 will be greater than the revenue we generate from the sales of blood flow devices.

Summary

The strengthening of our gamma product (device and drug) portfolio coupled with the introduction of the Cardiosonix blood flow products should position us to eventually achieve profitable operating performance for our device product lines. However, overall profitable operational results will be significantly affected by our decision to fund drug and therapeutic development activities internally.

We anticipate generating a net profit from the sale of our gamma detection devices in 2005, excluding the allocation of any corporate general and administrative costs; however, we expect to show a loss for our blood flow device product line for 2006 due to continued research and development and increased marketing and administrative support costs that are still required to commercialize the product line. Currently, we expect our blood flow operations, excluding any allocation of corporate general and administrative costs, to approach breakeven during the third or fourth quarters of 2006. However, this expectation is based to a large degree on our anticipation that we will achieve the necessary developmental milestones required to achieve significant commercial sales of our Quantix/OR product in a timely manner. The overall operating results for 2006 will be affected by the amount of development for radiopharmaceutical products. If we are unsuccessful in achieving significant commercial sales of the Quantix/OR product in 2006, or if we modify our business plan and decide to carry out RIGS development internally, our profitability estimates will be adversely affected and our business plan will likely need to be modified.

As a result of our decision to fund Lymphoseek development internally, we do not expect to achieve operating profit during 2006. In addition, our net loss and earnings per share will likely be significantly impacted by the non-cash interest expense we expect to record related to the accounting treatment for the

Edgar Filing: NEOPROBE CORP - Form POS AM

beneficial conversion feature of the convertible debt and for the warrants issued in connection with the private placement we completed in December 2004. Also, we cannot assure you that our current or potential new products will be successfully commercialized or that we will achieve significant product revenues or that we will achieve or be able to sustain profitability in the future.

Results of Operations

We reported revenues for 2005 of \$5.9 million compared to \$6.0 million in the prior year. However, license and other revenues for 2004 included a \$600,000 non-cash item, representing the final installment of deferred revenue related to a distribution agreement we entered into with EES in 1999, and no such revenue was recognized in 2005. The decrease in license and other revenue was offset by increases of \$251,000 related to blood flow device sales, \$203,000 of gamma detection device extended service contract sales, \$73,000 of gamma detection device sales, and \$40,000 of gamma detection device service revenue.

19

Gross profit for 2005 decreased \$64,000 or 2% as compared to 2004. Excluding license and other revenue, gross profit on net sales of our medical devices increased \$536,000 or 18% compared to the prior year. The percentage improvement in gross profit on net sales of our medical devices in 2005 relative to the percentage increase in sales reflects the impact of manufacturing cost control initiatives implemented in 2004 coupled with the positive contribution from the increased service activities.

Results for 2005 also reflect the efforts made in the development of our gamma detection radiopharmaceutical products, RIGScan CR and Lymphoseek. Accordingly, our research and development costs for 2005 increased to \$4.0 million compared to \$2.5 million in 2004. Consolidated general and administrative expenses remained constant at \$3.2 million in 2005 and 2004.

Major expense categories as a percentage of net sales fluctuated from 2004 to 2005 due to increased net sales as well as increased expenses related to our gamma detection radiopharmaceutical and therapeutic products. Research and development expenses, as a percentage of net sales, increased to 68% in 2005 from 46% in 2004 due to increased expenses related to the development of our gamma detection drug and therapeutic products. Selling, general and administrative expenses, as a percentage of net sales, decreased to 53% in 2005 from 59% in 2004 primarily due to the increase in net sales revenue. Due to the ongoing development activities of the company, research and development expenses are expected to be higher as a percentage of sales for 2006 than they were in 2005. In addition, as we move forward with commercialization activities related to the Quantix product line, selling, general and administrative expenses as a percentage of sales are expected to increase in 2006 over 2005.

Years Ended December 31, 2005 and 2004

Net Sales and Margins. Net sales, primarily of our gamma detection systems, increased \$567,000, or 11%, to \$5.9 million in 2005 from \$5.4 million in 2004. Gross margins on net sales increased to 60% of net sales for 2005 compared to 56% of net sales for 2004.

The increase in net sales was the combined result of increases of \$251,000 in blood flow device sales, \$203,000 in gamma detection device extended service contract sales, \$73,000 in gamma detection device sales, and \$40,000 in gamma

Edgar Filing: NEOPROBE CORP - Form POS AM

detection device service revenue. The price at which we sell our gamma detection products to EES is based on a percentage of the global average selling price received by EES on sales of Neoprobe products to end customers, subject to a minimum floor price. The base system price at which we sold neo2000 systems to EES increased approximately 1% from 2004 to 2005.

The increase in gross margins on net product sales was the combined result of increased extended service contract sales which typically generate higher margins than sales of our devices coupled with slightly decreased unit costs to manufacture our neo2000 control unit. Gross margins in 2005 were adversely affected by inventory impairments of \$42,000 related to our laparoscopic probe product as well as impairments of \$13,000 related to our Quantix products. Gross margins in 2004 were adversely affected by a \$107,000 impairment charge related to obsolete Quantix inventory.

License and Other Revenue. License and other revenue for 2004 included \$600,000 from the pro-rata recognition of license fees related to the distribution agreement with EES. These license fees were fully amortized into income as of the end of the third quarter of 2004. No license revenue was recorded in 2005.

Research and Development Expenses. Research and development expenses increased \$1.6 million, or 64%, to \$4.0 million during 2005 from \$2.5 million in 2004. Research and development expenses in 2005 included approximately \$2.3 million in drug and therapy product development costs, \$1.4 million in product design activities for the Quantix products and \$276,000 gamma detection device development costs. This compares to expenses of \$489,000, \$1.6 million and \$404,000 in these respective product categories in 2004. The changes in each category were primarily due to (i) efforts to move our development of Lymphoseek forward, (ii) the costs of product refinement activities related to the Quantix/OR offsetting cost savings from headcount reductions at our facility in Israel, and (iii) development activities related to updated versions of our neo2000 control unit and detector probes, respectively.

20

Selling, General and Administrative Expenses. Selling, general and administrative expenses remained steady at \$3.2 million during 2005 and 2004. Increases in U.S. headcount and compensation coupled with increases in certain overhead costs such as professional services and facilities expenses were offset by decreased marketing expenses and decreases in certain other overhead costs such as travel, insurance and taxes.

Other Income (Expenses). Other expenses decreased \$257,000 to \$1.3 million during 2005 from \$1.5 million during 2004. The primary reason for the decrease was a \$1.1 million decrease in warrant liability resulting from the accounting treatment for the warrants we issued in connection with the private placement of convertible debt we completed in December 2004. In addition, we recorded an increase of \$198,000 in interest income resulting from maintaining a higher balance of cash and investments during 2005 compared to 2004. We also recorded interest expense of \$1.4 million and \$334,000 during 2005 and 2004, respectively, related to debt financings entered into during 2004 and 2003. Of this interest expense, \$687,000 and \$268,000 in 2005 and 2004, respectively, was non-cash in nature related to the amortization of debt issuance costs and discounts resulting from the warrants and beneficial conversion features of the convertible debt.

Liquidity and Capital Resources

Edgar Filing: NEOPROBE CORP - Form POS AM

Operating Activities. Cash used in operations increased \$2.2 million to \$3.0 million during 2005 from \$825,000 during 2004. Working capital decreased \$3.5 million to \$6.9 million at December 31, 2005 as compared to \$10.4 million at December 31, 2004. The current ratio decreased to 5.6:1 at December 31, 2005 from 11.3:1 at December 31, 2004. The decrease in working capital was primarily related to cash used in operations coupled with cash used in investing activities.

Cash and investment balances decreased to \$6.5 million at December 31, 2005 from \$9.8 million at December 31, 2004, primarily as a result of cash used to fund operating activities and service our debt during 2005.

Accounts receivable increased to \$673,000 at December 31, 2005 from \$412,000 at December 31, 2004. The increase was primarily a result of timing of purchases and payments by EES. We expect overall receivable levels will continue to fluctuate in 2006 depending on the timing of purchases and payments by EES. However, on average, we expect accounts receivable balances will start to increase commensurate with anticipated increases in sales of blood flow products to our distributors, many of whom are foreign-domiciled entities who typically pay at a slower rate than domestic companies. Such increases, if any, will require the increased use of our cash resources over time.

Inventory levels decreased to \$804,000 at December 31, 2005 from \$855,000 at December 31, 2004. During 2005, we wrote off inventory totaling \$42,000 related to our laparoscopic probe product and \$13,000 related to our Quantix products. We expect inventory levels to increase during 2006 as we ramp up our blood flow device business, reassess our gamma detection and blood flow measurement device safety stock levels, and prepare for radiopharmaceutical product distribution.

Investing Activities. Cash used in investing activities increased \$1.5 million to \$1.6 million during 2005 from \$111,000 during 2004. We purchased \$5.5 million and received \$4.0 million from maturities of available-for-sale securities during 2005. Capital expenditures during 2005 were primarily related to purchases of production tools and equipment in preparation for blood flow measurement device production at our contract manufacturers. Capital expenditures during 2004 were primarily purchases of technology infrastructure. Capital needs for 2006 are expected to increase over 2005 as we start up blood flow product production at our contract manufacturers and establish alternative sales financing arrangements for our blood flow devices such as leasing and per use sales pricing.

Financing Activities. Financing activities used \$273,000 in cash during 2005 versus providing \$9.2 million during 2004. Proceeds from the issuance of common stock were \$58,000 and \$2.3 million in 2005 and 2004, respectively. Proceeds from notes payable were \$8.1 million 2004. Payments of common stock and debt issuance costs were \$30,000 and \$767,000 in 2005 and 2004, respectively. Payments of notes payable were \$190,000 lower during 2005 as compared to 2004, primarily due to the repayment of a note to our CEO in 2004.

During 2004, we sold a total of 2,350,000 shares of common stock and realized net proceeds of \$1,468,874 under the terms of a 2001 common stock purchase agreement with the Fusion Capital Fund II, LLC. We also issued Fusion 66,129 shares of common stock for commitment fees related to the sales of our common stock to them during 2004. No common stock was issued to Fusion during 2005. The

Edgar Filing: NEOPROBE CORP - Form POS AM

Fusion common stock purchase agreement expired under its own terms in February 2006.

During April 2003, we completed a bridge loan agreement with our President and CEO, David Bupp. Under the terms of the agreement, Mr. Bupp advanced us \$250,000. In consideration for the loan, we issued a note to Mr. Bupp in the principal amount of \$250,000. The note was secured by general assets of the company, excluding accounts receivable. In addition, we issued Mr. Bupp 375,000 warrants to purchase our common stock at an exercise price of \$0.13 per share, expiring in April 2008. The note bore interest at 8.5% per annum, payable monthly, and was originally due on June 30, 2004. On March 8, 2004, at the request of the Board of Directors, Mr. Bupp agreed to extend the due date of the note from June 30, 2004 to June 30, 2005. In exchange for extending the due date of the note, we issued Mr. Bupp an additional 375,000 warrants to purchase our common stock at an exercise price of \$0.50 per share, expiring in March 2009. On December 13, 2004, we repaid the balance of the note to Mr. Bupp.

During April 2003, we also completed a convertible bridge loan agreement with an outside investor for an additional \$250,000. In consideration for the loan, we issued a note to the investor in the principal amount of \$250,000. The note was secured by general assets of the company, excluding accounts receivable. In addition, we issued the investor 500,000 warrants to purchase our common stock at an exercise price of \$0.13 per share, expiring in April 2008. Under the terms of the agreement, the note bore interest at 9.5% per annum, payable monthly, and was due on June 30, 2004. During January 2004, the investor converted the entire balance of the note into 1.1 million shares of common stock according to the conversion terms of the agreement.

During 2004, the certain investors who received warrants to purchase our common stock in connection with a November 2003 financing exercised a total of 3,230,066 warrants in exchange for 3,197,854 shares of our common stock. Of the warrants exercised by these investors in 2004, 3,134,783 were exercised in exchange for 3,134,783 shares of our common stock resulting in net proceeds of \$871,398. The remaining 95,283 warrants exercised in 2004 were exercised on a cashless basis in exchange for 63,071 shares of our common stock. During 2005, certain investors and placement agents related to this financing also exercised a total of 206,865 warrants in exchange for 206,865 shares of our common stock, resulting in net proceeds of \$57,922.

In December 2004, we completed a private placement of Convertible Promissory Notes in an aggregate principal amount of \$8.1 million with Biomedical Value Fund, L.P., Biomedical Offshore Value Fund, Ltd. and David C. Bupp (our President and CEO). Biomedical Value Fund, L.P. and Biomedical Offshore Value Fund, Ltd. are funds managed by Great Point Partners, LLC. The notes bear interest at 8% per annum and are freely convertible into shares of our common stock at a price of \$0.40 per share. Neoprobe may force conversion of the notes prior to their stated maturity under certain circumstances. The conversion price represents the ten-day volume weighted average trading price of our common stock through December 10, 2004. As part of this transaction, we issued the investors 10,125,000 warrants to purchase our common stock at an exercise price of \$0.46, expiring in December 2009. In connection with this financing, we also issued 1,600,000 warrants to purchase our common stock to the placement agents, containing substantially identical terms to the warrants issued to the investors.

Our future liquidity and capital requirements will depend on a number of factors, including our ability to raise additional capital in a timely manner through additional investment, expanded 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 other international

Edgar Filing: NEOPROBE CORP - Form POS AM

regulatory bodies, and intellectual property protection. We believe we now have adequate capital to assure that we can properly support our current business goals and objectives for 2006. Our near-term priorities are to commence multi-center trials for our Lymphoseek product, support the launch of the reengineered version of the Quantix/OR products, identify a development and commercialization partner for our RIGS technology, complete a technology assessment of our ACT technology and continue to innovate our gamma detection product line. We cannot assure you that we will be able to achieve significant product revenues from our current or potential new products. We also cannot assure you that we will achieve profitability again.

22

Contractual Obligations and Commercial Commitments

The following table presents our contractual obligations and commercial commitments as of December 31, 2005.

Contractual Cash Obligations	Payments Due By Period				
	Total	Less than 1 Year	1 - 3 Years	4 - 5 Years	After 5 Years
Capital Leases (1)	\$ 61,151	\$ 24,769	\$ 33,897	\$ 2,485	\$ --
Operating Leases	208,819	100,129	108,690	--	--
Unconditional Purchase Obligations (2)	1,869,255	1,869,255	--	--	--
Long-Term Debt (3)	10,012,043	648,000	9,364,043	--	--
Total Contractual Cash Obligations	\$12,151,268 =====	\$ 2,642,153 =====	\$ 9,506,630 =====	\$ 2,485 =====	\$ -- =====

- (1) These amounts include interest at rates between 8% and 13%.
- (2) These amounts represent purchases under binding purchase orders for which we are required to take delivery of the product under the terms of the underlying supply agreements going out approximately one year.
- (3) These amounts include interest at 8% on \$8.1 million in outstanding principal due in December 2008, payable in either cash or common stock.

Recent Accounting Developments

In November 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 151, Inventory Costs - An Amendment of ARB No. 43, Chapter 4. This statement amends the guidance in ARB No. 43 Chapter 4, Inventory Pricing, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). Paragraph 5 of ARB No. 43, Chapter 4,

Edgar Filing: NEOPROBE CORP - Form POS AM

previously stated that ". . . under some circumstances, items such as idle facility expense, excessive spoilage, double freight, and rehandling costs may be so abnormal to require treatment as a current period charge. . . ." This statement requires that those items be recognized as current-period charges regardless of whether they meet the criterion of "so abnormal." In addition, this statement requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. The provisions of this statement will be effective for inventory costs during fiscal years beginning after June 15, 2005. Neoprobe does not believe that the adoption of this statement will have a material impact on its financial condition or results of operations.

In December 2004, the FASB issued SFAS No. 123 (revised 2004), Share-Based Payment, which is a revision of SFAS No. 123, Accounting for Stock-Based Compensation (SFAS No. 123R). SFAS No. 123R supersedes APB Opinion No. 25, Accounting for Stock Issued to Employees, and amends SFAS No. 95, Statement of Cash Flows. Generally, the approach in SFAS No. 123R is similar to the approach described in SFAS No. 123. However, SFAS No. 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative. We must adopt SFAS No. 123R for interim or annual reporting periods beginning after December 15, 2005. Early adoption will be permitted in periods in which financial statements have not yet been issued. We adopted SFAS No. 123R effective January 1, 2006.

23

As permitted by SFAS No. 123, during 2005 Neoprobe accounted for share-based payments to employees using APB Opinion No. 25's intrinsic value method and, as such, generally recognized no compensation cost for employee stock options. However, had we adopted SFAS No. 123R in prior periods, the impact of that standard would have approximated the impact of SFAS No. 123 as described in the disclosure of pro forma net loss and loss per share in Note 1(1) to our consolidated financial statements. The adoption of SFAS No. 123R's fair value method will have a significant impact on our results of operations, although it will have no impact on our overall cash position. Based on options outstanding at December 31, 2005, we estimate that the adoption of SFAS No. 123R will result in additional compensation expense of approximately \$260,000 in 2006 and \$115,000 in 2007. However, these amounts may change significantly depending on levels of share-based payments granted in the future and the assumptions for the variables which impact the computation. SFAS No. 123R also requires the benefits of tax deductions in excess of recognized compensation cost to be reported as a financing cash flow, rather than as an operating cash flow as required under current literature.

In December 2004, the FASB issued SFAS No. 153, Exchanges of Nonmonetary Assets - An Amendment of APB Opinion No. 29, Accounting for Nonmonetary Transactions (SFAS No. 153). SFAS No. 153 eliminates the exception from fair value measurement for nonmonetary exchanges of similar productive assets in paragraph 21(b) of APB Opinion No. 29, Accounting for Nonmonetary Transactions, and replaces it with an exception for exchanges that do not have commercial substance. SFAS No. 153 specifies that a nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. SFAS No. 153 is effective for fiscal periods beginning after June 15, 2005 and is required to be adopted by Neoprobe beginning January 1, 2006. Neoprobe is currently evaluating the effect that the adoption of SFAS No. 153 will have on its consolidated results of operations and

Edgar Filing: NEOPROBE CORP - Form POS AM

financial condition but does not expect it to have a material impact.

In June 2005, the FASB issued SFAS No. 154, Accounting Changes and Error Corrections - A Replacement of APB Opinion No. 20 and FASB Statement No. 3 (SFAS No. 154). SFAS No. 154 supersedes APB Opinion No. 20, Accounting Changes, and SFAS No. 3, Reporting Accounting Changes in Interim Financial Statements. SFAS No. 154 requires retrospective application to prior periods' financial statements of a voluntary change in accounting principle unless it is impracticable. APB Opinion No. 20 previously required that most voluntary changes in accounting principle be recognized by including in net income of the period of the change the cumulative effect of changing to the new accounting principle. SFAS No. 154 requires that a change in method of depreciation, amortization, or depletion for long-lived, nonfinancial assets be accounted for as a change in accounting estimate that is effected by a change in accounting principle. APB Opinion No. 20 previously required that such a change be reported as a change in accounting principle. SFAS No. 154 carries forward many provisions of APB Opinion No. 20 without change, including the provisions related to the reporting of a change in accounting estimate, a change in the reporting entity, and the correction of an error. SFAS No. 154 also carries forward the provisions of SFAS No. 3 that govern reporting accounting changes in interim financial statements. SFAS No. 154 is effective for fiscal years beginning after December 15, 2005 and is required to be adopted by Neoprobe beginning January 1, 2006. We do not expect the adoption of SFAS No. 154 to have a material impact on our consolidated results of operations and financial condition.

In September 2005, the Emerging Issues Task Force (EITF) ratified EITF No. 05-8, Income Tax Consequences of Issuing Convertible Debt with a Beneficial Conversion Feature (EITF No. 05-8). EITF No. 05-8 determined that (a) the issuance of convertible debt with a beneficial conversion feature results in a difference between book basis and tax basis of the debt instrument, (b) such difference between book basis and tax basis of the debt instrument is temporary in nature, and (c) the recognition of deferred taxes for the temporary difference of convertible debt with a beneficial conversion feature should be recorded as an adjustment to additional paid-in capital. EITF No. 05-8 is required to be applied retrospectively, and is effective beginning in the first interim or annual reporting period beginning after December 15, 2005. Neoprobe is required to adopt EITF No. 05-8 beginning January 1, 2006. We do not expect the adoption of EITF No. 05-8 to have a material impact on our consolidated results of operations or financial condition, however we do expect the adoption of EITF No. 05-8 to result in a material change in our income tax disclosures.

In February 2006, the FASB issued SFAS No. 155, Accounting for Certain Hybrid Financial Instruments - An Amendment of FASB Statements No. 133 and 140 (SFAS No. 155). SFAS No. 155 amends SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, and SFAS No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities. SFAS No. 155 (a) permits fair value remeasurement for any hybrid financial instrument that contains an embedded derivative that otherwise would require bifurcation, (b) clarifies which interest-only strips and principal-only strips are not subject to the requirements of SFAS No. 133, (c) establishes a requirement to evaluate interests in securitized financial assets to identify interests that are freestanding derivatives or that are hybrid financial instruments that contain an embedded derivative requiring bifurcation, (d) clarifies that concentrations of credit risk in the form of subordination are not embedded

Edgar Filing: NEOPROBE CORP - Form POS AM

derivatives, and (e) amends SFAS No. 140 to eliminate the prohibition on a qualifying special-purpose entity from holding a derivative financial instrument that pertains to a beneficial interest other than another derivative financial instrument. SFAS No. 155 is effective for all financial instruments acquired or issued after the beginning of an entity's first fiscal year that begins after September 15, 2006 and is required to be adopted by Neoprobe beginning January 1, 2007. We do not expect the adoption of SFAS No. 155 to have a material impact on our consolidated results of operations and financial condition.

Critical Accounting Policies

The following accounting policies are considered by us to be critical to our results of operations and financial condition.

Revenue Recognition Related to Net Sales. We currently generate revenue primarily from sales of our gamma detection products; however, sales of blood flow products constituted approximately 6% of total revenues for 2005 and are expected to increase in the future. Our standard shipping terms are FOB shipping point, and title and risk of loss passes to the customer upon shipment. We generally recognize sales revenue related to sales of our products 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 have no right to return products purchased in the ordinary course of business.

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

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.

Use of Estimates. The preparation of financial statements in conformity with U.S. generally accepted accounting principles 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:

- o **Allowance for Doubtful Accounts.** We maintain an allowance for doubtful accounts receivable to cover estimated losses resulting from the inability of our customers to make required payments. We determine the adequacy of this allowance by regularly reviewing our accounts receivable aging and evaluating individual customer receivables, considering customers' credit and financial condition, payment history and relevant economic conditions. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances

for doubtful accounts may be required.

25

- o 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, product recalls and variation in product utilization all impact the estimates related to excess and obsolete inventory.
- o Impairment or Disposal of Long-Lived Assets. We account for long-lived assets in accordance with the provisions of SFAS No. 144. This Statement requires that long-lived assets and certain identifiable intangibles be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net undiscounted cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be 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. As of December 31, 2005, the most significant long-lived assets on our balance sheet relate to assets recorded in connection with the acquisition of Cardiosonix and gamma detection device patents related to SLNB. The recoverability of these assets is based on the financial projections and models related to the future sales success of Cardiosonix' products and the continuing success of our gamma detection product line. As such, these assets could be subject to significant adjustment should the Cardiosonix technology not be successfully commercialized or the sales amounts in our current projections not be realized.
- o 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. Our accrual for warranty expenses is adjusted periodically to reflect actual experience. EES also reimburses us for a portion of warranty expense incurred based on end customer sales they make during a given fiscal year.
- o Fair Value of Warrant Liability. U.S. generally accepted accounting principles required us to classify the warrants issued in connection with our December 2004 placement of convertible promissory notes as a liability due to penalty provisions contained in the underlying securities purchase agreement. The penalty provisions could have required us to pay a penalty of 0.0667% per day of the total debt amount if we failed to meet certain registration deadlines, or if our stock was suspended from trading for more than 30 days. As a liability, the warrants were considered derivative instruments that were required to be periodically "marked to market" on

Edgar Filing: NEOPROBE CORP - Form POS AM

our balance sheet. We estimated the fair value of the warrants at December 31, 2004 using the Black-Scholes option pricing model. On February 16, 2005, Neoprobe and the investors confirmed in writing their intention that the penalty provisions which led to this accounting treatment were intended to apply only to the \$8.1 million principal balance of the promissory notes and underlying conversion shares and not to the warrant shares. Because the value of our stock increased \$0.19 per share from \$0.40 per share at the closing date of the financing on December 14, 2004 to \$0.59 per share at December 31, 2004, our year end, the effect of marking the warrant liability to "market" at December 31, 2004 resulted in an increase in the estimated fair value of the warrant liability of \$1.2 million which was recorded as non-cash expense during the fourth quarter of 2004. Subsequently, the value of our stock increased \$0.02 per share from \$0.59 at December 31, 2004 to \$0.61 per share at February 16, 2005, such that marking the warrant liability to "market" at February 16, 2005 resulted in an increase in the estimated fair value of the warrant liability of \$142,427 which was recorded as non-cash expense during the first quarter of 2005. The estimated fair value of the warrant liability was then reclassified to additional paid-in capital during the first quarter of 2005.

26

Other Items Affecting Financial Condition

At December 31, 2005, we had U.S. net operating tax loss carryforwards and tax credit carryforwards of approximately \$131.3 million and \$4.3 million, respectively, available to offset or reduce future income tax liability, if any, through 2025. However, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, use of prior tax loss and credit carryforwards may be limited after an ownership change. 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 tax loss carryforwards and tax credit carryforwards may be significantly limited.

DESCRIPTION OF BUSINESS

Development of the Business

We are a biomedical company that develops and commercializes innovative products that enhance patient care and improve patient outcome by meeting the critical intraoperative diagnostic information needs of physicians and therapeutic treatment needs of patients. 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(R)) technology. At that point, an evaluation of the status of the regulatory pathway for our RIGS products coupled with our limited financial resources caused us to suspend development activities related to our radiopharmaceutical business and to retrench our organization to focus on our medical device business. After achieving profitability in 2000 following this retrenchment, we set out on a strategy to expand our medical device portfolio

Edgar Filing: NEOPROBE CORP - Form POS AM

outside the cancer field. In December 2001, we took a major step in executing this strategy with the acquisition of Biosonix Ltd., a private Israeli company limited by shares, which we subsequently renamed Cardiosonix Ltd. (Cardiosonix).

Cardiosonix is commercializing the Quantix(R) line of blood flow measurement devices for a variety of diagnostic and surgical applications in the cardiac and vascular management arena. The decision to expand beyond our product focus on oncology was based on our belief that the Cardiosonix products would diversify the markets we address. We believe the Cardiosonix product line has significant market potential and a path of market adoption similar to our gamma detection devices, but one that also has significant operational synergies in development, regulation and manufacturing to that of our gamma devices.

In addition, although our strategic focus expanded to include cardiac and vascular blood flow management, we continued to look for other avenues to reinvigorate our radiopharmaceutical development. During 2004, our efforts resulted in a number of positive events that caused us to take steps to re-activate development of our radiopharmaceutical and therapeutic initiatives. As a result, we now have two of our radiopharmaceutical products, LymphoseekTM and RIGScan(R) CR, on the verge of entering Phase II and Phase III, and Phase III clinical trials, respectively. In early 2005, we also formed a new subsidiary, Cira Biosciences, Inc. (Cira Bio), to evaluate the current market opportunities for another technology platform, activated cellular therapy (ACT). Our unique virtual business model combines revenue generation from medical devices with the capital infusions we received in late 2004 to allow us to fund Lymphoseek development while we look for a development partner to assist us in the final clinical and commercial development for RIGScan CR and to evaluate the commercial opportunities for ACT.

Our Technology

Gamma Detection Devices

Through 2005, substantially all of our revenue has been generated from the sale of a line of gamma radiation detection devices and related products 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 the U.S. Food and Drug Administration (FDA) and other international regulatory agencies for marketing and commercial distribution throughout most major global markets.

27

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 contained 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 pocket flashlight. The neo2000(R) Gamma Detection System, originally released in 1998, is the third generation of our gamma detection systems. The neo2000 is designed as a platform for future growth of our instrument business. The neo2000 is software upgradeable and is designed to support future surgical targeting probes without the necessity of costly remanufacture. Since 1998, we have developed and released three major software upgrades for customer units designed to improve the utility of the system and/or offer the users additional features.

Surgeons are using our gamma detection devices in a surgical application referred to as sentinel lymph node biopsy (SLNB) or intraoperative lymphatic

Edgar Filing: NEOPROBE CORP - Form POS AM

mapping (lymphatic mapping or ILM). ILM helps trace the lymphatic 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. The 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. The agent is intended to follow the same lymphatic flow as the cancer would if it had metastasized. The surgeon may then track the 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.

Numerous clinical studies, involving a total of nearly two thousand patients and published in peer-reviewed medical journals such as *Oncology* (January 1999) and *The Journal of The American College of Surgeons* (December 2000), have indicated ILM 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 ILM 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 topics of sentinel lymph node biopsy and ILM. Furthermore, a number of thought leaders and cancer treatment institutions have recognized and embraced the technology as standard of care for melanoma and, in some cases, for breast cancer. Our marketing partner continues to see strong sales, especially for use in breast cancer treatment. Lymphatic mapping in breast cancer is the subject of national and international clinical trials, including studies sponsored by the U.S. Department of Defense, the National Cancer Institute (NCI) and the American College of Surgeons. Although we have been selling gamma detection devices for use in surgical oncology for over seven years, we believe many surgeons in the U.S. and the rest of the world have delayed adoption of lymphatic mapping pending the outcome of these important trials. We believe that once data from these trials are published; there will be an additional demand for our devices. We continue to monitor these trials and to work with our marketing partners and thought leaders in the surgical community to set up and support training courses internationally for lymphatic mapping. 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 devices are used, that roughly half of the potential global market for devices such as ours remains untapped. Courses showcasing our instruments continue to be held at many nationally and internationally renowned cancer-specializing and teaching institutions. These courses appear to be positively impacting the adoption of lymphatic mapping, albeit not as rapidly as we would like to see.

In addition to lymphatic mapping, surgeons are investigating the use of our device for other gamma guided surgery applications, such as evaluating the thyroid function, in determining the state of disease in patients with vulvar and penile cancers, and in SLNB in prostate, gastric, colon, head and neck and non-small cell lung cancers. Expanding the application of ILM beyond the current primary uses in the treatment of breast cancer and melanoma is the primary focus of our strategy regarding our gamma guided surgery products. To support that expansion, we continue to work with our marketing and distribution partners to develop additional software-based enhancements to the neo2000 platform as well as new probes such as the laparoscopic probe introduced in 2002 that supports the minimally invasive emphasis in today's practice of surgery. To that end, our goals for our gamma device business for 2006 center around introducing additional improvements to our neo2000 system and working with our marketing partners to further penetrate the breast care market and identify ways to expand

the application of ILM to other indications beyond breast cancer and melanoma. We also believe that our development of Lymphoseek could be an integral step in helping expand the application of ILM.

Blood Flow Measurement Devices

Accurate blood flow measurement is essential for a variety of clinical needs, including:

- o real-time monitoring;
- o intra-operative quantification;
- o non-invasive diagnostics; and
- o evaluation of cardiac function.

Blood flow velocity measurements are often confused with volume blood flow. These two variables, however, are normally different parameters that respond differently to pathological conditions and provide different data. Blood flow velocity is used primarily for determining the existence of a stenosis (narrowing or obstruction) in the vascular surgery setting, while the applications of blood flow volume have potential impact across a much broader range of medical disciplines.

Cardiosonix has developed and is commercializing the Quantix line of products that employ a unique and proprietary technology that allows for measurement of blood flow volume, velocity and several other hemodynamic parameters that permit the real-time assessment of conduit hemodynamic status.

The Quantix technology utilizes a special application of the Doppler method through simultaneous projection of a combination of narrow beams with a known angle between them. Thus, based on trigonometric and Doppler considerations, the angle of insonation can be obtained, resulting in accurate, angle-independent blood flow velocity measurements that do not require the use of complicated, expensive imaging systems. In order to obtain high-resolution velocity profiles, the Quantix devices use a multi-gated pulse wave Doppler beam. With this method, specific sample volumes along the ultrasound beam can be separately evaluated, and the application of a flow/no flow criterion can be made. The Cardiosonix technology applies a special use of digital Doppler technology, which with the digital signal processing power of the system allows hundreds of sample volumes to be sampled and processed simultaneously, thus providing high resolution velocity profiles for both angle and vascular diameter calculations, and subsequently volume blood flow measurements. At present, Cardiosonix has two products in the early stages of commercialization designed to provide blood flow measurement and cardiac output information to physicians in cardiac/vascular surgery and neurosurgery. The technology also has the potential to be applied in other healthcare settings where measurement of blood flow may be beneficial.

Quantix/ORTM is designed to permit cardiovascular surgeons to obtain intraoperative volume blood flow readings in various targeted blood vessels within seconds. The system consists of an insonation angle-independent ultrasound probe and digital numerical displays of blood flow rate. Thus, the surgeon obtains immediate, real-time and quantitative readings while focused on the target vessel. Quantifying blood flow can be very beneficial during anastomotic or other bypass graft procedures to determine adequate blood flow. While measurement is advisable whenever a blood vessel is exposed and manipulated intra-operatively, generally this is not the current practice.

Edgar Filing: NEOPROBE CORP - Form POS AM

Ultimately, in practice, the surgeon generally resorts to using his eyes and fingers in a process called finger palpation to qualitatively assess vessel flow. The Quantix/OR offers the surgeon immediate and simple quantitative assessment of blood flow in multiple blood vessels and grafts. The primary advantage of finger palpation is that it is fast, simple and low cost; the disadvantages are that it requires a good deal of experience, it is difficult to perform in vessels embedded in tissue, it can become difficult to interpret in large vessels, and it permits only a very qualitative and subjective assessment. A significant partial occlusion (or even a total occlusion) will result in significant vessel "distention" and strong pulse that may mislead the surgeon. Rather than rely on such a subjective clinical practice, which is highly experience-dependent, the Quantix/OR is designed to allow the surgeon to rely on more quantifiable and objective information. We believe that Quantix/OR represents a measurable improvement over existing technologies to directly measure blood flow intraoperatively. Other technologies that attempt to measure intraoperative blood flow directly are generally more invasive and are impractical when non-skeletonized vessel measurements are required. As a result, a majority of surgeons generally resort to finger palpation to qualitatively, rather than quantitatively, measure vessel perfusion.

29

The initial physician and distributor evaluation of the flagship product, the Quantix/OR, during 2004 indicated a number of design deficiencies that needed to be corrected before further commercial distribution of the product was advisable. The development activities for the Quantix/OR over the last year have therefore involved modification of the user interface software functions and a redesign of the Quantix/OR probe ergonomics to enhance system performance, improve ease of measurement and expand physician acceptance of the system. The Quantix/OR device has received CE mark regulatory clearance for marketing in the European Union (EU) as well as FDA 510(k) clearance for marketing in the United States.

Quantix/NDTM is intended to allow neurosurgeons and neurologists, as well as intensive care unit or emergency room physicians, to non-invasively measure the internal carotid artery blood flow in a simple, real-time manner. Quantix/ND consists of a control unit and an ultrasound probe that obtains signals directly from the carotid artery in a non-invasive manner. Quantix/ND is designed primarily for use in monitoring head trauma patients in neuro-intensive care units and emergency rooms. Periodic blood flow measurements may minimize the risk of brain impairment. To-date, we have placed the Quantix/ND device with a limited number of thought leaders. While we are unaware of any competitive measurement system on the market today that provides real-time, bedside, non-invasive, continuous, direct and accurate measurements of a complete suite of hemodynamic parameters including blood flow, we also believe that the current market for the Quantix/ND may be primarily as a research tool until additional feedback is received from those who are evaluating the device. The Quantix/ND device has received CE mark regulatory clearance for marketing in the EU as well as FDA 510(k) clearance for marketing in the United States.

Our strategy related to Cardiosonix products for 2006 continues to emphasize the three primary objectives we have established for the Quantix product line:

- o to secure and train additional marketing and distribution partners for key global markets for the Quantix/OR device;
- o to achieve commercial sales of Cardiosonix' Quantix products beyond demonstration unit sales that would demonstrate broader market acceptance of the products; and

Edgar Filing: NEOPROBE CORP - Form POS AM

- o to promote and expand the clinical evaluation of the Quantix/ND and Quantix/OR with thought leaders in the neurosurgical, cardiovascular and vascular surgery arenas.

We cannot assure you, however, that any of Cardiosonix' products will achieve market acceptance. See Risk Factors.

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 were used. The product we are working on with the greatest near-term potential in this area involves a proprietary drug compound under exclusive worldwide license from the University of California, San Diego (UCSD) that we refer to as Lymphoseek. If proven effective and cleared for commercial sale, Lymphoseek would be the first radiopharmaceutical specifically designed and labeled for the targeting of lymphatic tissue.

30

Neoprobe and UCSD completed the initial pre-clinical evaluations of Lymphoseek in 2001. Since that time, UCSD has initiated four Phase I clinical trials involving Lymphoseek. The status of these trials is listed below:

Indication -----	Number of Patients -----	Status -----
Breast (peritumoral injection)	24	Completed
Melanoma	24	Completed
Breast (intradermal injection, next day surgery)	60	Ongoing
Prostate	60	Ongoing

These Phase I studies have been supported, including being substantially funded through research grants, by 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 these clinical evaluations of Lymphoseek have been presented at recent meetings of the Society of Nuclear Medicine, the Society of Surgical Oncology and the World Sentinel Node Congress.

In November 2003 we met with the Interagency Council on Biomedical Imaging in Oncology (Interagency Council), 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 investigational new drug (IND) application to FDA to support the marketing clearance of Lymphoseek.

In the first quarter of 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.

Edgar Filing: NEOPROBE CORP - Form POS AM

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 non-clinical testing was successfully completed in the fourth quarter of 2005 and the reports were filed with FDA in December. 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.

In preparation for the commencement of the multi-center clinical study, Neoprobe engaged the services of a global clinical research organization (CRO) to oversee and monitor the conduct of the Phase II and Phase III clinical studies. Neoprobe and the CRO began working with some of the leading cancer treatment hospitals in the United States that Neoprobe had identified to participate in the clinical studies. We developed and are reviewing with the clinical sites and regulatory agencies the Phase II protocol, investigator's brochure and case report forms to obtain regulatory clearance and institutional clearance from the clinical sites to commence patient enrollment in the Phase II study. An investigator's meeting was held with the Phase II clinical investigators at the recently completed Society of Surgical Oncology (SSO) meeting in March 2006 in preparation for the initiation of patient enrollment in the Phase II study. In addition, we used the SSO meeting as a venue to meet with and recruit potential investigators for the planned Phase III study of Lymphoseek to be initiated later in 2006.

Upon the submission of the IND and draft Phase II protocol, FDA advised Neoprobe that commercially produced Lymphoseek would need to be used in the Phase II clinical study, as opposed to using drug previously manufactured in laboratories at UCSD for the Phase II clinical study. Also, the regulatory agencies raised a number of Chemistry, Manufacturing and Control (CMC) questions regarding the drug compound and its complete characterization. Neoprobe began the transfer of bulk drug manufacturing to Reliable Biopharmaceutical early in 2005 and engaged Cardinal Health to develop and validate procedures and assays to establish commercial standards for the formulation, filling and lyophilization of the drug compound. Developing responses to FDA to their CMC questions proved to be more challenging than originally anticipated, but both Reliable and Cardinal are concluding their work and we believe we will be in a position to submit a CMC response to FDA in April 2006.

31

With the completion and acceptance by FDA of the Phase II protocol amendment, the submission of non-clinical testing data and the pending submission of responses to CMC questions asked by FDA, we hope to begin patient enrollment in the Phase II trial in the second quarter and to be in a position to report preliminary results approximately ninety days after the commencement of patient enrollment. While preparing for the Phase II study, we began working with regulatory agencies in Europe to determine the pathway to seek marketing clearance for Lymphoseek in Europe. As a result of those discussions, it is our intention to pursue marketing clearance for Lymphoseek through the centralized authority, the European Agency for the Evaluation of Medicinal Products (EMA) in London. We intend to review with the EMA the Phase III protocol design that will be discussed with FDA with the intention of including European sites in the Phase III study. In addition, we have been discussing the evaluation of Lymphoseek in gastric cancers with researchers in Japan and we intend to provide commercial Lymphoseek kits to the investigators to assist in their evaluation. We cannot assure you, however, that this product will achieve regulatory approval, or if approved, that it will achieve market acceptance. See Risk Factors.

Edgar Filing: NEOPROBE CORP - Form POS AM

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, proprietary radiolabeled cancer-specific targeting agents, and patented surgical methods to provide surgeons with real-time information to locate tumor deposits not detectable by conventional methods, and to assist in more thorough removal of the cancer. 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 agents used in the RIGS process are monoclonal antibodies, 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 CR is an intraoperative agent consisting of a radiolabeled murine monoclonal antibody (MAb CC49). The radiolabel used is (^{125}I) , a 27 - 35 KeV emitting isotope. The MAb used in RIGScan CR is the CC49 MAb developed by the NCI and 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 and shows a strong reactivity with both LS-174T colon cancer extract and to a breast cancer extract.

RIGScan CR is the biologic component for the RIGS system to be used in patients with colon or rectal cancer. The RIGS system was conceived to be a diagnostic aid in the intraoperative detection of clinically occult disease. RIGScan CR is intended to be used in conjunction with other diagnostic methods, for the detection of the extent and location of tumor 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 used as a component of the RIGS system 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 III 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 United States, Israel, and Europe. The primary endpoint of both studies was to demonstrate that RIGScan CR detected pathology-confirmed disease that had been undetected 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 the EMEA and FDA for marketing approval of RIGScan CR for the detection of metastatic colorectal cancer.

Edgar Filing: NEOPROBE CORP - Form POS AM

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.

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 the EMEA. Both FDA and EMEA acknowledged that our studies met the diagnostic endpoint of the Phase III 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 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 the EMEA 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 pathways for approval that existed at that time, we determined that we did not have sufficient financial resources to conduct the additional studies requested and sought to identify others with an interest in continuing the development process.

In recent years, we have obtained access to survival analyses of patients treated with RIGScan CR which have been prepared by third parties, indicating 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. The data or its possible significance was unknown at the time of the BLA review given the limited maturity of the follow-up experience.

Edgar Filing: NEOPROBE CORP - Form POS AM

The data includes publication by some of the primary investigators involved in the Phase III 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. In addition, we have recently learned that FDA has held the BLA originally filed with FDA in 1996 open. Based primarily on these pieces of information, we requested a meeting with FDA to discuss the possible next steps for evaluating the survival related to our previous Phase III clinical trials as well as the possible submission of this data, if acceptable, as a prospective analysis in response to questions originally asked by FDA in response to our original BLA.

33

The April 2004 meeting with FDA was an important event in the re-activation of the RIGS program. The meeting was very helpful from a number of aspects: we 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. Applicability to a general colorectal population could result in a greater market potential for the product than if applicable to just the recurrent population. During the meeting, FDA indicated that it would consider possible prognostic indications for RIGScan CR and that survival data from one of our earlier Phase III studies could be supportive of a prognostic indication. We provided FDA with a draft protocol for a Phase III prognostic/therapeutic trial.

Neoprobe received a response from FDA that the prognostic/therapeutic trial design appeared to meet their guidelines. FDA's response to our clinical submission included an invitation for Neoprobe to seek a special protocol assessment (SPA) of its proposed Phase III study. Neoprobe intends to seek a SPA review of the complete Phase III package including the clinical protocol, training materials and data collection forms later this year. In concert with our meetings with FDA, we met with representatives of the European regulatory body, the EMEA, to seek guidance for the RIGScan CR program in Europe. The guidance from the EMEA was consistent with the input from FDA with the additional recommendation that any future clinical studies be conducted with the humanized version of the RIGScan CR antibody. It is possible that the regulatory pathway may continue to evolve as we seek to reach a consensus with the regulatory agencies on the reactivation of the BLA for RIGScan CR.

In addition, the RIGScan CR biologic drug has not been produced for several years and we believe it is likely we would have to perform some additional work related to ensuring the drug cell line is still viable and submit this data to FDA for their evaluation before approval could be considered. We have initiated discussions with established biologic manufacturing organizations to determine the costs and timelines associated with the production of commercial quantities of the CC49 antibody. In addition, we will need to establish radiolabeling capabilities for the CC49 antibody in order to meet the regulatory needs for the RIGScan CR product.

In parallel with our discussions with the regulatory authorities, we have discussed the clinical and regulatory strategy for RIGScan CR with reimbursement consultants who provided us with valuable input regarding the potential target pricing for a RIGScan product.

Edgar Filing: NEOPROBE CORP - Form POS AM

In November 2005, Neoprobe submitted a corporate IND application for the modified humanized version of RIGScan CR. With the establishment of the corporate IND, responsibility for the clinical and commercial development of the humanized version of RIGScan CR was officially transferred from a physician sponsored IND to Neoprobe. Prior to the evaluation of modified antibody in a Phase I clinical trial, all clinical development of RIGScan CR had been conducted with a murine (i.e., mouse DNA-based) version of a monoclonal antibody. The Phase I trial was the first test in human patients using a modified version of the antibody from which the prominent parts of the mouse DNA chain had been removed. In early 2006, we filed an IND amendment that included a final report to FDA of the Phase I study.

During 2005, we devoted significant effort, working in connection with business development consultants, toward the identification of potential development partners for RIGScan CR. Our efforts to date have resulted in discussions with a number of parties, some of which have led to due diligence and partnership discussions. We continue to believe it will be necessary for Neoprobe to identify a development partner or an alternative funding source in order to prepare for and to fund the pivotal clinical testing that will be necessary to gain marketing clearance for RIGScan CR. However, while we have parties who have indicated an interest in the technology, none of the discussions to-date have resulted in definitive agreements with any party or parties. In addition, we do not believe these efforts will result in a partnership until further clarity can be added to the RIGScan regulatory approval pathway, such as perhaps obtaining a positive SPA determination from FDA. 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 for the RIGS technology and do not know if a partner will be obtained on a timely basis on terms acceptable to us, or at all. We also cannot assure you that FDA or the EMEA will clear our RIGS products for marketing or that any such products will be successfully introduced or achieve market acceptance. See Risk Factors.

34

Activated Cellular Therapy

Through various research collaborations, we performed early stage research 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 numbering more than 20 billion, 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 lymphocytes containing helper T-cells could be activated and expanded to treat viral and autoimmune disease afflicted patients as well as oncology patients. We have seen promising efficacy of this technology demonstrated from six Phase I 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

Edgar Filing: NEOPROBE CORP - Form POS AM

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.

Cira Bio engaged the Battelle Memorial Institute to complete a technology and manufacturing process assessment of the cellular therapy approach. In addition, a scientific advisory group is being formed to develop a clinical and regulatory approach for the Cira Bio technology. Following the completion of these assessments and the formation of a commercialization strategy, Cira Bio intends to raise the necessary capital to move this technology platform forward. The means by which this funding is obtained will likely dilute Neoprobe's ownership interest in Cira Bio; however, we believe that moving forward such a promising technology will only yield positive results for the Neoprobe shareholders and the patients who could benefit from these treatments. However, we do not know if we will be successful in obtaining additional funding, on terms acceptable to us, or at all.

In addition, although the prospects for ACT may be improved depending on the outcome of a decision to renew development efforts for RIGS, we currently do not intend to fund any significant ACT-related research and development beyond the evaluation work performed in 2005 until a source of further funding is identified. We cannot assure you that we will be successful in obtaining additional funding, or if obtained, that any ACT products will be successfully developed, tested or licensed, or that any such products will gain market acceptance. See Risk Factors.

Market Overviews

The medical device marketplace is a fast growing market. Medical Device & Diagnostic Industry magazine reports an annual medical device and diagnostic market of \$75 billion in the U.S. and \$169 billion internationally.

Cancer Market Overview

Cancer is the second leading cause of death in the U.S. and Western Europe and is responsible for over half a million deaths annually in the U.S. alone. The NIH estimates the overall annual costs for cancer (the primary focus of our gamma detection and pharmaceutical products) for the U.S. in the year 2005 at \$209.9 billion: \$74.0 billion for direct medical costs, \$17.5 billion for indirect morbidity, and \$118.4 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 the ACS, are expected to account for 15% and 4%, respectively, of new cancer cases in the U.S. in 2006.

The NIH has estimated that breast cancer will annually affect approximately 500,000 women in North America, Western Europe, and other major economic markets. Breast cancer is the second leading cause of death from cancer among all women in the U.S. According to the ACS, nearly 213,000 new cases of invasive breast cancer are expected to be diagnosed and approximately 41,000 women are

Edgar Filing: NEOPROBE CORP - Form POS AM

expected to die from the disease during 2006 in the U.S. alone. The incidence of breast cancer increases with age, rising from about 100 cases per 100,000 women at age 40 to about 400 cases per 100,000 women at age 65. Thus, we believe that the significant aging of the population, combined with improved education and awareness of breast cancer and diagnostic methods, will 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 currently treat the majority of breast cancer patients. Over 10,000 hospitals are located in the markets targeted for our gamma detection ILM products. While we are aware of no published statistics on the number of institutions that are currently using gamma detection devices in ILM, we believe that approximately fifty percent of the total potential global market for gamma detecting devices remains to be penetrated at this time. However, if the potential of Lymphoseek as a radioactive tracing agent is ultimately realized, it has the potential to 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 ILM 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 \$200 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.

The ACS estimates that over 147,000 new incidences of colon and rectal cancers will occur in the U.S. in 2006. Based on an assumed recurrence rate of 40%, this would translate into total potential surgical procedures of over 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.

Blood Flow Measurement Market Overview

Cardiovascular disease is the number one killer of men and women in the U.S. and in a majority of countries in the rest of the world that track such statistics. The Centers for Disease Control registered over 6.8 million inpatient cardiovascular procedures in the U.S. during 2003 that directly involve cardiovascular circulation. In the United States in 2003, the National Center for Healthcare Services estimates that there were 467,000 coronary artery bypass surgeries performed on 268,000 patients. We, as well as our competitors and other industry analysts, generally estimate the rest of the world's incidence of such modalities at roughly twice U.S. estimates.

The American Heart Association (AHA) estimates the total cost of cardiovascular diseases and stroke in the United States will exceed \$403.1 billion in 2006. A substantial portion of these expenditures is expected to be for non-invasive image and intravascular examination. We are focused on two distinct markets within the hospital setting for Cardiosonix' products:

- o intraoperative assessment (Quantix/OR); and,
- o non-invasive diagnostics (Quantix/ND).

Based on data obtained from the AHA, the Society of Thoracic Surgeons and the American Hospital Association, it is estimated that there are approximately 1 million vascular and cardiovascular procedures performed in the U.S. that could benefit from qualitative blood flow measurement. Based on these estimates, information obtained from industry sources and data published by our competitors and other medical device companies, we estimate the worldwide total of target procedures to be approximately two times the U.S. totals.

Based on the above number of procedures, assuming we are able to achieve market prices that are comparable to what our competitors are achieving (estimated at averaging \$20,000 per system or \$130 per procedural use), we believe the worldwide market potential for blood flow measurement products in the niches which our products address to be more than \$1.5 billion. We believe that gaining even a modest share of this market would result in significant annual revenues for our company. We cannot assure you, however, that Cardiosonix products will achieve market acceptance and generate the level of sales or prices anticipated.

Marketing and Distribution

Gamma Detection Devices

We began marketing the current generation of our gamma detection systems, the neo2000, in October 1998. Since October of 1999, our gamma detection systems have been marketed and distributed throughout most of the world through Ethicon Endo-Surgery, Inc. (EES), a Johnson & Johnson company. In Japan, however, we market our products through a pre-existing relationship with Century Medical, Inc.

The heart of the neo2000 system is a control unit that is software-upgradeable, permitting product enhancements without costly remanufacturing. Since the original launch of the neo2000 system, we have introduced an enhanced version of our 14mm reusable probe optimized for lymphatic mapping procedures and a laparoscopic probe intended for certain minimally invasive procedures. We have also developed three major software version upgrades for the system that have been made available for sale to customers. We intend to continue developing additional ILM-related probes and instrument products in cooperation with EES to maintain our leadership position in the ILM field.

Physician training is critical to the use and adoption of ILM products by surgeons and other medical professionals. Our company and our marketing partners have established relationships with leaders in the ILM 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 ILM training courses available to surgeons.

We entered into our current 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 two-year term extension, thus extending the term of our current agreement through December 31, 2008. Under this agreement, we manufacture and sell our ILM products almost exclusively to EES, who distributes the products globally (except for Japan). EES has no ongoing purchase or reimbursement commitments to us other than the rolling four-month binding purchase commitment for gamma detection devices as outlined in the distribution agreement. Our agreement with EES 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

Edgar Filing: NEOPROBE CORP - Form POS AM

such as a change of control. See Risk Factors.

Gamma Detection Radiopharmaceuticals

We have not established a marketing or distribution channel for either RIGScan CR or Lymphoseek. We anticipate initiating such discussions as we continue to move forward with clinical development. We have had initial discussions with parties who may be interested in marketing and distribution of these products; however, such discussions to date have been preliminary in nature and have not resulted in any definitive arrangements. With respect to RIGScan CR, we believe there are development milestones that can be achieved prior to the need for significant capital investment in RIGScan CR such as preparing the request for a SPA and completing a final protocol review. However, we continue to believe it will be necessary for Neoprobe to identify a development partner or an alternative funding source in order to prepare for and to fund the pivotal clinical testing that will be necessary to gain marketing clearance for RIGScan CR. At the present time, while we have parties who have indicated an interest in entering into a development relationship, we do not believe these efforts will result in a definitive partnership until at least a positive SPA is obtained. We cannot assure you that we will be able to secure marketing and distribution partners for RIGS or Lymphoseek, or if secured, that such arrangements will result in significant sales of either product.

37

Blood Flow Measurement Devices

Both of our blood flow measurement devices, the Quantix/ND and Quantix/OR have received marketing clearance in the U.S. and the EU and certain other foreign markets. Our goal is to ensure sales and distribution coverage through third parties of substantially all of the U.S., the EU, the Pacific Rim of Asia and selective markets in the rest of the world. Currently, we have in place or have executed or reached agreement in principle with distributors and/or master distributors for the Quantix/OR covering the United States, all major market countries in the European Union as well substantially all countries that comprise the Pacific Rim of Asia. In addition, we have distribution arrangements in place covering major portions of Central and South America.

The initial negative response to the original Quantix/OR system strained many of our distributor relationships; however, we are heartened by the distributor response to the changes and improvements we have made to the Quantix/OR system. Despite the difficulties we have encountered, our underlying belief in the market need for a reliable system to measure blood flow has not been dampened. We continue to believe strongly in the blood flow market and believe the redesigned Quantix/OR system will generate increasing sales in 2006 and beyond.

In addition to the development activities on the Quantix/OR, the first multi-center data from the correlation of Cardiac Blood Flow (CBF) measurement with accepted clinical events was presented at the International Conference on Xenon CT-CBF and Related CBF Techniques in Bordeaux, France in June 2004. The presentation of the clinical evaluations of the Quantix/ND has set the stage for the broader adoption of the technology in the monitoring of patients with neuro-trauma and other neurology situations.

We anticipate spending a significant amount of time and effort during 2006 to penetrate the end-user market. We will need to complete the training of our distributors and independent sales agents and work through them with thought

Edgar Filing: NEOPROBE CORP - Form POS AM

leaders in the cardiac and neurosurgical fields to gain penetration at the end-user level. We anticipate placing some additional blood flow systems with industry thought leaders to obtain critical feedback; however, we plan to continue working with the thought leaders already identified to promote publication in support of more widespread market launch. To date, we have placed a small number of devices with thought leaders in the U.S. and EU to support clinical investigations by their institutions. We are also investigating different sales models that include both capital sales and per-use or lease-type transactions. We expect the sales model will evolve over the initial months of sales. The market education process we envision will likely take some time to develop in the manner we desire. In addition, the sales cycle for capital medical devices such as our blood flow products is typically a four to six month cycle.

Manufacturing

Gamma Detection Devices

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 for our gamma detection systems at qualified contract manufacturers. Production of the neo2000 control unit, the 14mm probe and the 11mm laparoscopic probe involve the manufacture of components by a combination of subcontractors, including but not limited to eV Products, a division of II-VI Corporation (eV), and TriVirix International, Inc. (TriVirix). Currently, we have a manufacturing and supply agreement with TriVirix for the manufacture of the 14mm probe, 11mm laparoscopic probe and the neo2000 control unit. We also purchase certain accessories for our line of gamma detection systems from other qualified manufacturers.

In December 1997, we entered into a supply agreement with eV for the supply of certain crystals and associated electronics to be used in the manufacture of our proprietary line of hand-held gamma detection probes. The original term of the agreement with eV expired on December 31, 2002 and was automatically extended through December 31, 2005. eV supplies 100% of the crystals used in our products. While eV is not the only potential supplier of such crystals, any prolonged interruption of this source could restrict the availability of our probe products, which would adversely affect our operating results.

38

In February 2004, we executed a Product Supply Agreement with TriVirix for the manufacture of the neo2000, 14mm probe and 11mm laparoscopic probe. The initial term of this agreement expires in February 2007 but will automatically be 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 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

Edgar Filing: NEOPROBE CORP - Form POS AM

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 multi-center clinical evaluation of Lymphoseek, Neoprobe has engaged drug manufacturing organizations to produce the drug for use in the Phase II and pivotal (i.e., Phase III) clinical trials. Neoprobe selected Reliable Biopharmaceuticals (Reliable) to produce the basic chemical compound and Cardinal Health (Cardinal) to perform product lyophilization (i.e., freeze-drying) and packaging processes. Once packaged, the vialled drug can then be shipped to a hospital or regional commercial radiopharmacy where it can be made radioactive (i.e., radiolabeled) with Tc99m to become Lymphoseek. The commercial manufacturing processes at Reliable and Cardinal have been validated and both organizations have assisted Neoprobe in the preparation of chemistry, manufacturing and control section of our submissions to FDA. At this point, our agreements with Reliable and Cardinal cover only product to be used in the clinical trials for Lymphoseek. Further commercial supply and distribution agreements have yet to be negotiated with both Reliable and Cardinal. We cannot assure you that we will be successful in reaching such agreements with Reliable or Cardinal on terms satisfactory to us or at all.

In preparation for the initiation of the next phase of clinical evaluation of RIGScan CR, we have also initiated discussions with potential biologic manufacturers and radiolabeling organizations. We have held discussions with parties who may assist in the manufacturing validation and radiolabeling of the RIGScan product; however, we have not yet finalized agreements with these entities. We anticipate finalizing these discussions following securing a development partner in order to accommodate the commencement of future RIGScan CR clinical trials. 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.

Blood Flow Measurement Devices

The Quantix blood flow measurement devices distributed to date have been manufactured by our subsidiary, Cardiosonix Ltd. In early 2006, we received the approval from the Office of the Chief Scientist in Israel to transfer manufacturing rights for the Quantix devices to Neoprobe. See Risk Factors. Future assembly of Quantix blood flow control units will therefore be done under the terms of the Product Supply Agreement we have in place with TriVirix for the assembly of our gamma devices. Assembly of the Quantix/OR control units started at TriVirix in March 2006. We currently purchase ultrasound transducer modules and probe subassemblies from Vermon S.A. (Vermon) of France under purchase orders. The ultrasound probe assemblies are then completed by Technical Services for Electronics, Inc. (TSE), also under purchase orders.

We cannot assure you that we will be able to finalize supply and service agreements with Vermon, TSE or other subcontractors for the Quantix products, that we will be able to maintain our agreement with TriVirix, 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.

39

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 and the measurement of blood flow. 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 emergence of ILM, 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, SenoRx, Pol.Hi.Tech. Srl, and other companies. GE Healthcare (GE) has recently entered the gamma detection market through an arrangement with Intra-Medical Imaging LLC. We are still assessing the impact of GE's entry into the market.

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 a large corporation or privately held corporations, whose sales revenue or volume data is, therefore, 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 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. As we have discussed, we believe that current sales levels indicate that some prospective customers may be waiting on the results of important international clinical trials prior to adoption the ILM procedure and purchasing a gamma detection device. We expect the results from these trials, when announced, will likely have a positive impact on sales volumes. 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,

Edgar Filing: NEOPROBE CORP - Form POS AM

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 CR that would be used intraoperatively in the colorectal cancer application that RIGScan CR 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 CR.

40

Surgeons who practice the lymphatic mapping procedure that Lymphoseek is intended for currently use other radiopharmaceuticals such as a sulphur-colloid compound in the U.S. and other colloidal compounds in other markets. However, these drugs are being used "off-label" (i.e., they are not specifically indicated for use as a lymphatic targeting agent). As such, we believe that Lymphoseek, if ultimately approved, would be the first drug specifically labeled for use as a lymphatic tissue targeting agent.

Blood Flow Measurement Devices

There are several technologies on the market that measure or claim to measure indices of blood flow. These products can be categorized as devices that measure blood flow directly and devices that only obtain an estimation of flow conditions. We believe our device is most directly competitive with Transit Time Ultrasound (TT) Flowmetry. TT is the leading modality for blood flow measurement in the operating room today. TT systems monitor blood flow invasively and are restricted to isolated vessels. They require probe adaptation to the vessel size, and do not provide additional vascular parameters. The technology requires the operator to encircle the blood vessel with a probe that includes two ultrasound transmitters/receivers on one side, and a mirror reflector on the opposite side of the vessel. By measuring the transit time of the ultrasound beam in the upstream and downstream directions, volume blood flow estimates can be evaluated. In addition, there are other competitive technologies which utilize Doppler ultrasound. Doppler technology has been around for several decades, and is being widely used in non-invasive vascular diagnostics. Duplex ultrasound systems have the potential to measure blood flow non-invasively. Duplex systems are designed for imaging the anatomical severity of pathology. This method is technician-dependent, often cumbersome and does not offer monitoring capabilities. Plain Doppler systems provide only blood flow velocity rather than volume flow.

Cardiosonix products are designed to address blood flow measurement across a variety of clinical and surgical settings, and there are a number of companies already in the marketplace that offer products related to blood flow measurement. However, most of these products do not directly compete with Cardiosonix products. The companies that do offer potentially competitive products are, for the most part, smaller, privately held companies, with which we believe we can effectively compete. Indeed, due to our belief in the technical superiority of our products, we believe the existence of competitors will help to educate the marketplace regarding the importance of blood flow measurement. As we have discussed, adoption of blood flow monitoring devices for the measurement of hemodynamic status will likely take an involved education process as it often involves a change in clinical or surgical management. While

Edgar Filing: NEOPROBE CORP - Form POS AM

there is not a clear leader in these markets, the following companies compete most directly with Cardiosonix: Transonic Systems, Inc., Medi-Stim AS, and Carolina Medical, Inc.

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. Specifically, twenty instrument patents have been issued in the United States as well as major foreign markets protect our ILM technology.

Cardiosonix has also applied for patent coverage for the key elements of its Doppler blood flow technology in the EU and the U.S. The first of the two patents covering Cardiosonix technology was issued in the U.S. in January 2003 and claims for the second patent have been allowed. Two patents have been filed in the EU and the claims of one patent have been allowed and the claims of the second patent are in the late stage of review by the relevant governing bodies.

Lymphoseek is also the subject of patent applications in the United States and certain major foreign markets. The patent applications are held by UCSD and licensed exclusively to Neoprobe for lymphatic tissue imaging and detection. The first composition of matter patent covering Lymphoseek was issued in the U.S. 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 is being prosecuted in Japan.

41

We continue to maintain 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. The original methodology aspects of our RIGS technology are claimed in the United States in U.S. Patent No. 4,782,840, which expired in August 2005. However, Neoprobe has recently gained access to additional methodology applications related to our RIGS technology that are covered by patents that provide additional patent coverage through 2018, unless extended. In addition to the RIGS methodology patents, 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 issued in 2004 and additional patent applications are pending.

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 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

Edgar Filing: NEOPROBE CORP - Form POS AM

questions. Potential competitors may have filed applications for, 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. See Risk Factors.

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.

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

Edgar Filing: NEOPROBE CORP - Form POS AM

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 and Blood Flow Measurement Devices

As a manufacturer of medical devices sold in various global markets, we are required to manufacture the devices under quality system regulations (QSR) and maintain appropriate technical files and quality records. Our medical devices are regulated in the United States by FDA. Our medical devices are regulated in the EU according to the Medical Device Directive (93/42/EEC). Under this regulation, we must obtain CE Mark status for all products exported to the EU.

Our initial generation gamma detection instruments received 510(k) marketing clearance from FDA in December 1986 with modified versions receiving similar clearances in 1992 through 1997. In 1998, FDA reclassified "nuclear uptake detectors" as being exempt from the 510(k) process. We believe the neo2000 device is exempt from the 510(k) process because it is substantially equivalent to previously cleared predecessor devices. We obtained the CE Mark for the neo2000 device in January 1999, and therefore, must continue to manufacture the devices under a quality system compliant to the requirements of ISO 9001/EN 46001 and maintain appropriate technical files. We maintain a license to import our gamma devices into Canada, and therefore must continue to manufacture the devices under a quality system compliant to the requirements of ISO 13485 and relevant Canadian regulations.

Cardiosonix has received 510(k) and CE mark clearance to market the Quantix/ND device in the U.S. and EU for non-invasive applications. The Quantix/OR has also received CE Mark clearance to market in the EU and 510(k) clearance to market in the U.S. Our distribution partners in certain foreign markets other than the EU are seeking marketing clearances, as required, for both the Quantix/ND and Quantix/OR.

Edgar Filing: NEOPROBE CORP - Form POS AM

Gamma Detection Radiopharmaceuticals (Lymphoseek and RIGScan)

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.

Employees

As of March 20, 2006, we had 21 full-time employees. We consider our relations with our employees to be good.

DESCRIPTION OF PROPERTY

We currently lease approximately 11,300 square feet of office space at 425 Metro Place North, Dublin, Ohio, as our principal offices. The current lease term is from February 1, 2005 and ending on January 31, 2008, at a monthly base rent of approximately \$8,300 during 2006. 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.

OUR MANAGEMENT

Directors, Executive Officers, Promoters and Control Persons

Directors

The following directors' terms continue until the 2006 Annual Meeting:

Kirby I. Bland, M.D., age 64, has served as a director of our Company since May 2004. Dr. Bland currently serves as Professor and Chairman and Fay Fletcher Kerner Professor and Chairman, Department of Surgery of the University of Alabama at Birmingham (UAB) School of Medicine since 1999 and 2002, respectively, Deputy Director of the UAB Comprehensive Cancer Center since 2000 and Senior Scientist, Division of Human Gene Therapy, UAB School of Medicine since 2001. Prior to his appointments at UAB, Dr. Bland was J. Murry Breadsley Professor and Chairman, Professor of Medical Science, Department of Surgery and Director, Brown University Integrated Program in Surgery at Brown University School of Medicine from 1993 to 1999. Prior to his appointments at Brown University, Dr. Bland was Professor and Associate Chairman, Department of Surgery, University of Florida College of Medicine from 1983 to 1993 and Associate Director of Clinical Research at the University of Florida Cancer Center from 1991 to 1993. Dr. Bland held a number of medical staff positions at the University of Louisville, School of Medicine from 1977 to 1983 and at M. D. Anderson Hospital and Tumor Institute from 1976 to 1977. Dr. Bland is a member of the Board of Governors of the American College of Surgeons (ACS), a member of the ACS' Advisory Committee, Oncology Group (ACOSOG), a member of the ACS' American Joint Committee on Cancer Task Force and serves as Chairman of the ACS' Breast Disease Site Committee, COC. Dr. Bland is a past President of the Society of Surgical Oncology. Dr. Bland received his B.S. in Chemistry/Biology from Auburn University and a M.D. degree from the University of Alabama, Medical College of Alabama.

J. Frank Whitley, Jr., age 63, has served as a director of our Company since May 1994. Mr. Whitley was Director of Mergers, Acquisitions and Licensing at The Dow Chemical Company (Dow), a multinational chemical company, from June 1993 until his retirement in June 1997. After joining Dow in 1965, Mr. Whitley served in a variety of marketing, financial, and business management functions. Mr. Whitley has a B.S. degree in Mathematics from Lamar State College of Technology.

The following directors' terms continue until the 2007 Annual Meeting:

Reuven Avital, age 54, has served as a director of our Company since January 2002. Mr. Avital is a partner and general manager of Ma'Aragim Enterprises Ltd., an investment company in Israel, and he is a member of the board of Neoprobe as well as a number of privately-held Israeli companies, three of them in the medical device field. Mr. Avital was a board member of Cardiosonix, Ltd. from April 2001 through December 31, 2001, when we acquired the company. Previously, Mr. Avital served in the Israeli government in a variety of middle and senior management positions. He is also chairman or board member in several not-for-profit organizations, mainly involved in education for the under-privileged and international peace-building. Mr. Avital has B.A. degrees in The History of the Middle East and International Relations from the Hebrew University of Jerusalem, and a M.P.A. from the Kennedy School of Government at Harvard University.

Edgar Filing: NEOPROBE CORP - Form POS AM

David C. Bupp, age 56, 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 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.

45

Julius R. Krevans, M.D., age 81, has served as a director of our Company since May 1994 and as Chairman of the Board of Directors of our Company since February 1999. Dr. Krevans served as Chancellor of the University of California, San Francisco from July 1982 until May 1993. Prior to his appointment as Chancellor, Dr. Krevans served as a Professor of Medicine and Dean of the School of Medicine at the University of California, San Francisco from 1971 to 1982. Dr. Krevans is a member of the Institute of Medicine, National Academy of Sciences, and led its committee for the National Research Agenda on Aging until 1991. Dr. Krevans also serves on the Board of Directors and the compensation committee of the Board of Directors of Calypte Biomedical Corporation (Calypte), a publicly held corporation. Dr. Krevans has a B.S. degree and a M.D. degree, both from New York University.

The following directors' terms continue until the 2008 Annual Meeting:

Carl J. Aschinger, Jr., age 67, has served as a director of our Company since June 2004. Mr. Aschinger is the Chairman and Chief Executive Officer of 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 also serves on the Board of Directors and as Chairman of the Audit Committee of Wilson-Bohannon, a privately-held company that manufactures padlocks. 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.

Fred B. Miller, age 66, 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.

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	45	Vice President, Manufacturing Operations
Carl M. Bosch	49	Vice President, Research and Development
Rodger A. Brown	55	Vice President, Regulatory Affairs and Quality Assurance
Brent L. Larson	42	Vice President, Finance; Chief Financial Officer; Treasurer and Secretary
Douglas L. Rash	62	Vice President, Marketing

Anthony K. Blair has served as Vice President, Manufacturing Operations of our Company since July 2004. Prior to joining our Company, he 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.

Carl M. Bosch has served as Vice President, Research and Development of our Company since March 2000. Prior to that, Mr. Bosch served as our Director, Instrument Development from May 1998 to March 2000. Before joining our Company, Mr. Bosch was employed by GE Medical Systems from 1994 to 1998 where he served as Manager, Nuclear Programs. From 1977 to 1994, Mr. Bosch was employed by GE Aerospace in several engineering and management functions. Mr. Bosch has a B.S. degree in Electrical Engineering from Lehigh University and a M.S. degree in Systems Engineering from the University of Pennsylvania.

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 Operations 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.

Brent L. Larson has served as Vice President, Finance and Chief Financial Officer of our Company since February 1999. Prior to that, he served as our Vice President, Finance from July 1998 to January 1999 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.

Douglas L. Rash has served as Vice President, Marketing of our Company since

Edgar Filing: NEOPROBE CORP - Form POS AM

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.

47

Family Relationships

There are no family relationships among the directors and executive officers of the Company.

Code of Conduct and Ethics

We have adopted a code of conduct and ethics that applies to our directors, officers and all employees. The code of 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.

Audit Committee Financial Expert

The Board of Directors of Neoprobe has determined that Fred B. Miller, a member of the Audit Committee, qualifies as Neoprobe's audit committee financial expert under Item 401 of Regulation S-B under the Securities Act of 1933, and that he is independent, as that term is defined in Item 7(d)(3) of Schedule 14A under the Securities Exchange Act of 1934.

48

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 having annual compensation in excess of \$100,000 during the last fiscal year (the Named Executives) for the last three fiscal years.

Edgar Filing: NEOPROBE CORP - Form POS AM

Name and Principal Position	Annual Compensation			
	Year	Salary	Bonus (e)	Other
Anthony K. Blair Vice President, Manufacturing Operations	2005	\$ 115,000	\$ 1,875	\$ 2,204 (a)
	2004	55,000	--	--
	2003	--	--	--
Carl M. Bosch Vice President, Research and Development	2005	\$ 149,000	\$ 7,500	\$ 2,980 (b)
	2004	138,375	6,000	2,887 (b)
	2003	135,125	--	6,573 (b)
Rodger A. Brown Vice President, Regulatory Affairs/ Quality Assurance	2005	\$ 124,000	\$ 1,875	\$ --
	2004	117,300	2,500	--
	2003	125,316	--	--
David C. Bupp President and Chief Executive Officer	2005	\$ 290,000	\$ 45,000	\$ 5,744 (c)
	2004	271,250	15,000	5,770 (c)
	2003	222,167	32,500	32,566 (c)
Brent L. Larson Vice President, Finance and Chief Financial Officer	2005	\$ 149,000	\$ 7,500	\$ 2,986 (d)
	2004	137,700	6,000	2,874 (d)
	2003	135,125	--	11,733 (d)

-
- (a) Amount represents solely matching contribution 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 five 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 is intended to qualify 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.
 - (b) Amounts represent solely matching contribution under the Plan, except for 2003, which includes \$3,870 related to the vesting of restricted stock.
 - (c) Amounts represent matching contribution under the Plan and social luncheon club dues, except for 2003, which includes \$27,090 related to the vesting of restricted stock.
 - (d) Amounts represent solely matching contribution under the Plan, except for 2003, which includes \$9,030 related to the vesting of restricted stock.
 - (e) Bonuses, if any, have been disclosed for the year in which they were earned (i.e., the year to which the service relates).

Option Grants in Last Fiscal Year

The following table presents certain information concerning stock options granted to the Named Executives under the 2002 Stock Incentive Plan during the 2005 fiscal year.

Edgar Filing: NEOPROBE CORP - Form POS AM

Individual Grants

Name	Number of Securities Underlying Options Granted (shares)	Percent of Total Options Granted to Employees in Fiscal Year	Exercise Price Per Share	Expiration Date (c)
Anthony K. Blair	30,000 (a)	6%	\$ 0.26 (b)	12/27/2015
Carl M. Bosch	40,000 (a)	8%	\$ 0.26 (b)	12/27/2015
Rodger A. Brown	20,000 (a)	4%	\$ 0.26 (b)	12/27/2015
David C. Bupp	200,000 (a)	41%	\$ 0.26 (b)	12/27/2015
Brent L. Larson	40,000 (a)	8%	\$ 0.26 (b)	12/27/2015

- (a) Vests as to one-third of these shares immediately and on each of the first two anniversaries of the date of grant.
- (b) The per share weighted average fair value of these stock options during 2005 was \$0.22 on the date of grant using the Black-Scholes option pricing model with the following assumptions: an expected life of 10 years, an average risk-free interest rate of 4.3%, volatility of 79% and no expected dividend rate.
- (c) The options terminate on the earlier of the expiration date, nine months after death or disability, 90 days after termination of employment without cause or by resignation, or immediately upon termination of employment for cause.

Fiscal Year-End Option Numbers and Values

The following table sets forth certain information concerning the number and value of unexercised options held by the Named Executives at the end of the last fiscal year (December 31, 2005). There were no stock options exercised by the Named Executives during the fiscal year ended December 31, 2005.

Name	Number of Securities Underlying Unexercised Options at Fiscal Year-End: Exercisable/Unexercisable	Value of Unexercised In-the-Money Options at Fiscal Year-End: Exercisable/Unexercisable (1)
Anthony K. Blair	40,021 / 79,979	\$0 / \$0
Carl M. Bosch	286,695 / 163,305	\$5,333 / \$2,667
Rodger A. Brown	271,182 / 143,318	\$5,333 / \$2,667
David C. Bupp	886,801 / 523,199	\$12,933 / \$6,467
Brent L. Larson	343,895 / 163,305	\$5,333 / \$2,667

Edgar Filing: NEOPROBE CORP - Form POS AM

- (1) Represents the total gain which would be realized if all in-the-money options held at year end were exercised, determined by multiplying the number of shares underlying the options by the difference between the per share option exercise price and the per share fair market value at year end of \$0.25. An option is in-the-money if the fair market value of the underlying shares exceeds the exercise price of the option.

50

Compensation of Non-Employee Directors

We paid non-employee directors a quarterly retainer of \$2,500 for participation in board or committee meetings during 2005. We also reimbursed non-employee directors for travel expenses for meetings attended during 2005. In addition, each non-employee director received 70,000 options to purchase common stock as a part of our annual stock incentive grants, and the Chairman of the Board and the Chairman of the Audit Committee each received an additional 20,000 options for their services in those capacities. Options granted to purchase common stock vest on the first anniversary of the date of grant and have an exercise price equal to not less than the closing market price of common stock at the date of grant.

Directors who are also officers or employees of Neoprobe do not receive any compensation for their services as directors.

Compensation of Mr. Bupp

Employment Agreement. David C. Bupp is employed under a thirty-six month employment agreement effective January 1, 2004. The employment agreement provides for an annual base salary of \$271,250. Effective January 1, 2005, Mr. Bupp's annual base salary was increased to \$290,000. Effective January 1, 2006, Mr. Bupp's annual base salary was increased to \$305,000. The Board of Directors 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 Compensation Committee that covers the executive officers of our company generally.

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

- o by our 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);
- o the term of Mr. Bupp's employment agreement expires; or
- o Mr. Bupp resigns because his authority, responsibilities or compensation have materially diminished, a material change occurs in his working conditions or we breach the agreement;

then, Mr. Bupp will be paid a severance payment of \$650,000 (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). If any such termination occurs after the substantial completion of the liquidation of our assets, the severance payment shall be increased by \$81,250.

Edgar Filing: NEOPROBE CORP - Form POS AM

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

- o the acquisition, directly or indirectly, by a person (other than our company or an employee benefit plan established by the Board of Directors) of beneficial ownership of 15 percent or more of our securities with voting power in the next meeting of holders of voting securities to elect the directors;
- o 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;
- o 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 eighty percent (80%) or more of the voting power for all purposes of the surviving or resulting corporation; or

51

- o our stockholders approve a transfer of substantially all of our assets to another person other than a transfer to a transferee, eighty percent (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 \$406,250 if his employment is terminated at the end of his employment agreement or without cause and his benefits will continue for the longer of twenty-four months or the full term of the agreement.

Compensation Agreements With Other Named Executives

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

Anthony K. Blair

Employment Agreement. Anthony Blair is employed under a twelve month employment agreement effective January 1, 2006. The employment agreement provides for an annual base salary of \$122,000.

The Compensation Committee will, on an annual basis, review the performance of our company and of Mr. Blair and we may pay a bonus to Mr. Blair as we deem appropriate, in our discretion. Such review and bonus will be consistent with any bonus plan adopted by the Compensation Committee that covers the executive officers of our company generally.

Edgar Filing: NEOPROBE CORP - Form POS AM

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

- o 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);
- o the term of Mr. Blair's employment agreement expires; or
- o Mr. Blair resigns because his authority, responsibilities or compensation have materially diminished, a material change occurs in his working conditions or we breach the agreement;

then, Mr. Blair will be paid a severance payment of \$122,000 and will continue his benefits for the longer of twelve months or the remaining term of his employment agreement.

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

- o the acquisition, directly or indirectly, by a person (other than our company or an employee benefit plan established by the Board of Directors) of beneficial ownership of 30 percent or more of our securities with voting power in the next meeting of holders of voting securities to elect the directors;
- o 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;

52

- o 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 eighty percent (80%) or more of the voting power for all purposes of the surviving or resulting corporation; or
- o our stockholders approve a transfer of substantially all of the assets of our company to another person other than a transferee, eighty percent (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 \$61,000 if his employment is terminated at the end of his employment agreement or without cause, and his benefits will be continued for up to twelve months.

Carl M. Bosch

Employment Agreement. Carl Bosch is employed under a twenty-four month employment agreement effective January 1, 2005. The employment agreement provides for an annual base salary of \$149,000. Effective January 1, 2006, Mr. Bosch's annual base salary was increased to \$160,000.

Edgar Filing: NEOPROBE CORP - Form POS AM

The terms of Mr. Bosch's employment agreement are substantially identical to Mr. Blair's employment agreement except that Mr. Bosch would be paid \$298,000 if terminated due to a change of control and \$149,000 if terminated at the end of his employment or without cause.

The Compensation Committee will, on an annual basis, review the performance of our company and of Mr. Bosch and we may pay a bonus to Mr. Bosch as we deem appropriate, in our discretion. Such review and bonus will be consistent with any bonus plan adopted by the Compensation Committee that covers the executive officers of our company generally.

Rodger A. Brown

Employment Agreement. Rodger Brown is employed under a twenty-four month employment agreement effective January 1, 2005. The employment agreement provides for an annual base salary of \$124,000. Effective January 1, 2006, Mr. Brown's annual base salary was increased to \$129,000.

The terms of Mr. Brown's employment agreement are substantially identical to Mr. Blair's employment agreement except that Mr. Brown would be paid \$248,000 if terminated due to a change of control and \$124,000 if terminated at the end of his employment or without cause.

The Compensation Committee will, on an annual basis, review the performance of our company and of Mr. Brown and we may pay a bonus to Mr. Brown as we deem appropriate, in our discretion. Such review and bonus will be consistent with any bonus plan adopted by the Compensation Committee that covers the executive officers of our company generally.

Brent L. Larson

Employment Agreement. Brent Larson is employed under a twenty-four month employment agreement effective January 1, 2005. The employment agreement provides for an annual base salary of \$149,000. Effective January 1, 2006, Mr. Larson's annual base salary was increased to \$160,000.

The terms of Mr. Larson's employment agreement are substantially identical to Mr. Blair's employment agreement except that Mr. Larson would be paid \$298,000 if terminated due to a change of control and \$149,000 if terminated at the end of his employment or without cause.

The Compensation Committee will, on an annual basis, review the performance of our company and of Mr. Larson and we may pay a bonus to Mr. Larson as we deem appropriate, in our discretion. Such review and bonus will be consistent with any bonus plan adopted by the Compensation Committee that covers the executive officers of our company generally.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Security Ownership of Principal Stockholders, Directors, Nominees and Executive Officers

The following table sets forth, as of March 15, 2006, certain information with respect to the beneficial ownership of shares of our common stock by: (i) each

Edgar Filing: NEOPROBE CORP - Form POS AM

person known to us to be the beneficial owner of more than 5 percent 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.	103,000	(a)	(o)
Reuven Avital	264,256	(b)	(o)
Anthony K. Blair	95,643	(c)	(o)
Kirby I. Bland	110,000	(d)	(o)
Carl M. Bosch	425,146	(e)	(o)
Rodger A. Brown	317,848	(f)	(o)
David C. Bupp	2,674,542	(g)	4.4%
Julius R. Krevans	362,000	(h)	(o)
Brent L. Larson	538,174	(i)	(o)
Fred B. Miller	196,000	(j)	(o)
Douglas L. Rash	56,616	(k)	(o)
J. Frank Whitley, Jr.	216,000	(l)	(o)
All directors and officers as a group (12 persons)	5,359,225	(m) (p)	8.5%
Great Point Partners, L.P. 2 Pickwick Plaza, Suite 450 Greenwich, CT 06830	30,000,000	(n)	33.9%

(*) 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 December 31, 2005, plus the number of shares the person has the right to acquire within 60 days of December 31, 2005.

(a) This amount includes 80,000 shares issuable upon exercise of options which are exercisable within 60 days, but does not include 30,000 shares issuable upon exercise of options which are not exercisable within 60 days.

(b) This amount consists of 139,256 shares of our common stock owned by Mittai Investments Ltd. (Mittai), an investment fund under the management and control of Mr. Avital, and 125,000 shares issuable upon exercise of options which are exercisable within 60 days but does not include 30,000 shares issuable upon exercise of options which are not exercisable within 60 days. The shares held by Mittai were obtained through a distribution of 2,785,123 shares previously held by Ma'Aragim Enterprise Ltd. (Ma'Aragim), another investment fund under the management and control of Mr. Avital. On February 28, 2005, Ma'Aragim distributed its shares to the partners in the fund. Mr. Avital is not an affiliate of the other fund to which the remaining 2,645,867 shares were distributed. Of the 2,785,123 shares previously held by Ma'Aragim, 2,286,712 were acquired in exchange for surrendering its shares in Cardiosonix Ltd. on December 31, 2001, in connection with our acquisition of Cardiosonix, and 498,411 were acquired by Ma'Aragim based on the satisfaction of certain developmental milestones on December 30, 2002, associated with our acquisition of Cardiosonix.

(c) This amount includes 40,021 shares issuable upon exercise of options which

Edgar Filing: NEOPROBE CORP - Form POS AM

are exercisable within 60 days and 5,622 shares in Mr. Blair's account in the 401(k) Plan, but does not include 79,979 shares issuable upon exercise of options which are not exercisable within 60 days.

- (d) This amount includes 110,000 shares issuable upon exercise of options which are exercisable within 60 days but does not include 30,000 shares issuable upon exercise of options which are not exercisable within 60 days.

54

- (e) This amount includes 333,361 shares issuable upon exercise of options which are exercisable within 60 days and 51,785 shares in Mr. Bosch's account in the 401(k) Plan, but does not include 116,639 shares issuable upon exercise of options which are not exercisable within 60 days.
- (f) This amount includes 317,848 shares issuable upon exercise of options which are exercisable within 60 days, but does not include 96,652 shares issuable upon exercise of options which are not exercisable within 60 days.
- (g) This amount includes 993,467 shares issuable upon exercise of options which are exercisable within 60 days, 875,000 warrants which are exercisable within 60 days, a promissory note convertible into 250,000 shares of our common stock, 57,875 shares that are held by Mr. Bupp's wife for which he disclaims beneficial ownership and 75,500 shares in Mr. Bupp's account in the 401(k) Plan, but it does not include 416,533 shares issuable upon exercise of options which are not exercisable within 60 days.
- (h) This amount includes 360,000 shares issuable upon exercise of options which are exercisable within 60 days, but does not include 30,000 shares issuable upon the exercise of options which are not exercisable within 60 days.
- (i) This amount includes 390,561 shares issuable upon exercise of options which are exercisable within 60 days and 52,113 shares in Mr. Larson's account in the 401(k) Plan, but it does not include 116,639 shares issuable upon exercise of options which are not exercisable within 60 days.
- (j) This amount includes 185,000 shares issuable upon exercise of options which are exercisable within 60 days and 11,000 shares held by Mr. Miller's wife for which he disclaims beneficial ownership, but does not include 30,000 shares issuable upon the exercise of options which are not exercisable within 60 days.
- (k) This amount includes 53,348 shares issuable upon exercise of options which are exercisable within 60 days and 3,268 shares in Mr. Rash's account in the 401(k) Plan, but does not include 56,652 shares issuable upon exercise of options which are not exercisable within 60 days.
- (l) This amount includes 215,000 shares issuable upon exercise of options which are exercisable within 60 days, but does not include 30,000 shares issuable upon exercise of options which are not exercisable within 60 days.

Edgar Filing: NEOPROBE CORP - Form POS AM

- (m) This amount includes 3,203,606 shares issuable upon exercise of options which are exercisable within 60 days and 188,288 shares held in the 401(k) Plan on behalf of certain officers, but it does not include 1,063,094 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 345,868 shares of common stock.
- (n) This amount includes 11,000,000 shares issuable upon conversion of promissory notes in the original principal amount of \$4,400,000 held by Biomedical Value Fund, L.P. (BVF) that are convertible within 60 days, 9,000,000 shares issuable upon conversion of promissory notes in the original principal amount of \$3,600,000 held by Biomedical Offshore Value Fund, Ltd. (BOVF) that are convertible within 60 days, 5,500,000 warrants held by BVF that are exercisable within 60 days and 4,500,000 warrants held by BOVF that are exercisable within 60 days. BVF and BOVF are investment funds managed by Great Point Partners, LLP.
- (o) Less than one percent.
- (p) The address of all directors and executive offices is c/o Neoprobe Corporation, 425 Metro Place North, Suite 300, Dublin, Ohio 43017-1367.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

During April 2003, we completed a bridge loan agreement with our President and CEO, David Bupp. Under the terms of the agreement, Mr. Bupp advanced us \$250,000. In consideration for the loan, we issued a note to Mr. Bupp in the principal amount of \$250,000. The note was secured by general assets of the company, excluding accounts receivable. In addition, we issued Mr. Bupp 375,000 warrants to purchase our common stock at an exercise price of \$0.13 per share, expiring in April 2008. The note bore interest at 8.5% per annum, payable monthly, and was originally due on June 30, 2004. On March 8, 2004, at the request of the Board of Directors, Mr. Bupp agreed to extend the due date of the note from June 30, 2004 to June 30, 2005. In exchange for extending the due date of the note, we issued Mr. Bupp an additional 375,000 warrants to purchase our common stock at an exercise price of \$0.50 per share, expiring in March 2009. On December 13, 2004, we repaid the balance of the note to Mr. Bupp.

In December 2004, we completed a private placement of Convertible Promissory Notes in an aggregate principal amount of \$8.1 million with Biomedical Value Fund, L.P., Biomedical Offshore Value Fund, Ltd. and David C. Bupp (our President and CEO). Biomedical Value Fund, L.P. and Biomedical Offshore Value Fund, Ltd. are funds managed by Great Point Partners, LLC. The notes bear interest at 8% per annum and are freely convertible into shares of our common stock at a price of \$0.40 per share. Neoprobe may force conversion of the notes prior to their stated maturity under certain circumstances. The conversion price represents the ten-day volume weighted average trading price of our common stock through December 10, 2004. As part of this transaction, we issued the investors 10,125,000 warrants to purchase our common stock at an exercise price of \$0.46, expiring in December 2009. In connection with this financing, we also issued 1,600,000 warrants to purchase our common stock to the placement agents, containing substantially identical terms to the warrants issued to the investors.

Edgar Filing: NEOPROBE CORP - Form POS AM

DESCRIPTION OF CAPITAL STOCK

Authorized and Issued Stock

Title of Class	Number of Shares at March 15, 2006		
	Authorized	Outstanding	Reserved
Common Stock, \$0.001 par value per share	150,000,000	58,690,046	22,459,851
Preferred Stock, \$0.001 par value per share	5,000,000	0	5,000,000

Common Stock

Dividends

Each share of common stock is entitled to receive an equal dividend, if one is declared, which is unlikely. We have never paid dividends on our common stock and do not intend to do so in the foreseeable future. We intend to retain any future earnings to finance our growth. See Risk Factors.

Liquidation

If our company is liquidated, any assets that remain after the creditors are paid, and the owners of preferred stock receive any liquidation preferences, will be distributed to the owners of our common stock pro-rata.

Voting Rights

Each share of our common stock entitles the owner to one vote. There is no cumulative voting. A simple majority can elect all of the directors at a given meeting and the minority would not be able to elect any directors at that meeting.

Preemptive Rights

Owners of our common stock have no preemptive rights. We may sell shares of our common stock to third parties without first offering it to current stockholders.

Redemption Rights

We do not have the right to buy back shares of our common stock except in extraordinary transactions such as mergers and court approved bankruptcy reorganizations. Owners of our common stock do not ordinarily have the right to require us to buy their common stock. We do not have a sinking fund to provide assets for any buy back.

Conversion Rights

Shares of our common stock can not be converted into any other kind of stock except in extraordinary transactions, such as mergers and court approved bankruptcy reorganizations.

Preferred Stock

Our certificate of incorporation authorizes our board of directors to issue "blank check" preferred stock. The board of directors may divide this stock into series and set their rights. To date, our board of directors has created one series of preferred stock. The Board of Directors had designated 500,000 shares of preferred stock as Series A Junior Participating Preferred Stock. However, upon the August 28, 2005, expiration of the Company's Stockholder Rights Plan the Board of Directors determined that the Company had no further reason to have the Series A Junior Participating Preferred Stock authorized in the Company's certificate of incorporation. Accordingly, the Company filed a certificate of elimination removing from the Company's certificate of incorporation all reference to the Series A Junior Participating Preferred Stock. Additionally, The board of directors had previously designated 63,000 shares of preferred stock as 5% Series B Convertible Preferred Stock, but these shares have been redeemed and returned to the status of unissued shares. The board of directors may, without prior stockholder approval, issue any of the 5,000,000 shares of 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. Although we have no present intention of issuing any shares of preferred stock, our board of directors may do so in the future. If we do issue preferred stock in the future, it could have a dilutive effect upon the common stock. See Risk Factors.

Anti-Takeover Charter Provisions and Laws

In addition to the blank check preferred stock described above, some features of our certificate of incorporation and by-laws and the Delaware General Corporation Law (DGCL), which are further described below, 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. 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. See Risk Factors.

Limitations on Stockholder Actions

Our certificate of incorporation provides that stockholder action may only be taken at a meeting of the stockholders. Thus, an owner of a majority of the voting power could not take action to replace the board of directors, or any class of directors, without a meeting of the stockholders, nor could he amend the by-laws without presenting the amendment to a meeting of the stockholders. Furthermore, under the provisions of the certificate of incorporation and by-laws, only the board of directors has the power to call a special meeting of stockholders. Therefore, a stockholder, even one who owns a majority of the voting power, may neither replace sitting board of directors members nor amend the by-laws before the next annual meeting of stockholders.

Advance Notice Provisions

Our by-laws establish advance notice procedures for the nomination of candidates for election as directors by stockholders, as well as for other stockholder proposals to be considered at annual meetings. Generally, we must receive a notice of intent to nominate a director or raise any other matter at a stockholder meeting not less than 120 days before the first anniversary of the mailing of our proxy statement for the previous year's annual meeting. The notice must contain required information concerning the person to be nominated or the matters to be brought before the meeting and concerning the stockholder submitting the proposal.

Edgar Filing: NEOPROBE CORP - Form POS AM

Delaware Law

We are incorporated in Delaware, and as such are subject to Section 203 of the DGCL, which provides that a corporation may not engage in any business combination with an interested stockholder during the three years after he becomes an interested stockholder unless:

- o the corporation's board of directors approved in advance either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

57

- o the interested stockholder owned at least 85 percent of the corporation's voting stock at the time the transaction commenced; or
- o the business combination is approved by the corporation's board of directors and the affirmative vote of at least two-thirds of the voting stock which is not owned by the interested stockholder.

An interested stockholder is anyone who owns 15 percent or more of a corporation's voting stock, or who is an affiliate or associate of the corporation and was the owner of 15 percent or more of the corporation's voting stock at any time within the previous three years; and the affiliates and associates of any those persons. Section 203 of the DGCL makes it more difficult for an interested stockholder to implement various business combinations with our company for a three-year period, although our stockholders may vote to exclude it from the law's restrictions.

Classified Board

Our certificate of incorporation and by-laws divide our board of directors into three classes with staggered three year terms. There are currently nine directors, three in each class. At each annual meeting of stockholders, the terms of one class of directors will expire and the newly nominated directors of that class will be elected for a term of three years. The board of directors will be able to determine the total number of directors constituting the full board of directors and the number of directors in each class, but the total number of directors may not exceed 17 nor may the number of directors in any class exceed six. Subject to these rules, the classes of directors need not have equal numbers of members. No reduction in the total number of directors or in the number of directors in a given class will have the effect of removing a director from office or reducing the term of any then sitting director. Stockholders may only remove directors for cause. If the board of directors increases the number of directors in a class, it will be able to fill the vacancies created for the full remaining term of a director in that class even though the term may extend beyond the next annual meeting. The directors will also be able to fill any other vacancies for the full remaining term of the director whose death, resignation or removal caused the vacancy.

A person who has a majority of the voting power at a given meeting will not in any one year be able to replace a majority of the directors since only one class of the directors will stand for election in any one year. As a result, at least two annual meeting elections will be required to change the majority of the directors by the requisite vote of stockholders. The purpose of classifying the board of directors is to provide for a continuing body, even in the face of a person who accumulates a sufficient amount of voting power, whether by ownership or proxy or a combination, to have a majority of the voting power at a given

Edgar Filing: NEOPROBE CORP - Form POS AM

meeting and who may seek to take control of our company without paying a fair premium for control to all of the owners of our common stock. This will allow the board of directors time to negotiate with such a person and to protect the interests of the other stockholders who may constitute a majority of the shares not actually owned by that person. However, it may also 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.

58

ACQUISITION OF COMMON STOCK BY SELLING STOCKHOLDERS

General

During April 2003, we completed a bridge loan agreement with our President and CEO, David Bupp. Under the terms of the agreement, Mr. Bupp advanced us \$250,000. In consideration for the loan, we issued a note to Mr. Bupp in the principal amount of \$250,000. The note was secured by general assets of the company, excluding accounts receivable. In addition, we issued Mr. Bupp 375,000 warrants to purchase our common stock at an exercise price of \$0.13 per share, expiring in April 2008. The note bore interest at 8.5% per annum, payable monthly, and was originally due on June 30, 2004. On March 8, 2004, at the request of the Board of Directors, Mr. Bupp agreed to extend the due date of the note from June 30, 2004 to June 30, 2005. In exchange for extending the due date of the note, we issued Mr. Bupp an additional 375,000 warrants to purchase our common stock at an exercise price of \$0.50 per share, expiring in March 2009. On December 13, 2004, we repaid the balance of the note to Mr. Bupp. This prospectus covers the resale of the original 375,000 shares of common stock issuable pursuant to the warrants granted to Mr. Bupp in April 2003.

During April 2003, we also completed a convertible bridge loan agreement with Donald E. Garlikov for an additional \$250,000. In consideration for the loan, we issued a note to Mr. Garlikov in the principal amount of \$250,000. The note was secured by general assets of the company, excluding accounts receivable. In addition, we issued Mr. Garlikov 500,000 warrants to purchase our common stock at an exercise price of \$0.13 per share, expiring in April 2008. Under the terms of the agreement, the note bore interest at 9.5% per annum, payable monthly, and was due on June 30, 2004. During January 2004, Mr. Garlikov converted the entire balance of the note into 1.1 million shares of common stock according to the conversion terms of the agreement. Mr. Garlikov's 500,000 warrants remain outstanding. This prospectus covers the resale of the shares of common stock issued upon the conversion of the note and the 500,000 shares of common stock issuable upon the exercise of the warrants granted to Mr. Garlikov.

During 2003, we engaged the services of two investment banking firms to assist us in raising capital, Alberdale Capital, LLC (Alberdale) and Trautman Wasserman & Company, Inc. (Trautman Wasserman). In exchange for Alberdale's services, we paid them a monthly retainer of \$10,000, half in cash and half in common stock, and we agreed to pay them additional compensation upon the successful completion of a private placement of our securities. We terminated the agreement with Alberdale in September 2003, but issued them a total of 150,943 shares of common stock in payment for one half of their retainer. In addition, warrants to purchase 78,261 shares of our common stock were issued in exchange for their assistance in arranging an accounts receivable financing transaction. The warrants had an exercise price of \$0.28 per share, and were exercised on a cashless basis in exchange for 53,500 shares of our common stock in 2004. In e