SPECTRX INC
Form S-2/A
July 09, 2004

As filed with the Securities and Exchange Commission on July 9, 2004

Registration No. 333-114772

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 2 to

FORM S-2

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

SpectRx, Inc.

(Exact name of registrant as specified in its charter)

Delaware	58-2029543
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

6025A Unity Drive
Norcross, Georgia 30071
(770) 242-8723

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

Thomas H. Muller, Jr.
Executive Vice President, Chief Financial Officer and Secretary
SpectRx, Inc.
6025A Unity Drive
Norcross, Georgia 30071
(770) 242-8723

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

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Atlanta, Georgia 30309-3053
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Approximate date of commencement of proposed sale to the public:

From time to time following the effective date of this registration statement.

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

If the registrant elects to deliver its latest annual report to security holders, or a complete and legal facsimile thereof, pursuant to Item 11(a)(1) of this Form, check the following box. [X]

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 registration statement for the same offering. [ ]

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

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

If delivery of the prospectus is expected to be made pursuant to Rule 434, 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 this registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell or offer these securities until the registration statement filed with the Securities and Exchange Commission is declared effective. This prospectus is not an offer to sell these securities and neither SpectRx nor the selling stockholders are soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated July 9, 2004

PROSPECTUS

11,557,385 Shares
SpectRx, Inc.
Common Stock

This prospectus relates to up to 11,557,385 shares of our common stock, 4,886,690 of which are issuable upon conversion of our Series A Convertible Preferred Stock, referred to in this prospectus as the preferred stock, 488,669 of which may be issued in payment of dividends on the preferred stock, 6,122,026 of which are issuable upon the exercise of warrants and 60,000 of which are presently outstanding. The shares offered by this prospectus may be sold from time to time by the selling stockholders listed in this prospectus at prevailing market prices or prices negotiated at the time of sale. This prospectus also relates to an indeterminate number of shares of our common stock that may be issued to prevent dilution resulting from stock splits, stock dividends or similar transactions in accordance with the terms of the certificate of designations governing the preferred stock and the terms of the warrants, respectively. The securities offered by this prospectus were issued to the selling stockholders in transactions exempt from registration under the Securities Exchange Act of 1933, as amended.

We will not receive any cash proceeds from the sale of shares by the selling stockholders, but if the warrants are exercised in whole or in part, we will receive payment for the exercise price. We will pay the expenses of registering these shares.

Our common stock is listed on the OTC Bulletin Board under the symbol "SPRX." The last reported sale price of our common stock on the OTC Bulletin Board on July 8, 2004 was $1.30 per share.

Investing in our common stock involves a high degree of risk. These risks are described under the caption "Risk Factors" that begins on page 2 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the common stock that may be offered under this prospectus, nor have any of these organizations determined if this prospectus is accurate or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is July __, 2004

SUMMARY

This summary highlights general information about SpectRx and the common stock that may be offered by the selling stockholders, but does not contain all information important to you. You should read the more detailed information and financial statements, including the related notes, appearing elsewhere and incorporated by reference in this prospectus.

Our Company

We are a medical technology company focused on insulin delivery and glucose monitoring products for the diabetes management market and biophotonic (optics and spectroscopy) devices and technology for the non-invasive cancer diagnostics market. Historically, our technology has been primarily based upon biophotonic technology, which we define as the use of light and other forms of energy to access the human body to diagnose and monitor disease. We added insulin delivery to our technology base with the purchase of Sterling Medivations, Inc., now doing business as SimpleChoice, in December of 2001. Currently, our technology, including products in development, includes innovative methods of delivering insulin to people with diabetes with our SimpleChoice® product line, innovative methods of sampling interstitial fluid using laser energy to create micropores for improved glucose and alcohol monitoring, and biophotonics technology for the non-invasive detection of cancers.

We are currently developing our insulin infusion product line, the glucose monitoring product and cervical cancer detection product independently of any strategic partnership, upon which we have historically relied for a significant amount of the funding for product development. We will need to obtain additional funding to continue developing our products. We have announced that we plan to seek a collaborative partner to help develop and commercialize our glucose monitoring product. We have also announced that we intend to finance our cancer detection product activities independently and separately through direct financing of our subsidiary, Guided Therapeutics, Inc. In addition, we may need or choose to seek and rely on collaborative partners in the future to distribute and market the products we are developing.

Our principal executive and operations facility is located at 6025A Unity Drive, Norcross, Georgia 30071, and our telephone number is (770) 242-8723.

Use of Proceeds

We will not receive any cash proceeds from the sale of common stock that may be offered by the selling stockholders. We may receive proceeds from the exercise of warrants entitling the selling stockholders to purchase 6,122,026 shares of our common stock. The detailed terms of the warrants are set forth under "Description of Securities-Warrants." We expect to use any proceeds we receive from the exercise of the warrants for general corporate purposes, including, but not limited to, working capital, capital expenditures and repaying or refinancing of our obligations.

Offering

Common stock that may be offered by selling stockholders	11,557,385 shares.
OTC Bulletin Board Symbol for Common Stock	SPRX.
Risk Factors	You should read the "Risk Factors" section beginning on page 2 of this prospectus, as well as the other cautionary statements throughout the entire prospectus and in the documents incorporated by reference in this prospectus, to ensure that you understand the risks associated with an investment in our common stock.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the specific factors listed below, as well as the other information included and incorporated by reference in this prospectus, before investing in our common stock.

We do not have a long operating history, which makes it difficult for you to evaluate our business.

Because limited historical information is available on our revenue trends and operations, it will be difficult for you to evaluate our business. Our historical financial information also includes the sale of our Bili*Chek* product line in March of 2003. Our prospects must be considered in light of the substantial risks, expenses, uncertainties and difficulties encountered by entrants into the medical device industry, which is characterized by increasing intense competition and a high failure rate.

We have a history of losses, and we expect losses to continue.

We have never been profitable, and we have had operating losses since our inception. We expect our operating losses to continue as we continue to expend substantial resources to launch the SimpleChoice product line, to complete development of our products, obtain regulatory clearances or approvals, build our marketing, sales, manufacturing and finance organizations, and conduct further research and development. To date, we have engaged primarily in research and development efforts. The further development and commercialization of our products will require substantial development, regulatory, sales and marketing, manufacturing and other expenditures. We have only generated limited revenues from product sales. Our accumulated deficit was about $53.6 million at March 31, 2004.

If we cannot obtain additional funds when needed, we will not be able to implement our business plan.

We will require substantial additional capital to develop our products, including completing product testing and clinical trials, obtaining all required regulatory approvals and clearances, beginning and scaling up manufacturing, and marketing our products. We have historically funded a significant portion of our activities through collaborative

partners. We are seeking a collaborative partner for our glucose monitoring technology and are seeking separate funding for our cervical cancer program. Any failure to find a collaborative partner to fund our operations and capital expenditures, or our inability to obtain capital through other sources, would limit our ability to grow and operate as planned. Even if we do enter into an agreement with a collaborative partner, the obligations of a collaborative partner to fund our expenditures will be largely discretionary and will depend on a number of factors, including our ability to meet specified milestones in the development and testing of the relevant product. We may not be able to meet these milestones, or our collaborative partner may not continue to fund our expenditures.

We bear responsibility for all aspects of our SimpleChoice product line and our cervical cancer product, which are not being developed with a collaborative partner. In addition to any funds that may be provided by collaborative partners, we will be required to raise additional funds through public or private financing, additional collaborative relationships or other arrangements. We believe that our existing capital resources and the funding from prospective collaborative partners will be sufficient to satisfy our funding requirements through 2004, but may not be sufficient to fund our operations to the point of commercial introduction of our glucose monitoring products, our cervical cancer detection product or our full line of diabetes products. Any failure to agree on a collaborative arrangement or to achieve adequate funding in a timely fashion would delay our development programs and could lead to abandonment of one or more of our development initiatives. Any required additional funding may not be available on terms attractive to us, or at all. To the extent we cannot obtain additional funding, our ability to continue to develop and introduce products to market will be limited. Any additional equity financing may be dilutive to stockholders, and debt and certain types of equity financing, if available, may involve restrictive covenants or other provisions that would limit how we conduct our business or finance our operations.

We are no longer listed on a Nasdaq market, which may affect our ability to obtain additional funds when needed and the liquidity and value of our common stock.

The Nasdaq National Market and SmallCap Market have minimum listing requirements. In December 2002, we applied for and moved to the Nasdaq SmallCap Market because we could not continue to meet the National Market listing requirements. A key requirement is the level of stockholders' equity. At June 30, 2003, our stockholders' equity was below the minimum Nasdaq requirements and, as a result, our stock was delisted from the SmallCap Market. Our stock is now listed on the OTC Bulletin Board, which does not have similar listing requirements. As a result, our ability to raise additional capital may be impacted and the liquidity and value of our common stock may be impaired.

Our SimpleChoice product line has a different focus than our non-invasive products, and we will be required to develop new capabilities to successfully manage these operations.

Prior to our acquisition of the SimpleChoice product line, it did not have revenues or significant assets. The SimpleChoice product line is also significantly different from our historical product line, which focuses on non-invasive and minimally invasive products. We shipped small quantities of our first SimpleChoice products to be introduced to the market during 2003. SimpleChoice's future business will depend on our ability to develop more fully various functions that will enable it to operate as planned, including manufacturing, marketing, and distribution capabilities. There can be no assurance that we, or our subsidiary doing business as SimpleChoice, will be able to successfully develop or implement these functions.

Our ability to sell our products is controlled by government regulations, and we may not be able to obtain any necessary clearances or approvals.

The design, manufacturing, labeling, distribution and marketing of medical device products are subject to extensive and rigorous government regulation, which can be expensive and uncertain and can cause lengthy delays before we can begin selling our products.

In the United States, the Food and Drug Administration's actions could delay or prevent our ability to sell our products, which would adversely affect our growth and strategy plans.

In order for us to market our products in the United States, we must obtain clearance or approval from the Food and Drug Administration, referred to in this prospectus as the FDA. We cannot be sure:

- that we or any collaborative partner will make timely filings with the FDA;
- that the FDA will act favorably or quickly on these submissions;
- that we will not be required to submit additional information or perform additional clinical studies;
- that we would not be required to submit an application for premarket approval, rather than a 510(k) premarket notification submission as described below; or
- that other significant difficulties and costs will not be encountered to obtain FDA clearance or approval.

The premarket approval process is more rigorous and lengthier than the 510(k) clearance process for premarket notifications; it can take several years from initial filing and require the submission of extensive supporting data and clinical information. For example, Roche, as part of our collaborative agreement, had previously filed a premarket notification for our diabetes detection product, which was withdrawn when the FDA indicated that this product should be submitted for premarket approval, including submission of clinical study data. We do not have any premarket notifications or premarket approval applications pending, but our cervical cancer detection product and, we believe, our glucose monitoring products will require submission of applications for premarket approval.

The FDA may impose strict labeling or other requirements as a condition of its clearance or approval, any of which could limit our ability to market our products. Further, if we wish to modify a product after FDA clearance of a premarket notification or approval of a premarket approval application, including changes in indications or other modifications that could affect safety and efficacy, additional clearances or approvals will be required from the FDA. Any request by the FDA for additional data, or any requirement by the FDA that we conduct additional clinical studies or submit to the more rigorous and lengthier premarket approval process, could result in a significant delay in bringing our products to market and substantial additional research and other expenditures. Similarly, any labeling or other conditions or restrictions imposed by the FDA on the marketing of our products could hinder our ability to effectively market our products. Any of the above actions by the FDA could delay or prevent altogether our ability to market and distribute our products. Further, there may be new FDA policies or changes in FDA policies that could be adverse to us.

In foreign countries, including European countries, we are also subject to government regulation, which could delay or prevent our ability to sell our products in those jurisdictions.

In order for us to market our products in Europe and some other international jurisdictions, we and our distributors and agents must obtain required regulatory registrations or approvals. We must also comply with extensive regulations regarding safety, efficacy and quality in those jurisdictions. We may not be able to obtain the required regulatory registrations or approvals, or we may be required to incur significant costs in obtaining or maintaining any regulatory registrations or approvals we receive. Delays in obtaining any registrations or approvals required to market our products, failure to receive these registrations or approvals, or future loss of previously obtained registrations or approvals would limit our ability to sell our products internationally. For example, international regulatory bodies have adopted various regulations governing product standards, packaging requirements, labeling requirements, import restrictions, tariff regulations, duties and tax requirements. These regulations vary from country to country. In order to sell our products in Europe, we must maintain ISO 9001 certification and CE mark certification, which is an international symbol of quality and compliance with applicable European medical device directives. Failure to receive or maintain ISO 9001 certification or CE mark certification or other international regulatory approvals would prevent us from selling in Europe.

Even if we obtain clearance or approval to sell our products, we are subject to ongoing requirements and inspections that could lead to the restriction, suspension or revocation of our clearance.

We, as well as our potential collaborative partners, will be required to adhere to applicable FDA regulations regarding good manufacturing practice, which include testing, control, and documentation requirements. We are subject to similar regulations in foreign countries. Ongoing compliance with good manufacturing practice and other applicable regulatory requirements will be strictly enforced in the United States through periodic inspections by state and federal agencies, including the FDA, and in international jurisdictions by comparable agencies. Failure to comply with these regulatory requirements could result in, among other things, warning letters, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, failure to obtain premarket clearance or premarket approval for devices, withdrawal of approvals previously obtained, and criminal prosecution. The restriction, suspension or revocation of regulatory approvals or any other failure to comply with regulatory requirements would limit our ability to operate and could increase our costs.

Our success largely depends on our ability to obtain and protect the proprietary information on which we base our products.

Our success depends in large part upon our ability to establish and maintain the proprietary nature of our technology through the patent process, as well as our ability to license from others patents and patent applications necessary to develop our products. If any of our patents are successfully challenged, invalidated or circumvented, or our right or ability to manufacture our products were to be limited, our ability to continue to manufacture and market our products could be adversely affected. In addition to patents, we rely on trade secrets and proprietary know-how, which we seek to protect, in part, through confidentiality and proprietary information agreements. The other parties to these agreements may breach these provisions, and we may not have adequate remedies for any breach. Additionally, our trade secrets could otherwise become known to or be independently developed by competitors.

We have been issued, or have rights to, 38 U.S. patents (including those under license). In addition, we have filed for, or have rights to, 30 U.S. patents (including those under license) that are still pending. There are additional international patents and pending applications. One or more of the patents we hold directly or license from third parties, including those for the disposable components to be used with our glucose monitoring, infant jaundice and insulin delivery products, may be successfully challenged, invalidated or circumvented, or we may otherwise be unable to rely on these patents. These risks are also present for the process we use or will use for manufacturing our products. In addition, our competitors, many of whom have substantial resources and have made substantial investments in competing technologies, may apply for and obtain patents that prevent, limit or interfere with our ability to make, use and sell our products, either in the United States or in international markets.

The medical device industry has been characterized by extensive litigation regarding patents and other intellectual property rights. In addition, the United States Patent and Trademark Office may institute interference proceedings. The defense and prosecution of intellectual property suits, Patent and Trademark Office proceedings and related legal and administrative proceedings are both costly and time consuming. Moreover, we may need to litigate to enforce our patents, to protect our trade secrets or know-how, or to determine the enforceability, scope and validity of the proprietary rights of others. Any litigation or interference proceedings involving us may require us to incur substantial legal and other fees and expenses and may require some of our employees to devote all or a substantial portion of their time to the proceedings. An adverse determination in the proceedings could subject us to significant liabilities to third parties, require us to seek licenses from third parties or prevent us from selling our products in some or all markets. We may not be able to reach a satisfactory settlement of any dispute by licensing necessary patents or other intellectual property. Even if we reached a settlement, the settlement process may be expensive and time consuming, and the terms of the settlement may require us to pay substantial royalties. An adverse determination in a judicial or administrative proceeding or the failure to obtain a necessary license could prevent us from manufacturing and selling our products.

We may not be able to generate sufficient sales revenues to sustain our growth and strategy plans.

We expect that the majority of our revenues in 2004 will come from sales of our new SimpleChoice diabetes product line, which has just been launched and some of which is still in development. We sold our Bili*Chek* product line in 2003 and will not have continuing revenue from that source other than future earn out payments. Although we received a payment for royalties and earn out of $655,000 in the first quarter of 2004, there can be no assurance of additional payments. Our ability to collect additional earn out payments from the Bili*Chek* product line depends on Respironics' efforts in conducting that business. Our glucose monitoring product in development depends on finding a new partner and the collaborative partner's ability to generate sales of our products, which will provide us with revenue. We may not be able to successfully commercialize the products we are developing. Even if we do, we, together with any collaborative partners with respect to products being jointly developed, may not be able to sell sufficient volumes of our products to generate profits for us.

We are developing our current product lines independently from any collaborative partners, which will require us to access additional capital and to develop additional skills to produce, market and distribute these products.

We are independently finishing development, building up production capacity, launching, marketing and distributing our SimpleChoice line of products. We are also currently seeking direct funding for and expect to commercialize our cervical cancer detection product independently of any collaborative partner. These activities require additional resources and capital that we will need to secure. There is no assurance that we will be able to raise sufficient capital or attract and retain skilled personnel to enable us to finish development, launch and market these products. Thus, there can be no assurance that we will be able to commercialize all, or any, of these products.

Because our products, which use different technology or apply technology in more innovative ways than other medical devices, are or will be new to the market, we may not be successful in launching our products and our operations and growth would be adversely affected.

Our products are based on new methods of glucose monitoring and cervical cancer detection and new methods of delivery for our diabetes products. If our products do not achieve significant market acceptance, our sales will be limited and our financial condition may suffer. Physicians and individuals may not recommend or use our products unless they determine that these products are an attractive alternative to current tests that have a long history of safe and effective use. To date, our products have been used by only a limited number of people, and few independent studies regarding our products have been published. The lack of independent studies limits the ability of doctors or consumers to compare our products to conventional products.

If we are unable to compete effectively in the highly competitive medical device industry, our future growth and operating results will suffer.

The medical device industry in general, and the markets in which we expect to offer products in particular, are intensely competitive. Many of our competitors have substantially greater financial, research, technical, manufacturing, marketing and distribution resources than we do and have greater name recognition and lengthier operating histories in the health care industry. We may not be able to effectively compete against these and other competitors. A number of competitors offer insulin infusion disposable products and a number of competitors are currently marketing traditional glucose monitors. These disposable products and monitors are widely accepted in the health care industry and have a long history of accurate and effective use. Further, if our products are not available at competitive prices, health care administrators who are subject to increasing pressures to reduce costs may not elect to purchase them. Also, a number of companies have announced that they are developing products that permit non-invasive and less invasive glucose monitoring. Accordingly, competition in this area is expected to increase.

Furthermore, our competitors may succeed in developing, either before or after the development and commercialization of our products, devices and technologies that permit more efficient, less expensive non-invasive

and less invasive glucose monitoring, insulin delivery, or cancer detection. It is also possible that one or more pharmaceutical or other health care companies will develop therapeutic drugs, treatments or other products that will substantially reduce the prevalence of diabetes or otherwise render our products obsolete.

We have little manufacturing experience, which could limit our growth.

We do not have manufacturing experience that would enable us to make products in the volumes that would be necessary for us to achieve significant commercial sales, and we rely upon our suppliers. In addition, we may not be able to establish and maintain reliable, efficient, full scale manufacturing at commercially reasonable costs, in a timely fashion. Difficulties we encounter in manufacturing scale-up, or our failure to implement and maintain our manufacturing facilities in accordance with good manufacturing practice regulations, international quality standards or other regulatory requirements, could result in a delay or termination of production. To date, our manufacturing activities have included our former Bili*Chek* and Bili*Cal* products, as well as the diabetes detection product on a limited scale. We are having our initial product offerings in the SimpleChoice insulin delivery area manufactured by a third party. We may decide to manufacture these products ourselves in the future or may decide to manufacture products that are currently under development in this market segment. Companies often encounter difficulties in scaling up production, including problems involving production yield, quality control and assurance, and shortages of qualified personnel.

Since we rely on sole source suppliers for several of our products, any failure of those suppliers to perform would hurt our operations.

Several of the components used in our products are available from only one supplier, and substitutes for these components are infeasible or would require substantial modifications to our products. Any significant problem experienced by one of our sole source suppliers may result in a delay or interruption in the supply of components to us until that supplier cures the problem or an alternative source of the component is located and qualified. Any delay or interruption would likely lead to a delay or interruption in our manufacturing operations. For our products which require premarket approval, the inclusion of substitute components could require us to qualify the new supplier with the appropriate government regulatory authorities. Alternatively, for our products which qualify for premarket notification, the substitute components must meet our product specifications.

Since we are relying on third party manufacturing for our initial product offerings in the SimpleChoice product line, we are dependent upon those parties for product supply. Any delay in initiating production or scaling production to higher volumes could result in delays of product introduction, or create lower availability of product than our expectations. These delays could lead to lower revenue achievement and additional cash requirements for us.

Our limited marketing and sales experience makes our SimpleChoice revenue uncertain.

We are responsible for marketing our SimpleChoice product line. We have relatively limited experience in marketing or selling medical device products and only have a four person marketing and sales staff. In order to successfully continue to market and sell our products, we must either develop a marketing and sales force or expand our arrangements with third parties to market and sell our products. We may not be able to successfully develop an effective marketing and sales force, and we may not be able to enter into and maintain marketing and sales agreements with third parties on acceptable terms, if at all. If we develop our own marketing and sales capabilities, we will compete with other companies that have experienced and well-funded marketing and sales operations. If we enter into a marketing arrangement with a third party, any revenues we would receive will be dependent on this third party, and we will likely be required to pay a sales commission or similar compensation to this party. The efforts of these third parties for the marketing and sale of our products may not be successful.

Because we operate in an industry with significant product liability risk, and we have not specifically insured against this risk, we may be subject to substantial claims against our products.

The development, manufacture and sale of medical products entail significant risks of product liability claims. We currently have no product liability insurance coverage beyond that provided by our general liability insurance. Accordingly, we may not be adequately protected from any liabilities, including any adverse judgments or settlements, we might incur in connection with the development, clinical testing, manufacture and sale of our products. A successful product liability claim or series of claims brought against us that results in an adverse judgment against or settlement by us in excess of any insurance coverage could seriously harm our financial condition or reputation. In addition, product liability insurance is expensive and may not be available to us on acceptable terms, if at all.

The availability of third party reimbursement for our products is uncertain, which may limit consumer use and the market for our products.

In the United States and elsewhere, sales of medical products are dependent, in part, on the ability of consumers of these products to obtain reimbursement for all or a portion of their cost from third-party payors, such as government and private insurance plans. Any inability of patients, hospitals, physicians and other users of our products to obtain sufficient reimbursement from third-party payors for our products, or adverse changes in relevant governmental policies or the policies of private third-party payors regarding reimbursement for these products, could limit our ability to sell our products on a competitive basis. We are unable to predict what changes will be made in the reimbursement methods used by third-party health care payors. Moreover, third-party payors are increasingly challenging the prices charged for medical products and services, and some health care providers are gradually adopting a managed care system in which the providers contract to provide comprehensive health care services for a fixed cost per person. Patients, hospitals and physicians may not be able to justify the use of our products by the attendant cost savings and clinical benefits that we believe will be derived from the use of our products, and therefore may not be able to obtain third-party reimbursement.

Reimbursement and health care payment systems in international markets vary significantly by country and include both government sponsored health care and private insurance. We may not be able to obtain approvals for reimbursement from these international third-party payors in a timely manner, if at all. Any failure to receive international reimbursement approvals could have an adverse effect on market acceptance of our products in the international markets in which approvals are sought.

Our success depends on our ability to attract and retain scientific, technical, managerial and finance personnel.

Our ability to operate successfully and manage our future growth depends in significant part upon the continued service of key scientific, technical, managerial and finance personnel, as well as our ability to attract and retain additional highly qualified personnel in these fields. We may not be able to attract and retain key employees when necessary, which would limit our operations and growth. None of our key employees have an employment contract with us, nor are any of these employees, except our chief executive officer, covered by key person or similar insurance. In addition, if we are able to successfully develop and commercialize our products, we will need to hire additional scientific, technical, marketing, managerial and finance personnel. We face intense competition for qualified personnel in these areas, many of whom are often subject to competing employment offers.

Adjustments to the conversion price for our series A convertible preferred stock and the exercise price for certain of our warrants will dilute the ownership interests of our existing stockholders.

On March 26, 2004, we entered into agreements with investors to raise capital in a private placement of our series A convertible preferred stock and warrants. As a result of this private placement transaction, there are 488,669 shares of our series A convertible preferred stock outstanding convertible into 4,886,690 shares of our common stock at a conversion price of $1.50 per share, plus warrants exercisable for 2,443,345 shares of our common stock at an exercise price of $1.65 per share and warrants exercisable for 2,443,345 shares of our common stock at an exercise price of $2.25 per share. The conversion price for the series A convertible preferred stock and the exercise price for

the warrants may be lowered under certain price adjustment provisions in the certificate of designations relating to the series A convertible preferred stock and the warrants if we issue common stock at a per share price below the then conversion price for the series A convertible preferred stock.

Subject to certain exceptions, if we issue shares of our common stock, or securities convertible into or exercisable for shares of our common stock, at a price per share less than the then effective conversion price for the series A convertible preferred stock, the conversion price for the series A convertible preferred stock will be adjusted to equal such lower per share consideration, the exercise price for the warrants with the $1.65 exercise price will be adjusted to equal such lower per share consideration, and the exercise price for the warrants with the $2.25 exercise price will be adjusted to equal 125% of such lower per share consideration. A reduction in the conversion price for the series A convertible preferred stock and the exercise price for the warrants may result in the issuance of a significant number of additional shares of our common stock upon conversion of the series A convertible preferred stock and the exercise of the warrants, respectively. The downward adjustment of the conversion price for the series A convertible preferred stock and the exercise price for these warrants would result in dilution in the value of the shares of our outstanding common stock and the voting power represented thereby.

We are significantly influenced by our directors, executive officers and their affiliated entities.

Our directors, executive officers and entities affiliated with them beneficially owned an aggregate of about 27% of our outstanding common stock as of March 31, 2004. These stockholders, acting together, would be able to exert significant influence on substantially all matters requiring approval by our stockholders, including the election of directors and the approval of mergers and other business combination transactions.

Our forward-looking statements are subject to a variety of factors that could cause actual results to differ materially from current beliefs.

Safe harbor statement under the Private Securities Litigation Reform Act of 1995:

Statements in or incorporated by reference in this prospectus which express "belief," "anticipation" or "expectation," as well as other statements which are not historical facts, are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from historical results or anticipated results, including those identified in the foregoing "Risk Factors" and elsewhere in this prospectus. Examples of these uncertainties and risks include, but are not limited to:

- access to sufficient debt or equity capital to meet our operating and financial needs;
- the effectiveness and ultimate market acceptance of our products;
- whether our products in development will prove safe, feasible and effective;
- whether and when we or any potential strategic partners will obtain approval from the FDA and corresponding foreign agencies;
- our need to achieve manufacturing scale-up in a timely manner, and our need to provide for the efficient manufacturing of sufficient quantities of our products;
- the lack of immediate alternate sources of supply for some critical components of our products;
- our patent and intellectual property position;
- the need to fully develop the marketing, distribution, customer service and technical support and other functions critical to the success of our product lines;
- the dependence on potential strategic partners or outside investors for funding, development assistance, clinical trials, distribution and marketing of some of our products; and
- other risks and uncertainties described from time to time in our reports filed with the Securities and Exchange Commission, including those contained in our annual report on Form 10-K for the year ended December 31, 2003 and our quarterly report on Form 10-Q for the quarter ended March 31, 2004.

USE OF PROCEEDS

All sales of the common stock covered by this prospectus will be by or for the account of the selling stockholders listed in the following section of this prospectus. We will not receive any cash proceeds from the sales of any common stock. We may receive the proceeds from the exercise of warrants entitling the selling stockholders to purchase 6,122,026 shares of our common stock. If all warrants held by the selling stockholders are exercised, we will receive $11,799,849 in proceeds.

We anticipate that any proceeds from the exercise of warrants by the selling stockholders will be used for general corporate purposes, including, but not limited to, working capital, capital expenditures and the repayment or refinancing of our obligations.

SELLING STOCKHOLDERS

We issued and sold preferred stock convertible into common stock, common stock and warrants to purchase shares of common stock in private placement transactions exempt from registration under the Securities Act of 1933. These shares of common stock we sold, as well as the shares of common stock issuable upon conversion of the preferred stock and exercise of the warrants, are covered by this prospectus.

The following table sets forth information known to us with respect to the beneficial ownership of our common stock as of June 23, 2004 by each of the selling stockholders. Beneficial ownership is determined in accordance with the rules and regulations of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. The information in the table reflects the most recent information furnished to us by each identified selling stockholders. As of June 23, 2004, there were approximately 11,390,079 shares of our common stock issued and outstanding. Shares issuable upon conversion of the preferred stock and upon exercise of the warrants are deemed to be outstanding for purposes of the selling stockholders named in the table. The number of shares reflected in the table assumes no adjustment in the number of shares issuable upon conversion of the preferred stock or upon exercise of the warrants as a result of stock splits and stock dividends, and conversion price or exercise price adjustments pursuant to the terms of the certificate of designations governing the preferred stock and the terms of the warrants, respectively.

No offer or sale of common stock under this prospectus may be made by a selling stockholder unless that stockholder is listed in the table below or until that stockholder has notified us, provided all required information to us and a supplement to this prospectus has been filed or an amendment to the registration statement has become effective.

Unless otherwise indicated in the footnotes to the table, no selling stockholder has held any position, office or other material relationship with us or our affiliates during the past three years.

Name	Amount of Common Stock Owned Prior to Offering(1)		Amount of Common Stock That May Be Offered Pursuant to this Prospectus			Amount of Common Stock Owned After Offering(2)	
	Number	Percent	Outstanding Common Stock	Common Stock Underlying Preferred Stock	Common Stock Underlying Warrants	Number	Percent
	133,340	1.2%	---	66,670	66,670	---	---

OTAPE Investments, LLC(3)							
Dolphin Offshore Partners, L.P.	1,333,340	10.5%	---	666,670	666,670	---	---
Pamela Kaweske	80,000	*	---	40,000	40,000	---	---
Baffles, S.A.	80,000	*	---	40,000	40,000	---	---
Hytek International, Ltd.	56,000	*	---	28,000	28,000	---	---
SEGOES Trust	104,000	*	---	52,000	52,000	---	---
SF Capital Partners(3)	586,660	4.9%	---	293,330	293,330	---	---
Bristol Investment Fund, Ltd.	533,340	4.5%	---	266,670	266,670	---	---
Bristol Investment Group, Inc.(4)	6,667	*	---	---	6,667	---	---
Easton Hunt Capital Partners, L.P.	1,666,660	12.8%	---	833,330	833,330	---	---
ProMed Partners, L.P.(3)(5)	875,072	7.1%	---	422,740	452,332	---	---
ProMed Partners II, L.P.(3)(5)	157,196	1.4%	---	75,940	81,256	---	---
ProMed Offshore Fund, Ltd.(3)(5)	140,760	1.2%	---	68,000	72,760	---	---
David Musket(3)(5)	248,222	2.1%	---	100,000	148,222	---	---

SDS Capital Group SPC, Ltd.	333,340	2.8%	---	166,670	166,670	---	---
North Sound Legacy Fund LLC	20,000	*	---	10,000	10,000	---	---
North Sound Legacy Institutional Fund, LLC	220,000	1.9%	---	110,000	110,000	---	---
North Sound Legacy International, Ltd.	426,660	3.6%	---	213,330	213,330	---	---
Sagamore Hill Hub Fund, Ltd.(6)	666,660	5.5%	---	333,330	333,330	---	---
Alpha Capital AG	266,660	2.3%	---	133,330	133,330	---	---
Paul Scharfer(3)	381,562	3.2%	---	166,670	214,892	---	---
John E. Imhoff	1,765,820(7)	14.1%	---	333,330	718,330	622,500	5.2%
Susan M. Imhoff	91,660(8)	*	---	33,330	58,330	---	---
Dolores Maloof(3)	803,866	6.8%	---	166,670	270,670	366,526	3.1%
Steven Maloof(9)	559,750	4.9%	---	---	143,000	416,750	3.5%
Keith Ignotz(10)	695,560(11)	5.9%	---	66,670	143,670	485,220	4.1%
Mark Samuels(12)	790,895(13)	6.6%	---	66,670	143,670	580,555	4.8%
Kensington Partners, L.P.	190,560	1.6%	---	95,280	95,280	---	---
Bald Eagle Fund, Ltd.	9,440	*	---	4,720	4,720	---	---

Douglas Schmidt	66,680	*	---	33,340	33,340	---	---
Heidi Douglas	147,000	1.3%	---	---	17,000	130,000	1.1%
Barry Kurokawa(3)	48,222	*	---	---	48,222	---	---
Joshua Golomb(3)	9,334	*	---	---	9,334	---	---
Robert R. Blakely(3)	89,001	*	20,000	---	69,001	---	---
Scott R. Griffith(3)	89,000	*	20,000	---	69,000	---	---
Jesse B. Shelmire, III(3)	89,000	*	20,000	---	69,000	---	---

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* Less than 1%.

(1) Represents the number of shares of outstanding common stock, common stock underlying preferred stock and common stock underlying warrants that may be offered pursuant to this prospectus and the amount of other common stock owned.

(2) Assumes the sale of all of the shares of common stock offered by each selling stockholder. The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

(3) The selling stockholder, who is a broker-dealer or an affiliate of a broker-dealer, has advised us that such selling stockholder acquired the securities in the ordinary course of business and, at the time, had no agreements or understandings, directly or indirectly, with any person to distribute the shares.

(4) This selling stockholder, who is a broker-dealer and may be deemed an underwriter, has advised us that it acquired the securities in the ordinary course of business and, at the time, had no agreements or understandings, directly or indirectly, with any person to distribute the shares.

(5) David Musket may be deemed the beneficial owner of the securities held by ProMed Partners, L.P., ProMed Partners II, L.P. and ProMed Offshore Fund, Ltd.

(6) According to the selling stockholder's Schedule 13G dated April 12, 2004, each of Sagamore Hill Capital Management, L.P., its general partner, Sagamore Hill Capital Advisors, and its sole member, Steven H. Bloom have sole voting and dispositive power of these shares.

(7) Includes preferred shares convertible into 33,330 common shares and warrants to purchase 58,330 common shares held by Dr. Imhoff's spouse, for which he claims no beneficial interest.

(8) Excludes 622,500 common shares, held by Mrs. Imhoff's spouse, for which she claims no beneficial interest.

(9) This selling stockholder, who is a broker-dealer and may be deemed an underwriter, has advised us that he has not acquired the securities in the ordinary course of business and, at the time, had no agreements or understandings, directly or indirectly, with any person to distribute the shares.

(10) The selling stockholder is our senior executive vice president and one of our directors.

(11) Includes 238,924 common shares and 246,296 shares subject to stock options that are exercisable within 60 days of April 2, 2004.

(12) The selling stockholder is the chairman of our board of directors and our chief executive officer.

(13) Includes 271,926 common shares and 308,629 common shares subject to stock options that are exercisable within 60 days of April 2, 2004.

We and the selling stockholders have entered into agreements which required us to file the registration statement, of which this prospectus is a part, to permit the resale of the shares of common stock issued or issuable to those stockholders. Those agreements require that we use our best efforts to keep the registration statement continuously effective from the date the registration statement becomes effective until the earliest of:

the date on which all of the shares of common stock have been disposed of in accordance with the registration statement;

the date on which all of the shares of common stock held by persons that are not our affiliates are eligible to be sold pursuant to Rule 144(k) of the Securities Act of 1933; and

the seventh anniversary of the date of the registration rights agreement.

We may require the selling stockholders to suspend the sales of the common stock covered by this prospectus if our board of directors determines in good faith that it is in our best interests not to disclose the existence of facts surrounding any proposed or pending acquisition, disposition, strategic alliance or financing, or for any other purpose in order to comply with the federal securities laws. We will be permitted to suspend the rights of the selling stockholders to make sales pursuant to the registration statement and/or postpone the preparation, filing and effectiveness of the registration statement for periods not to exceed 90 days in the aggregate in any consecutive twelve month period.

PLAN OF DISTRIBUTION

Any or all of the shares offered by the selling stockholders may be offered for sale and sold by or on behalf of the selling stockholders from time to time in varying amounts, including in block transactions, on the Nasdaq Stock Market or the over-the-counter market, in privately negotiated transactions, or otherwise (other than underwritten offerings), at prices prevailing in such market or as may be negotiated at the time of the sale. The shares may be sold by the selling stockholders directly to one or more purchasers, through agents designated from time to time or to or through broker-dealers designated from time to time. In the event the shares are publicly offered through broker-dealers or agents, the selling stockholders may enter into agreements with respect thereto. Such broker-dealers or agents may receive compensation in the form of discounts, concessions or commissions from the selling stockholders and/or the purchasers of the shares. The selling stockholders and any such broker-dealers or agents that participate in the distribution of the shares may be deemed to be underwriters within the meaning of the Securities

Act, and any profit on the sale of the shares by them and any discounts, commissions or concessions received by them may be deemed to be underwriting discounts and commissions under the Securities Act. Any such broker-dealers and agents may engage in transactions with, and perform services for, SpectRx. At the time a particular offer of shares is made by the selling stockholders, to the extent required, a prospectus supplement will be distributed which will set forth the aggregate number of shares being offered, and the terms of the offering, including the public offering price thereof, the name or names of any broker-dealers or agents, any discounts, commissions and other items constituting compensation from, and the resulting net proceeds to, the selling stockholders.

Any supplement and, if necessary, a post-effective amendment to the registration statement, of which this prospectus is a part, will be filed with the Securities and Exchange Commission to reflect the disclosure of additional information with respect to the distribution of the securities.

We have agreed to indemnify the selling stockholders against specified liabilities under the Securities Act of 1933 and to pay substantially all of the expenses incidental to the registration, offering and sale of the common stock to the public other than commissions, brokerage fees and stock transfer taxes applicable to the common stock sold by the selling stockholders.

To the best of our knowledge, there are currently no plans, arrangements or understandings between any selling stockholders and any broker, dealer, agent or underwriter regarding the sale of the common stock by the selling stockholders.

In order to comply with the securities laws of certain states, sales of shares offered hereby to the public in such states may be made only through broker-dealers who are registered or licensed in such states. Sales of shares offered hereby must also be made by the selling stockholders in compliance with other applicable state securities laws and regulations.

DESCRIPTION OF SECURITIES

We have 55,000,000 authorized shares of stock, consisting of 50,000,000 shares of common stock, having a par value of $0.001 per share, and 5,000,000 shares of preferred stock, having a par value of $0.001 per share, of which 525,000 shares have been designated as redeemable convertible preferred stock and 510,000 shares have been designated as series A convertible preferred stock.

Common Stock

As of June 23, 2004, there were 11,390,079 shares of common stock issued and outstanding held of record by approximately 164 holders. The holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders. Subject to preferences that may be applicable to any outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by our board of directors out of funds legally available therefor and in liquidation proceedings. Holders of common stock have no preemptive or subscription rights and there are no redemption rights with respect to such shares. The outstanding shares of common stock are, and the shares of common stock offered by this prospectus will be, fully paid and nonassessable.

Preferred Stock

Our board of directors is authorized, without further stockholder action, to issue preferred stock in one or more series and to fix the voting rights, liquidation preferences, dividend rights, repurchase rights, conversion rights, redemption rights and terms, including sinking fund provisions, and certain other rights and preferences, of the preferred stock. Although there is no current intention to do so, our board of directors may, without stockholder approval, issue shares of a class or series of preferred stock with voting and conversion rights which could adversely affect the voting power

or dividend rights of the holders of common stock and may have the effect of delaying, deferring or preventing a change in control.

Redeemable Convertible Preferred Stock

We currently have outstanding 525,000 shares of redeemable convertible stock, having a stated value of $10.00 per share, held by one holder as of June 23, 2004.

On March 7, 2003, we reached a settlement with the sole holder of our 525,000 issued and outstanding shares of redeemable convertible preferred stock regarding certain disputes in connection with a previously terminated research and development and license agreement and the election of such holder to have shares of redeemable convertible preferred stock redeemed by us. The holder had previously agreed to waive its right to have 100,000 shares of redeemable convertible preferred stock redeemed, and had elected to have the remaining 425,000 shares redeemed, with 162,500 shares to be redeemed on December 30, 2002 at $10.00 per share, plus accrued dividends, and the remaining shares to be redeemed no later than January 31, 2004. Under the settlement, we agreed to make quarterly payments to the holder during 2003 and 2004 and end of the year lump sum payments in 2005 and 2006 to redeem the 425,000 shares of redeemable convertible preferred stock and to pay accrued dividends as to such shares. Our yearly financial obligations to the holder under the agreement are approximately $0.7 million, $1.3 million, $1.8 million and $1.9 million for 2003, 2004, 2005 and 2006, respectively.

Dividends.

The holders of the redeemable convertible preferred stock are entitled, when and if declared by our board of directors, to receive dividends out of assets of SpectRx legally available therefor at an annual rate of $0.60 per share. These dividends will be cumulative and will accrue whether or not declared by our board. So long as any shares of the redeemable convertible preferred stock are outstanding, we will not declare or pay on any stock ranking junior to the redeemable convertible preferred stock any dividend or distribution on any such junior ranking stock, nor will we purchase or redeem any such junior ranking stock, or pay or make available any monies for a sinking fund for the purpose of redemption of such junior ranking stock, unless all dividends declared or accrued on any outstanding shares of redeemable convertible preferred stock have been paid or declared and a sum of money sufficient for the payment thereof set apart.

Conversion.

Each share of the 100,000 shares of redeemable convertible preferred stock that will be converted is convertible into the number of shares of common stock equal to the product obtained by multiplying the conversion rate by the number of shares of preferred stock being converted. The conversion price will be equal to the greater of (i) $9.388 or (ii) the average of the closing sales price of the common stock as reported by the NASDAQ Stock Market for each day of the 30-day trading period that begins on the trading day that is 15 trading days prior to the date of our receipt of the conversion notice, as defined in the certificate of designations governing the redeemable convertible preferred stock.

Upon conversion of any shares of redeemable convertible preferred stock, we will pay all declared or accrued but unpaid dividends as to such shares to the holders thereof to and through the conversion effective date; provided, however, that we may, at our option, in lieu of making a full cash payment of all such declared or accrued but unpaid dividends, make payment thereof in that number of whole shares of common stock calculated by dividing the total of such declared or accrued but unpaid dividends due such holders by the conversion price. Each outstanding share of redeemable convertible preferred stock will automatically be converted into common stock on and as of December 31, 2004, at the then effective conversion rate.

Redemption.

We are required to redeem the redeemable convertible preferred stock at the election of the holders of a majority of the redeemable convertible preferred stock, which election has been made for the 425,000 shares eligible for redemption at a redemption price of $10.00 per share, plus accrued but unpaid dividends. On or before each date scheduled for redemption, each holder of shares to be redeemed must surrender the certificate representing such shares to us and will receive payment of the redemption price therefor in cash. If fewer than all of the shares represented by a surrendered certificate are redeemed, we will issue a new certificate representing the unredeemed shares.

Voting.

Holders of the redeemable convertible preferred stock have no voting rights in respect of the redeemable convertible preferred stock, except that they have the right to vote on those matters which, under the Delaware General Corporation Law, voting by classes of stock is required. So long as any shares of the redeemable convertible preferred stock are outstanding, we may not, without the unanimous consent of the holders of the redeemable convertible preferred stock then outstanding:

alter or change the preferences, rights, powers or privileges of the redeemable convertible preferred stock;

allocate any earned surplus, whether now existing or hereafter arising, to capital, in accordance with Delaware law, if the effect thereof would be to reduce the legally available funds for payment of dividends or for redemption of the redeemable convertible preferred stock; or

create or authorize any shares of any class of our capital stock having any preference or priority as to either dividends or distribution or assets upon liquidation superior to any such preference or priority of the shares of redeemable convertible preferred stock or reclassify any securities into shares of such superior stock.

Liquidation.

In the event of our voluntary or involuntary liquidation, dissolution or winding up, before any payment or distribution of our assets is made to or set apart for the holders of any stock ranking junior to the redeemable convertible preferred stock, the holders of the redeemable convertible preferred stock will be entitled to receive in respect of their shares of redeemable convertible preferred stock payment out of our assets of $10.00 per share, plus all accrued but unpaid dividends to the date of final distribution.

Series A Convertible Preferred Stock

We currently have outstanding 488,669 shares of series A convertible preferred stock, having a stated value of $15.00 per share, held by 28 holders as of June 23, 2004.

Dividends.

The holders of the series A convertible preferred stock are entitled to receive quarterly, at the end of each calendar quarter, commencing on and after March 26, 2006, out of funds legally available therefor, dividends per share at the per annum rate of $0.75 per share, prior and in preference to any declaration or payment of any dividend on any stock ranking junior to the series A convertible preferred stock. Such dividends shall be cumulative, compounded annually, and accrue from March 26, 2004, whether or not declared by our board of directors. At our election, dividends on the series A convertible preferred stock may be paid by the issuance and delivery of whole shares of common stock having an aggregate current market price at the time of issuance equal to the amount of dividends so paid. The shares of redeemable convertible preferred stock and shares of any class of our capital stock ranking equal to the series A convertible preferred stock as to dividends and the distribution of assets upon liquidation, referred to in this prospectus as *pari passu* stock, shall rank equally with the series A convertible preferred stock as to payment of dividends. If any dividend becomes due and payable to the holders of series A convertible preferred stock and there is also due and payable a dividend to the holders of the redeemable convertible preferred stock or other *pari passu* stock, and we have insufficient funds to make payment in full to all such holders of such respective dividends, then such funds as are available will be distributed among the holders, ratably in proportion to the full amounts to which they would otherwise respectively be entitled.

Conversion.

Each share of series A convertible preferred stock is convertible into the number of shares of common stock equal to the quotient obtained by dividing the sum of (i) $15.00 (as adjusted for changes in the series A convertible preferred stock by stock split, stock dividend, or the like occurring after March 26, 2004), referred to in this prospectus as the invested amount, plus (ii) all declared or accrued but unpaid dividends on such shares of series A convertible preferred stock, by the conversion price per share. The current per share conversion price is $1.50. The conversion price is subject to adjustment under certain circumstances to protect the holders of series A convertible preferred stock from dilution relative to certain issuances of common shares, or securities convertible into or exercisable for common shares. Subject to certain exceptions, if we issue common shares, or such other securities, at a price per share less than the then effective conversion price, the conversion price will be

adjusted to equal such lower per share consideration.

On any automatic conversion date, each share of series A convertible preferred stock then outstanding will automatically be converted into common stock at the then effective conversion rate; provided, however, the number of shares of series A convertible preferred stock to be converted on any automatic conversion date must not exceed, as measured by the aggregate number of shares of common stock issued or to be issued upon conversion thereof, the cumulative trading volume for 90 preceding consecutive trading days for the common stock on its principal trading market in the United States. An automatic conversion date, subject to certain additional limitations and requirements, will occur if our common stock trades for a period of 20 consecutive trading days on its principal trading market in the U.S. at a per share trading price of the greater of $4.50 or three times the then conversion price.

Voting.

Each holder of a share of the series A convertible preferred stock is entitled to the number of votes equal to the number of shares of common stock into which such share of series A convertible preferred stock would be convertible under the circumstances described above on the record date for the vote or consent of stockholders, and will otherwise have voting rights and powers equal to the voting rights and powers of the common stock; *provided, however,* that, so long as at least 100,000 (such number subject to adjustment) shares of series A convertible preferred stock are outstanding, with respect to the election of directors, in addition to and not in limitation of the foregoing, if requested of us in a writing delivered to us at our principal executive offices and signed by the holders of a majority of the issued and outstanding shares of series A convertible preferred stock (or their duly designated proxies), the holders of the series A convertible preferred stock will vote together as a single class to elect two members of our board of directors.

In addition, holders of the series A convertible preferred stock have the right to vote on those matters which, under the Delaware General Corporation Law, voting by classes of stock is required and, so long as at least 100,000 (such number subject to adjustment) shares of series A convertible preferred stock are outstanding, we may not, without the consent (given by vote in person or by proxy at a meeting called for the purpose, or by written consent) of the holders of a majority of the shares of series A convertible preferred stock then outstanding:

- create or authorize any shares of any class or series of our capital stock having a preference or priority as to either dividends or distribution of assets upon liquidation equal or superior to any such preference or priority of the shares of series A convertible preferred stock, reclassify any existing securities into shares of such equal or superior stock or amend the terms of any existing securities in a manner inconsistent with the foregoing restriction;
- amend or repeal any provision of, or add any provision to, our certificate of incorporation or bylaws, if such action would adversely alter or change the preferences, rights, privileges, or powers of, or restrictions provided for the benefit of, the series A convertible preferred stock;
- declare, pay or set aside any dividends on any stock ranking junior to the series A convertible preferred stock, or redeem or repurchase any such junior ranking stock;
- increase or decrease (other than in connection with a redemption or conversion) the authorized number of shares of series A convertible preferred stock; or
- alter or change the rights, preferences or privileges of the series A convertible preferred stock in a manner different from each other class of *pari passu* stock.

Liquidation.

In the event of our voluntary or involuntary liquidation, dissolution or winding up, referred to in this prospectus as a liquidation, or a "sale or merger" (as defined in the certificate of designations governing the series A convertible preferred stock), the holders of the outstanding shares of series A convertible preferred stock will, at their election, be entitled to receive in exchange for and in redemption of each share of their series A convertible preferred stock, prior and in preference to the holders of stock ranking junior to the series A convertible preferred stock, (x) in the case of a liquidation, from any funds legally available for distribution to stockholders, and (y) in the case of a sale or merger, from the net proceeds therefrom, an amount equal to the greater of (i) the invested amount per share, plus the aggregate amount of all declared or accrued, but unpaid, dividends per share, or (ii) the amounts to which such holders would have been entitled if the shares were converted to shares of common stock immediately before the liquidation, or sale or merger as the case may be. If, upon any liquidation, our assets are insufficient to make payment in full to all holders of the series A convertible preferred stock of the liquidation preference and to make payment in full to all

holders of the redeemable convertible preferred stock of the liquidation preference, then our assets will be distributed among the holders of the series A convertible preferred stock and the holders of the redeemable convertible preferred stock then outstanding, ratably in proportion to the full amounts to which they would otherwise respectively be entitled.

Pre-emptive Rights.

The holders of the series A convertible preferred stock have the right of first refusal to purchase their pro rata share of any new securities, as defined in the certificate of designations governing the series A convertible preferred stock, that we may, from time to time, propose to sell and issue.

Warrants

We have issued warrants to purchase our common stock from time to time in connection with certain financing arrangements. As of June 23, 2004, there were outstanding warrants to purchase an aggregate of 6,501,026 shares of common stock at a weighted average exercise price of $2.39 per share. All of our warrants are currently exercisable. Of our warrants, warrants exercisable for 4,886,690 shares of our common stock were issued to the purchasers of our shares of series A convertible preferred stock, with the per share exercise price being $1.65 for one half of those warrants and $2.25 for the other half. Subject to certain exceptions, if we issue shares of common stock, or securities convertible or exercisable for common shares, for a consideration per share of less than the then conversion price for the series A convertible preferred stock, then the per share exercise price for the warrants with the $1.65 exercise price will be adjusted to equal such lower per share consideration, and the exercise price for the warrants with the $2.25 exercise price will be adjusted to equal 125% of such lower per share consideration. All outstanding warrant agreements provide for anti-dilution adjustments in the event of certain mergers, consolidations, reorganizations, recapitalizations, stock dividends, stock splits or other changes in our corporate structure. Holders of some of our warrants are entitled to certain rights to cause us to register the sale of such shares under the Securities Act.

Certain Charter and Bylaw Provisions and Delaware Anti-Takeover Statute

Certain provisions of our certificate of incorporation, as amended, and bylaws may have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, control of us. Such provisions could limit the price that certain investors might be willing to pay in the future for shares of our common stock. Certain of these provisions allow us to issue preferred stock without any vote or further action by the stockholders and eliminate the right of stockholders to act by written consent without a meeting. These provisions may make it more difficult for stockholders to take certain corporate actions, and could have the effect of delaying or preventing a change in control of us.

In addition, we are subject to Section 203 of the Delaware General Corporation Law which, subject to certain exceptions, prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that such stockholder became an interested stockholder, unless: (1) prior to such date, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder, or (2) upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding of those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer, or (iii) on or subsequent to such time the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

LEGAL MATTERS

Jones Day, Atlanta, Georgia, has passed upon the validity of the common stock that may be offered by this prospectus.

EXPERTS

The consolidated financial statements for the year ended December 31, 2003 included in our annual report on Form 10-K for the year ended December 31, 2003 have been audited by Eisner LLP, independent auditors, as set forth in their report thereon included therein and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

The consolidated financial statements for the year ended December 31, 2002 included in our annual report on Form 10-K for the year ended December 31, 2003 have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon included therein and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

The consolidated financial statements for the year ended December 31, 2001 included in our annual report on Form 10-K for the year ended December 31, 2003 have been audited by Arthur Andersen LLP, which has since ceased operations. Because Arthur Andersen LLP will not be available to consent to the inclusion of their report in the registration statement of which this prospectus is a part, you will not be able to recover against Arthur Andersen LLP under Section 11 of the Securities Act for any false or misleading statements of a material fact contained in the consolidated financial statements audited by Arthur Andersen LLP that are incorporated by reference or any omissions to state a material fact required to be stated therein. An investor's ability to seek potential recoveries from Arthur Andersen LLP related to any claims that an investor may assert as a result of the work performed by Arthur Andersen LLP may be limited significantly by the lack of Arthur Andersen LLP's consent and the absence of assets of Arthur Andersen LLP that are or may be available to satisfy any claims.

WHERE YOU CAN GET MORE INFORMATION

Available Information

We file reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy this information at the public reference facilities maintained by the Commission at the Commission's Public Reference Room, which is located at 450 Fifth Street, N.W., Judiciary Plaza, Washington, D.C. 20549.

You may obtain information on the operation of the Public Reference Room by calling the Commission at 1-800-SEC-0330. Our filings are also available on the Commission's web site on the Internet at http://www.sec.gov.

Statements in this prospectus concerning the contents of any contract, agreement or other document are not necessarily complete. If we filed as an exhibit to any of our public filings any of the contracts, agreements or other documents referred to in this prospectus, you should read the exhibit for a more complete understanding of the document or matter involved.

Incorporation of Documents by Reference

We have incorporated information into this prospectus by reference. This means we have disclosed information to you by referring you to another document we filed with the Commission. We will make those documents available to you without charge upon your oral or written request. Requests for these documents should be directed to SpectRx, Inc., 6025A Unity Drive, Norcross, Georgia 30071, Attention: Investor Relations, telephone: (770) 242-8723.

The information in the following documents we filed with the Commission (file no. 0-22179) is incorporated by reference in this prospectus:

- Annual Report on Form 10-K for the year ended December 31, 2003, dated and filed with the Commission on March 30, 2004, as amended by Form 10K/A dated and filed with the Commission on July 8, 2004, copies of which are being delivered with this prospectus;
- Proxy Statement, dated as of April 23, 2004, filed with the Commission in definitive form on April 23, 2004, with respect to the information required by Items 401 (management), 402 (executive compensation), 403 (securities ownership), 404 (specified relationships and related transactions) and 405 (Section 16(a) compliance) of Regulation S-K promulgated under the Securities Act of 1933 and the Securities Exchange Act of 1934, and Item 9(e) (independent public accountants) of Schedule 14A promulgated under the Securities Exchange Act of 1934;
- Current Report on Form 8-K dated and filed with the Commission on March 29, 2004; and
- Quarterly Report on Form 10-Q for the quarter ended March 31, 2004, dated and filed with the Commission on May 14, 2004, a copy of which is being delivered with this prospectus.

We are also incorporating by reference additional documents we may file pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus and before all of the shares covered by this prospectus are sold or deregistered (other than information furnished under Item 9 or Item 12 or successor provisions of any current report on Form 8-K which are not filed). This additional information is a part of this prospectus from the date of filing of those documents.

Any statements made in this prospectus or in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other subsequently filed document which is also incorporated or deemed to be incorporated by reference in this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

The information relating to us contained in this prospectus should be read together with the information in the documents incorporated or deemed to be incorporated by reference.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. Other Expenses of Issuance and Distribution

The following table sets forth the various expenses and costs incurred or to be incurred by SpectRx, Inc. in connection with the registration, sale and distribution of the shares of common stock that may be offered hereby, other than selling commissions which will be borne by the selling stockholders. All the amounts shown are estimated except the Securities and Exchange Commission registration fee.

Securities and Exchange Commission filing fee	$ 2,811
Legal fees and expenses	$60,000
Accounting fees and expenses	$ 7,000

Blue Sky and related expenses	$15,000
Miscellaneous	$ 1,000
Total	$85,811

ITEM 15. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law permits a corporation to include in its charter documents, and in agreements between the corporation and its directors and officers, provisions expanding the scope of indemnification beyond that specifically provided by the current law. Article VII of our Certificate of Incorporation provides for the indemnification of directors to the fullest extent permissible under Delaware law. Article VII of our Bylaws provides for the indemnification of officers, directors and third parties acting on behalf of the corporation if such person acted in good faith and in a manner reasonably believed to be in and not opposed to the best interest of the corporation, and, with respect to any criminal action or proceeding, the indemnified party had no reason to believe his conduct was unlawful. We have entered into indemnification agreements with our directors and executive officers, in addition to indemnification provided for in the our Bylaws, and intend to enter into indemnification agreements with any new directors and executive officers in the future.

ITEM 16. Exhibits

Exhibit Number	Description of Exhibit
3.1A	Certificate of Incorporation, as amended (incorporated by reference to Exhibit 3.1A filed with the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 1997, filed August 12, 1997).
3.1B	Certificate of Designations for Redeemable Convertible Preferred Stock (incorporated by reference to Exhibit 3.1B filed with the registrant's Annual Report on Form 10-K for the year ended December 31, 2001, filed April 2, 2002).
3.1C	Certificate of Designations for Series A Convertible Preferred Stock (incorporated by reference to Exhibit 99.4 filed with the registrant's Current Report on Form 8-K, dated and filed March 29, 2004 (the "March 2004 Form 8-K")).
3.2A	Amendment to Bylaws (incorporated by reference to Exhibit 3.2A filed with the registrant's Annual Report on Form 10-K for the year ended December 31, 2003, filed March 30, 2004 (the "2003 Form 10-K")).
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 filed with the registrant's S-1 Registration Statement (No. 333-22429) filed February 27, 1997, as amended (the "S-1 Registration Statement")).
4.2A	Form of Warrant (incorporated by reference to Exhibit 99.5 filed with the registrant's March 2004 8-K).
4.2B	Form of Warrant (incorporated by reference to Exhibit 99.6 filed with the

	registrant's March 2004 8-K).
4.2	Form of Common Stock Warrant (incorporated by reference to Exhibit 4.1 filed with the registrant's quarterly report on Form 10-Q for the quarter for the quarter ended March 31, 2002, filed May 14, 2002).
4.3	Registration Rights Agreement, dated March 26, 2004, by and among SpectRx and the Purchasers listed therein (incorporated by reference to Exhibit 99.3 filed with the registrant's March 2004 8-K).
*** 5	Opinion of Jones Day regarding validity.
10.1	1997 Employee Stock Purchase Plan and for of agreement thereunder (incorporated by reference to Exhibit 10.1 filed with the registrant's S-1 Registration Statement).
10.2	1995 Stock Plan, as amended, and form of Stock Option Agreement thereunder (incorporated by reference to Exhibit 10.2 to the registrant's S-1 Registration Statement).
10.4	Assignment and Bill of Sale, dated February 29, 1996, between Laser Atlanta Optics, Inc. and SpectRx (incorporated by reference to Exhibit 10.4 filed with the registrant's S-1 Registration Statement).
10.5	Security Agreement, dated October 31, 1996, between Mark A. Samuels and SpectRx (incorporated by reference to Exhibit 10.5 filed with the registrant's S-1 Registration Statement).
10.6	Security Agreement, dated October 31, 1996, between Keith D. Ignotz and SpectRx (incorporated by reference to Exhibit 10.6 filed with the registrant's S-1 Registration Statement).
10.7A**	License Agreement, dated May 7, 1991, between Georgia Tech Research Corporation and Laser Atlanta Optics, Inc. (incorporated by reference to Exhibit 10.7A filed with the registrant's S-1 Registration Statement).
10.7B	Agreement for Purchase and Sale of Technology, Sale, dated January 16, 1993, between Laser Atlanta Optics, Inc. and SpectRx (incorporated by reference to Exhibit 10.7B filed with the registrant's 2003 Form 10-K).
10.7C	First Amendment to License Agreement, dated October 19, 1993, between Georgia Tech Research Corporation and SpectRx (incorporated by reference to Exhibit 10.7C filed with the registrant's S-1 Registration Statement).
10.8	Clinical Research Study Agreement, dated July 22, 1993, between Emory University and SpectRx (incorporated by reference to Exhibit 10.8 filed with the registrant's S-1 Registration Statement).
10.9A**	Development and License Agreement, dated December 2, 1994, between Boehringer Mannheim Corporation and SpectRx (incorporated by reference to Exhibit 10.9A filed with the registrant's S-1 Registration Statement).

10.9B**	Supply Agreement, dated January 5, 1996, between Boehringer Mannheim and SpectRx (incorporated by reference to Exhibit 10.9B filed with the registrant's S-1 Registration Statement).
10.10	Sole Commercial Patent License Agreement, dated May 4, 1995, between Martin Marietta Energy Systems, Inc. and SpectRx (incorporated by reference to Exhibit 10.10 filed with the registrant's S-1 Registration Statement).
10.11A	License and Joint Development Agreement, dated March 1, 1996, between NonInvasive-Monitoring Company, Inc., Altea Technologies, Inc. and SpectRx (incorporated by reference to Exhibit 10.11A filed with the registrant's S-1 Registration Statement).
10.11B**	Amendment to License and Joint Development Agreement, dated December 30, 2001, between NonInvasive-Monitoring Company, Inc., Altea Technologies, Inc. and SpectRx (incorporated by reference to Exhibit 10.11B filed with the registrant's Form 8-K dated and filed March 21, 2003).
10.12A**	Purchasing and Licensing Agreement, dated June 19, 1996, between Respironics and SpectRx (incorporated by reference to Exhibit 10.12A filed with the registrant's S-1 Registration Statement).
10.12B	Amendment to Purchasing and Licensing Agreement, dated October 21, 1998 between Respironics and SpectRx (incorporated by reference to Exhibit 10.12B filed with the registrant's Annual Report on Form 10-K for the year ended December 31, 1998, filed March 30, 1999, as amended).
10.13	Research Services Agreement, dated September 3, 1996, between Sisters of Providence in Oregon doing business as the Oregon Medical Laser Center, Providence St. Vincent Medical Center and SpectRx (incorporated by reference to Exhibit 10.13 filed with the registrant's S-1 Registration Statement).
10.14A**	Research and Development and License Agreement, dated October 10, 1996, between Abbott Laboratories and SpectRx (incorporated by reference to Exhibit 10.14A filed with the registrant's S-1 Registration Statement).
10.14B**	Letter Agreement, dated December 22, 1997, between Abbott Laboratories and SpectRx (incorporated by reference to Exhibit 10.14B filed with the registrant's Annual Report on Form 10-K for the year ended December 31, 1997, filed March 27, 1998).
10.14C**	Third Amendment to Research and Development and License Agreement, dated November 30, 1999 between Abbott Laboratories and SpectRx (incorporated by reference to Exhibit 10.14C filed with the registrant's Annual Report on Form 10-K for the year ended December 31, 1999, filed March 30, 2000, as amended).
10.14D**	Fourth Amendment to Research and Development and License Agreement, dated November 30, 1999 between Abbott Laboratories and SpectRx (incorporated by reference to Exhibit 10.14D filed with the registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2002,

	filed November 14, 2002).
10.15A	Lease, dated September 21, 1993, between National Life Insurance Company d/b/a Plaza 85 Business Park and SpectRx, together with amendments 1, 2, 3 and 4 thereto and Tenant Estoppel Certificate, dated September 20, 1994 (incorporated by reference to Exhibit 10.15A filed with the registrant's S-1 Registration Statement).
10.16A**	Development and License Agreement, dated July 13, 1999, between Roche Diagnostics Corporation and SpectRx (incorporated by reference to Exhibit 10.16A filed with the registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 1999, filed August 16, 1999, as amended (the "June 1999 Form 10-Q"))
10.16B**	Supply Agreement, dated July 13, 1999, between Roche Diagnostics Corporation and SpectRx (incorporated by reference to Exhibit 10.16B filed with the registrant's June 1999 Form 10-Q).
10.17	Agreement and Plan of Merger, dated December 31, 2001 by and between SpectRx, Inc. Sterling Medivations, Inc., SM Merger Sub, Inc. and certain shareholders of Sterling Medivations, Inc. (incorporated by reference to Exhibit 10.17 filed with the registrant's Current Report on Form 8-K, as amended, dated and filed January 14, 2002 (the "January 2002 Form 8-K")).
10.18	Agreement and Plan of Merger, dated December 31, 2001, by and among SpectRx, SM Merger Sub, Inc., Sterling Medivations, Inc. and certain stockholders (incorporated by reference to Exhibit 21 filed with the registrant's January 2002 Form 8-K).
10.19	Agreement for Termination of Development and Commercialization Agreement, dated November 19, 2002, between SpectRx and Welch Allyn, Inc. (incorporated by reference to Exhibit 99.1 filed with the registrant's Current Report on Form 8-K, dated and filed December 20, 2002).
10.20	Asset Sale Agreement, dated March 6, 2003, between SpectRx and Respironics (incorporated by reference to Exhibit 10.20 filed with the registrant's Current Report on Form 8-K, dated and filed March 21, 2003).
10.21	Securities Purchase Agreement, dated as of March 26, 2004, by and among SpectRx and the Purchasers listed on Schedule I (incorporated by reference to Exhibit 99.2 filed with the registrant's March 2004 Form 8-K).
13.1	Annual Report on Form 10-K for the year ended December 31, 2003 (incorporated by reference to the registrant's 2003 Form 10-K).
13.2	Quarterly Report on Form 10-Q for the quarter ended March 31, 2004 (incorporated by reference to the registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2004, dated and filed with the Commission on May 14, 2004).
16.1	Letter re Change in Certifying Accountants (incorporated by reference to Exhibit 16.1 to the registrant's Current Report on Form 8-K, dated and filed

	June 4, 2002).
16.2	Letter re Change in Certifying Accountants (incorporated by reference to Exhibit 99.1 to the registrant's Current Report on Form 8-K, dated and filed October 24, 2003).
*23.1	Consent of Eisner LLP.
*23.2	Consent of Ernst & Young LLP.
23.3	Consent of Jones Day (included in Exhibit 5).
*** 24	Powers of Attorney (included on signature page).

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* Filed herewith.

** Confidential treatment granted for portions of these agreements.

*** Previously filed.

ITEM 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however,

that paragraphs (i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-2 and has duly caused this amendment to its registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Atlanta, in the State of Georgia, on July 8, 2004.

SPECTRX, INC.

By: /s/ THOMAS H. MULLER, JR.

Thomas H. Muller, Jr.
Executive Vice

President, Chief Financial Officer and Secretary

Pursuant to the requirements of the Securities Act of 1933, this amendment to the registration statement has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicted.

DATE	SIGNATURE	TITLE
	* Mark A. Samuels	Chairman, Chief Executive Officer and Director (Principal Executive Officer
	/s/ Thomas H. Muller, Jr. Thomas H. Muller, Jr.	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)
	* Keith D. Ignotz	Senior Executive Vice President and Director
	* Charles G. Hadley	Director
	* Earl R. Lewis	Director
	* William E. Zachary	Director
	* Chris Monahan	Director
July 8, 2004	/s/ Thomas H. Muller, Jr. Thomas H. Muller, Jr. Attorney-In-Fact	

EXHIBIT INDEX

Exhibit Number	Description of Exhibits
*23.1	Consent of Eisner LLP.

*23.2	Consent of Ernst & Young LLP.

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* Filed herewith.