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PHARMANETICS INC
Form 10-K
March 22, 2002

FORM 10-K
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
(Mark One)
 ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D)
OF THE SECURITIES EXCHANGE ACT OF 1934.
For the fiscal year ended December 31, 2001

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE
SECURITIES EXCHANGE ACT OF 1934.
FOR THE TRANSITION PERIOD FROM

_____ to _____

Commission file number 0-25133

PHARMANETICS, INC.
(Exact name of registrant as specified in its charter)

NORTH CAROLINA
(State or other jurisdiction of
incorporation or organization)

56-2098302
(I.R.S. Employer
Identification No.)

9401 GLOBE CENTER DRIVE, SUITE 140
MORRISVILLE, NORTH CAROLINA
(Address of principal executive offices)

27560
(Zip Code)

Registrant's telephone number, including area code:
919-582-2600

SECURITIES REGISTERED PURSUANT TO SECTION 12(B) OF THE ACT: NONE
SECURITIES REGISTERED PURSUANT TO SECTION 12(G) OF THE ACT:
COMMON STOCK (NO PAR VALUE)

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

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

The aggregate market value of the voting stock held by non-affiliates of the registrant based upon \$7.75 per share, the closing price of the Common Stock on March 18, 2002, on the NASDAQ National Market System, was approximately \$57,503,000 as of such date. Shares of Common Stock held by each officer and director and by each person who owns 10% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status may not be conclusive for other purposes.

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As of March 18, 2002, the registrant had outstanding 9,534,494 shares of Common Stock (no par value).

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company's Proxy Statement for the 2002 Annual Meeting of Shareholders are incorporated herein by reference into Part III.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

Statements in this Annual Report on Form 10-K that are not descriptions of historical facts are forward-looking statements that are subject to risks and uncertainties. Actual results could differ materially from those currently anticipated due to a number of factors, including those set forth herein under the heading "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations -- Factors That Might Affect Future Results" and elsewhere, as well as in the Company's other filings with the Securities and Exchange Commission, and including, in particular, the ability of the Company to implement its business strategy, risks relating to new product development, uncertainties regarding market acceptance of the Company's products, government regulation, healthcare industry consolidation and competition.

PART I

ITEM 1. BUSINESS

PharmaNetics, Inc. (the "Company"), through its wholly-owned subsidiary Cardiovascular Diagnostics, Inc. ("CVDI"), develops, manufactures and markets rapid turnaround diagnostics to assess blood clot formation and dissolution. CVDI's products are a proprietary analyzer and dry chemistry tests, known as the Thrombolytic Assessment System or TAS, that provide, at the point of patient care, rapid and accurate evaluation of hemostasis. CVDI is also establishing itself in the emerging field of theranostics, or rapid near-patient testing, in which the diagnostic results may influence treatment decisions. CVDI's current tests and tests under development are used in the treatment of angina, heart attack, stroke, deep vein thrombosis and pulmonary and arterial emboli.

CVDI believes that the TAS is the only stat, or "as soon as possible", point-of-care system capable of monitoring the coagulation (formation) and lysis (dissolution) of blood clots. Such monitoring provides information which is critical in administering anticoagulant and thrombolytic (clot-dissolving) drugs, which are used in the treatment of a variety of medical disorders. Hemostatic test results must be provided quickly because a majority of the drugs used to regulate clotting are cleared rapidly from the body, and these drugs must be closely monitored to maintain drug levels within an effective treatment range. CVDI believes that hospital central and stat laboratories, which currently provide the majority of such testing, generally cannot provide timely information to clinicians regarding drugs that affect coagulation and thrombolysis. Delay in providing such information can be a problem because the physician is likely to leave the patient area during this time, which may result in a further delay of diagnosis and treatment. CVDI believes that the TAS can provide information regarding coagulation and thrombolysis as well as drug monitoring on a timely basis, permitting quicker diagnosis and therapeutic intervention, which will improve hemostatic therapy and the quality of patient care. CVDI believes that this improvement may facilitate quicker transfers out of expensive critical care settings, reduce the overall length of hospital stays, reduce expenditures for laboratory equipment and its associated maintenance, and reduce the unnecessary use of pharmaceuticals. In addition,

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point-of-care testing can reduce hospitals' costs by reducing the numerous steps, paperwork and personnel used in collecting, transporting, documenting and processing blood samples.

The Company currently sells domestically and internationally its TAS analyzer and a menu of tests and controls. Of these tests, the following have received Food and Drug Administration, or FDA, clearance under Section 510(k) of the Food, Drug and Cosmetic Act and are currently sold for commercial use: Prothrombin Time ("PT"); PT non-citrated ("PTNC"); PT One; activated Partial Thromboplastin Time ("aPTT"); Heparin Management test ("HMT"); Low Range Heparin Management Test ("LHMT"); and Heparin Management Panel and Accent system, a hardware accessory to the TAS analyzer which combines the TAS technology and the currently marketed HMT with two other test cards, the Heparin Titration test ("HTT") and Protamine Response test ("PRT") with the Accent. The Company has sold three other tests, the Lysis Onset Time ("LOT), Ecarin Clotting Time ("ECT") and a modified ecarin clotting time test "for investigational use only". In addition, the Company has obtained a Humanitarian Device Exemption, or HDE, for its ECT card, which is used in managing patients suffering from heparin induced thrombocytopenia, or HIT. HDE approval is an accelerated FDA authorization process to market devices used in rare disease states where no existing solution is available. In addition, the Company is currently researching and developing other test cards for use on the TAS system.

INDUSTRY OVERVIEW

Blood testing within the practice of laboratory medicine has been evolving in response to the physician's demand for information. This demand for information is particularly acute in blood testing, where access to timely and accurate results is critical to effective patient care. Initially, hospital blood analysis was performed in multiple small laboratories that typically used time consuming manual techniques. The accuracy of tests performed under these conditions varied considerably depending upon, among other factors, the skill of the laboratory personnel. The advent of automated blood testing allowed for centralization and standardization of laboratory tests. With improved access to blood analysis, physicians began to use laboratory tests as a primary diagnostic tool and consequently demanded more tests and faster results. In an effort to meet this demand, some hospitals established decentralized stat laboratories nearer the patient. These laboratories typically rely on technology designed for efficiency in a high-volume centralized department. CVDI believes that reliance on this technology makes stat laboratories inadequate and expensive, creating a need for new technology suitable for use at the point of patient care. As diagnostics move closer to the patient, the centralized lab has had a reduced role in the purchasing decisions for point-of-care systems. The physician is more likely to have influence over the use of point-of-care technology given its ability to be a valuable tool for managing therapy.

Recent advances in technology allow many routine blood tests to be performed at the point of patient care, where the physician can most effectively use test results. Portable, easy-to-use analyzers designed to perform blood analysis rapidly and accurately are emerging as a solution to these current healthcare demands. While speed is important in point-of-care testing, accuracy is critical. Since point-of-care testing is often performed by operators who lack special laboratory skills or training, the more error-proof the testing system, from sample collection through archiving of the test result, the more reliable the system will prove to be. By design, most point-of-care tests require limited materials and minimum labor. Point-of-care test systems must also comply with the Clinical Laboratory Improvement Act of 1988, or CLIA, and its regulations. See "Government Regulation".

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Access to timely and accurate coagulation test results must be provided quickly because a majority of the drugs used to regulate clotting are cleared rapidly from the body and these drugs must be closely monitored to maintain drug levels within a safe treatment range. Coagulation testing presents special challenges in achieving test accuracy.

TECHNOLOGY

The Company's core technology relating to both the TAS analyzer and test cards is currently protected by a number of U.S. and corresponding international patents. The TAS card technology combines a mixture of dry reagents and paramagnetic iron oxide particles, or PIOP, that is contained within the card's reaction chamber. The test card has the approximate dimensions and half the thickness of a standard credit card. Blood samples are introduced into this reagent/particle mixture, dissolving the dry reagent and freeing the magnetic particles to move within the card's chamber. When the oscillating magnetic field is generated by the TAS analyzer, the magnetic particles within the TAS card's reaction chamber move in response to the magnetic field. An optical sensor within the TAS analyzer monitors the motion of the magnetic particles without touching the blood sample. When movement diminishes to a predetermined amplitude, the TAS system determines that a clot has been formed.

Conversely, the same technology is used to measure the time required for a clot to dissolve. The Company's technology permits the measurement of clot dissolution by introducing a sample of blood to a mixture of magnetic particles and reagents including a clot-forming chemical, thereby inducing a clot. The system then measures the amount of time required for the induced clot to dissolve. The Company believes that TAS is the only point-of-care system capable of monitoring both coagulation and dissolution of clots. Furthermore, an additional benefit to CVDI is the flexibility of the TAS technology, which allows for further expansion of the Company's menu of tests, since new tests can be developed by using different reagents in the test cards.

PRODUCTS

TAS ANALYZER

The TAS analyzer weighs approximately four pounds and is about the size of a typical office telephone. The TAS analyzer has a four-line LCD display, which is driven by software to prompt the technician to input the user and patient ID numbers, sample type, and timing of application of the blood.

TAS can test unprocessed whole blood or plasma. Whole blood is obtained by drawing blood from a patient, often into a tube containing sodium citrate, which stabilizes the blood prior to testing. The process of citrating blood requires no special training or skill, and can be done at the point of patient care by the same person who performs the TAS test, without adding any significant time to the process. Plasma, which is typically used in laboratory testing, is whole blood which has had various cellular components removed through spinning the blood in a centrifuge for 10 to 15 minutes.

The analyzer and test cards are designed to work effectively in a decentralized testing environment where they are used by healthcare personnel who do not need formal central laboratory training. To operate TAS, a test card is passed through the magnetic strip reader of the analyzer, which automatically initiates quality controls and begins to elicit information from the operator through a series of prompts outlining the operating procedure for the specific test to be performed. The test card is then inserted into the TAS analyzer. A single drop of unprocessed, noncitrated or citrated whole blood or

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plasma is then placed into the reaction chamber of the test card, which already contains the appropriate mixture of dry reagents and PIOP for the test being performed. Typically within three minutes, the screen on the TAS analyzer displays a numerical test result, which is comparable to the result which would be achieved in a central laboratory using traditional testing procedures. The portable analyzer has been designed with a memory capability, may be connected to a printer, and with a software upgrade may be connected to the hospital's patient information system. The internal memory of the TAS analyzer allows for the storage of up to 1,000 individual test results and has an alphanumeric keypad that allows for the input of up to a 20-character patient identification code. Additionally, the keypad provides for coded entry so only authorized personnel can gain access to the system. The analyzer can operate either on wall current or on an internal rechargeable battery. The Company's distributor, Bayer Diagnostics ("Bayer") currently markets this product as the Rapidpoint Coag analyzer.

ACCENT

The Accent is a hardware accessory to the TAS analyzer. The Accent is a microprocessor-based device that connects to the TAS analyzer and automatically calculates the information required by physicians to manage the anticoagulation of patients during cardiopulmonary bypass procedures. It is used in conjunction with the HTT, PRT and HMT cards and is marketed by Bayer as Rapidpoint ACCENT. The data collected by Accent can be transferred to a printer and/or hospital information system for storage.

FDA-CLEARED TEST CARDS

The following describes CVDI's test cards that have been cleared by the FDA:

The PT test is a general screening test that is used to assess a patient's baseline hemostatic function or to monitor the use of oral anticoagulants, such as warfarin. Warfarin is widely used in the United States for long-term treatment in patients who have previously developed clots, including after heart attacks, to inhibit coagulation to reduce the risk of developing additional clots. A physician uses the PT test to monitor and maintain drug levels within a safe treatment range; too little warfarin will not prevent a new clot from developing, and too much of the drug may result in a bleeding complication. CVDI manufactures and markets three different types of PT test cards, a general purpose PT test card routinely used in the United States, the PT One, which uses a more sensitive scale of measurement, and the PT-NC, which is used with finger stick samples.

The aPTT test is a coagulation screening test which may be used in conjunction with the PT to provide a global assessment of a patient's ability to form a clot. In addition, the aPTT test is used to monitor heparin, an injectable anticoagulant. Hospitals routinely use heparin as the initial treatment for patients with a clot, including patients suffering from heart attacks or strokes. Heparin also prevents clots from forming in patients undergoing procedures

involving particular risks of clotting, such as angiography, open heart surgery, dialysis and several other surgeries. Heparin must be closely monitored to assure adequate anticoagulation without increasing the risk of developing a bleeding complication. Time is particularly important when monitoring heparin, since the intravenously administered drug affects a patient's coagulation system within minutes.

Generally, aPTT tests are incapable of monitoring high levels of heparin.

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The Company developed and markets its HMT for monitoring patients requiring high dose heparin therapy during procedures such as open heart surgery or dialysis. For example, during the course of an open heart surgery, the patient's blood may be tested as many as four to six times to assure an adequate heparin effect. The Company believes that its HMT is a more effective test than comparable tests because it is easier to use and less prone to operator error. Also, it is not sensitive to changes in blood temperature or dilution, such as typically occur during bypass surgery. The Company believes that HMT more closely correlates with a precise but time-consuming laboratory measurement of heparin concentration than comparable tests.

The HTT and PRT test cards are combined with the HMT to provide a system for total individualized heparin management during cardiac surgery. Heparin management is complicated due to patients' widely variable response to this drug as well as its clearance rate from the blood during surgery. Heparin dosing based on weight-based protocols is often unreliable, particularly in complicated cases with patients receiving simultaneous therapy. CVDI believes the HTT/PRT approach should make it easier and cost effective to incorporate individual heparin management into routine practice.

The LHMT card is used principally in cardiac catheterization and interventional cardiology procedures. It is designed to monitor the effects of low to moderate levels of heparin.

The Company markets its ECT card under the FDA's Humanitarian Device Exemption program. The ECT card is used in managing patients suffering from heparin induced thrombocytopenia. The FDA's approval only allows the use of the test for managing patients who receive Repludan while undergoing cardiopulmonary bypass.

TEST CARDS UNDER DEVELOPMENT

The Company is continuing research and development focused on expanding the current menu of tests for the TAS analyzer. CVDI is currently researching and/or developing the following new tests:

Test	Description
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Enoxaparin Test	Test to monitor the anticoagulant effect of the low molecular weight heparin enoxaparin sodium used for the treatment and prevention of thrombotic diseases, This test is the subject of a collaborative development agreement with Aventis Pharmaceuticals, Inc. In October 2001, the Company filed a 510k with the FDA for clearance to market this test.
Protein C Test	Test for monitoring and screening potential treatments for patients with sepsis
Ecarin Clotting Time ("ECT")	Test to monitor direct thrombin inhibitors for use in patients treated for heart attack or prevention of deep vein thrombosis
Modified Ecarin Clotting Time	Test to allow the monitoring of oral antithrombin drugs currently in FDA Phase III development for treatment of DVT and atrial fibrillation
Lysis Onset Time ("LOT")	Test to monitor a patient's lytic response to any thrombolytic drug used for the treatment of heart attack, stroke or other thrombotic diseases

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QUALITY CONTROL PRODUCTS

The Company also develops single-use "crush-vial" controls for each test card. These controls are produced by CVDI and a contract manufacturer and allow quality assurance testing at the point of care. In addition, the Company sells an Electronic Quality Control ("EQC") card used to test analyzer function.

SALES AND MARKETING

CVDI's current marketing strategy for its PT, aPTT, HMT and LHMT test cards relies on a distribution partner. In August 1998, CVDI signed a five-year global distribution agreement, subject to minimum annual sales, with Chiron Diagnostics Corp. to distribute these test cards (in November 1998, Bayer Corporation acquired Chiron Diagnostics and it became a part of Bayer). At that time, CVDI received an up-front investment of \$6 million in exchange for 600,000 shares of common stock. Additionally, in April 2001, Bayer purchased 1,450,000 shares of common stock of the Company at \$12 per share for \$17.4 million. This investment increased Bayer's ownership percentage in the Company from approximately 7% to 19.9%. In connection with the investment, the Company and Bayer entered into an amended distribution agreement to replace the previous distribution agreement.

Under the terms of the amended agreement, Bayer will purchase, at pre-determined prices, CVDI's routine test cards identified in the agreement. The companies also expanded their relationship to cover collaborative distribution and supply of certain theranostic tests in the USA. Under the provisions of the agreement, Bayer is responsible for taking the orders, shipping and collecting receivables for theranostic tests sold by the Company's sales team. In return, Bayer will receive a 10% commission. This arrangement enables the customer to order all of the Company's products from a single source. The initial term of this agreement is until December 31, 2003, renewable for successive five-year terms. CVDI has the right to terminate the Bayer agreement if (1) Bayer fails to make payments when due to the Company, (2) Bayer fails to maintain sales to end users or (3) a distributor appointed by Bayer sells products which are competitive with CVDI. Either party may terminate the Agreement upon the occurrence of any of the following: (1) the insolvency of the other party; (2) material breach of the Bayer agreement by the other party which is not cured; or (3) certain types of "change-in-control" transactions by the other party. The Company also markets TAS products in Europe and other foreign countries and Bayer is CVDI's exclusive distributor in these territories.

CVDI believes that Bayer has a strong global presence and that its strategy for expanding rapid diagnostic platforms into critical care settings and its considerable presence in these specialized areas of the hospital will lead to increased placements of TAS products. CVDI also believes that the TAS products are complementary with Bayer's leading market position in blood gas analysis. In addition, Bayer has the contingent right to distribute outside the U.S. certain theranostic test cards currently under development and a right of first refusal for distribution of these tests in the U.S.

The Company's strategy is to increasingly focus on becoming a leader in the theranostic testing market, specifically managing new therapeutics which affect coagulation. Many drugs currently under development may require faster, more accurate assessment, given short half-lives and narrow therapeutic windows, and thus the Company believes physicians will increasingly demand therapeutic drug monitoring. To further the goal of establishing itself in the emerging field of theranostics, the Company has entered into development agreements with major pharmaceutical companies such as Aventis Pharmaceuticals

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and Knoll AG (now a part of Abbott Laboratories) pursuant to which the Company is developing test cards for potential use in patient identification and monitoring of therapies affecting coagulation being investigated by these companies.

Under the agreement with Aventis, the Company is developing the ENOX test, the only point-of-care test designed to monitor the anticoagulant effect of the low molecular weight heparin enoxaparin sodium, a drug developed and marketed by Aventis Pharmaceuticals in the U.S. under the brand name Lovenox(R) and outside the U.S. under the brand name Clexane(R). This test was submitted to the FDA for marketing clearance in October 2001. It is anticipated that the ENOX test may facilitate the use of Lovenox in some cardiology patients and in certain special populations. PharmaNetics believes the ENOX test may provide physicians with a tool to more confidently prescribe enoxaparin for all of their patients, because they can assess the anticoagulant state of patients who could be sent to the catheterization laboratory. Consequently, PharmaNetics initiated the ELECT (Evaluating Enox Clotting Times) study, a clinical trial developed by leading interventional cardiologists, to assess the clinical utility of the

ENOX test in patients undergoing interventional cardiac procedures and to provide physicians with guidance in assessing anticoagulation at time-points before, during, and after the course of the procedure. The study, currently conducted in over 15 top interventional catheterization laboratories, will collect data from 600 patients. The data, when published, will be an integral part of the Company's marketing strategy to the medical community. The Company will then deploy a contract direct sales force that could include up to 10 specialists and 8 technical service representatives. The sales force intends to launch the test at approximately 100 beta sites across the U.S. performing cardiac intervention procedures and then seek to penetrate the top 1,000 cardiac centers in the U.S. when the results of ELECT are available.

The Company has received \$2 million in milestone payments under this agreement and will receive a milestone payment of \$1.5 million when 510(k) clearance to market the ENOX test is obtained and another \$1.5 million upon market launch of the product.

In relation to the development of the ecarin clotting time cards to monitor direct thrombin inhibitors, CVDI has a worldwide exclusive sublicense from Knoll/Abbott to use the reagent within the test. During 2001, the Company ended an Interim Agreement with AstraZeneca related to Astra's development of an oral thrombin inhibitor and received a payment of \$1.5 million as part of the cessation of this agreement. The Company believes the medical community will embrace the need for a test for managing therapeutic levels in patients receiving oral and injectable direct thrombin inhibitors. To this end, the Company is presently in the process of collecting its own data and conducting clinical trials necessary to submit an FDA application for this test. The test would be used with three FDA-approved thrombin inhibitors on the market.

CVDI's intent is to enter into additional collaborations to expand its theranostic test card menu. Within the cardiovascular market, drugs affecting coagulation, such as thrombin inhibitors, platelet inhibitors and low molecular weight heparins, are under development by pharmaceutical companies. The Company's strategy is to increase its number of collaborations, expand current collaborations, increase involvement of leading research centers and physician "thought leaders" and further the involvement of Bayer in working with other pharmaceutical companies to engage in outcome studies related to new theranostic tests.

The Company's strategy is focusing its theranostic test development

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efforts on drugs in Phase II or Phase III development. The Company believes this will help reduce development risk as these drugs have a greater chance of approval than those just beginning clinical trials. Additionally, in the past under this collaboration model, the pharmaceutical company with whom the Company is collaborating has paid for the clinical trials and provided the Company access to the regulatory data associated with the test to be used in submitting a 510(k) notification. This approach has allowed the Company to cost-effectively develop its tests.

The commercial success of the Company's products will depend upon their acceptance by the medical community as being useful and cost-effective. Market acceptance will depend upon several factors, including the establishment of the utility and cost-effectiveness of the Company's tests and the receipt of regulatory clearances in the United States and elsewhere. The availability of point-of-care hemostasis test systems has been limited to date, so by selling point-of-care hemostasis test products, the Company is targeting an essentially new market. Diagnostic tests similar to those developed by the Company are generally performed by a central laboratory at a hospital or clinic. The approval of the purchase of diagnostic equipment by a hospital is generally controlled by its central laboratory. The Company expects central laboratories will resist yielding control of tests they have previously performed. The Company will also have to demonstrate to physicians that its diagnostic products perform as intended, meaning that the level of accuracy and precision attained by the Company's products must be comparable to test results achieved by central laboratory systems. Failure of the Company's products to achieve market acceptance would have a material adverse effect on the Company.

The Company is substantially dependent upon Bayer as its principal distributor for marketing and distribution of its routine test cards, the PT, aPTT, HMT and LHMT and the related controls and analyzer. Bayer also distributes the specialty cards HTT and PRT. There can be no assurance that Bayer will be successful in marketing or selling these products in sufficient volume to produce profitability for the Company. Also, there can be no assurance that the Company could build a cost-effective and adequate sales and marketing staff to replace Bayer in selling these routine products. The loss of the Company's distributor or the inability to enter into agreements with new distributors to sell TAS products in additional countries could have a material adverse effect on the Company.

COMPETITION

The medical diagnostic testing industry is characterized by rapidly evolving technology and intense competition. The current TAS menu competes in the coagulation and hematology testing market with manufacturers that provide testing equipment to central and stat laboratories of hospitals. These laboratories currently perform a substantial portion of such testing. The TAS menu also competes with other point-of-care coagulation and hematology test system manufacturers. Laboratories provide some of the same tests performed by TAS; however, these laboratory tests generally require the use of skilled technicians and complex, expensive equipment. The Company believes that TAS offers several advantages over these laboratory-based instruments, including faster results, ease-of-use, reduced opportunity for error and cost-effectiveness.

CVDI has several competitors, including Roche Diagnostics, International Technidyne Corporation ("ITC") and Medtronic, that manufacture and market point-of-care coagulation and hematology test systems. ITC, in particular, has a large installed base of systems, which it has been selling for over 20 years. Despite the fact that the Company believes that TAS competes favorably with these systems, ITC's installed base could give it a competitive advantage. CVDI

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believes that potential customers will base their purchasing decisions upon a combination of factors, including accuracy and precision, speed, cost-effectiveness, data management, ease-of-use, compliance with CLIA guidelines, and availability of a comprehensive test menu. If CVDI introduces additional blood tests beyond its initial coagulation and hematology tests, it will compete with other companies that market similar products to hospitals for use in laboratories and at the point of patient care. Other manufacturers and academic institutions may be conducting research and development with respect to blood testing technologies and other companies may in the future engage in research and development activities regarding products that compete with those of the Company. Many of the companies in the medical technology industry, including those listed above, have substantially greater capital resources, research and development staffs, sales and manufacturing capabilities and manufacturing facilities than the Company. Such entities may be developing or could in the future attempt to develop additional products competitive with TAS. Many of these companies also have substantially greater experience than CVDI in research and development, obtaining regulatory clearances, manufacturing and marketing, and may therefore represent significant competition for the Company. There can be no assurance that CVDI's competitors will not succeed in developing or marketing technologies and products that will be more effective or less expensive than those being marketed by CVDI or that would render CVDI's technology and products obsolete or noncompetitive.

PATENTS AND OTHER INTELLECTUAL PROPERTY

The Company pursues patent applications to provide protection from competitors. A number of U.S. and corresponding international patents have been issued to CVDI covering various aspects of the TAS technology. These patents expire between 2004 and 2013. The Company has filed, and is pursuing, a number of additional U.S. and international patent applications.

The Company's success will depend in part on its ability to enforce its patents, to preserve its trade secrets and to operate without infringing the proprietary rights of third parties. The Company's ability to protect its proprietary position is also in part dependent on the issuance of additional patents on current and future applications. No assurance can be given that any patent applications will be issued, that the scope of any patent protection will exclude competitors or provide competitive advantages to the Company, that any of the Company's patents will be held valid if subsequently challenged or that others will not claim rights in or ownership to the patents and other proprietary rights held by the Company. Furthermore, others might have developed or will develop similar products, duplicate the Company's products or design around the Company's patents. If any relevant claims of third-party patents are upheld as valid and enforceable, the Company could be prevented from practicing the subject matter claimed in such patents or could be required to obtain licenses from the patent owners of each of such patents or to redesign its products or processes to avoid infringement. Such licenses might not be available or, if available, could be on terms unacceptable to the Company.

The Company also relies upon unpatented trade secrets to protect its proprietary technology. In particular, CVDI believes that its custom-designed automated test card production line embodies proprietary process technology. Others may independently develop or otherwise acquire equivalent technology or otherwise gain access to CVDI's proprietary technology and CVDI might not ultimately be able to protect meaningful rights to such

unpatented proprietary technology. There has been substantial litigation regarding patent and other intellectual property rights in the medical device industry.

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LICENSES

TOKUYAMA SODA LICENSE

CVDI is a party to a License Agreement with Tokuyama Soda Company, Ltd. pursuant to which CVDI granted Tokuyama exclusive rights to manufacture and sell PT and aPTT tests and analyzers in Myanmar, Brunei, Hong Kong, Indonesia, Japan, Malaysia, China, Philippines, Taiwan, South Korea, Singapore and Thailand. The Tokuyama License requires that CVDI negotiate in good faith with Tokuyama for 90 days prior to marketing or licensing in these Asian nations any new products that CVDI develops related to the licensed tests or analyzer technology.

Until the earlier of October 2004 or the expiration of the last Japanese patent covering the licensed technology, Tokuyama must pay CVDI royalties based on Tokuyama's net sales of licensed products. CVDI can terminate the Tokuyama License if Tokuyama fails to make a required payment or report (or makes a false report), or if Tokuyama voluntarily ceases the manufacture and sale of licensed products for 12 months, and if, in any such case, Tokuyama fails to remedy such default within 60 days after notice thereof from CVDI.

In December 1995, CVDI and Tokuyama amended the Tokuyama license to, among other things, provide the Company with the right to market PT and aPTT tests and analyzers in an Asian country (other than Japan, Taiwan and South Korea) if Tokuyama has not attained annual net sales of \$250,000 in the country by June 30, 1996 or within 12 months of the time when export to such country becomes authorized. In the event CVDI exercises this right, it and Tokuyama may both market in the country and must each pay royalties to the other. To date, CVDI has not exercised this right. The amendment also provides that CVDI owns all rights outside Asia to improvements made by Tokuyama to CVDI's technology, and must pay royalties to Tokuyama based on CVDI net sales of products incorporating such improvements.

CVDI received royalty payments under this agreement of \$24,000, \$58,909 and \$89,507 during the years ended December 31, 2001, 2000, and 1999, respectively.

MANUFACTURING

CVDI operates its manufacturing facility to assemble TAS analyzers. Vendors currently provide all molded parts, mechanical components and printed circuit boards. CVDI assembles the components and provides final mechanical, electrical and chemistry testing of each analyzer. In addition, CVDI operates proprietary automated test card production equipment. This automated production equipment was custom designed by CVDI and built to its specifications. CVDI believes that this production machinery embodies proprietary process technology. The equipment has been designed to allow for increased production as dictated by customer demand. Current annual manufacturing capacity is approximately 15 million cards.

The FDC Act requires the Company to manufacture its products in registered establishments and in accordance with Good Manufacturing Practice, or GMP, now known as Quality System Regulations, or QSR. CVDI is registered as a medical device manufacturer and is subject to periodic inspections by the FDA. In addition, CVDI has maintained ISO 9001 certification since 1997.

To be successful, the Company must manufacture its products in compliance with regulatory requirements, in sufficient quantities and on a timely basis, while maintaining product quality and acceptable manufacturing costs. The Company has limited experience producing its products in large commercial quantities. The Company might not be able to manufacture accurate and reliable

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products in large commercial quantities on a timely basis and at an acceptable cost.

Most of the raw materials and components used to manufacture CVDI's TAS products are readily available. However, some of these materials are obtained from a sole supplier or a limited group of suppliers. PIOP and some reagents used in the TAS test cards are obtained from single sources. However, CVDI maintains enough supply to

produce test cards for an extended period of time. The Company believes that, in the event of an interruption in the availability of supplies, the Company has enough supply at its facility to fulfill its needs until an alternative source can be procured. The Company seeks to maintain long-term agreements with its suppliers when possible. The reliance on sole or limited suppliers and the inability to maintain long-term agreements with suppliers involves several risks, including the inability to obtain an adequate supply of required raw materials and components and reduced control over pricing, quality and timely delivery. Any interruption in supply could have a material adverse effect on the Company.

GOVERNMENT REGULATION

FDA

The medical devices marketed and manufactured by the Company are subject to extensive regulation by the FDA. Pursuant to the FDC Act, the FDA regulates the clinical testing, manufacture, design control, labeling, distribution and promotion of medical devices. Noncompliance with applicable requirements can result in, among other things:

- . Fines
- . Injunction
- . civil penalties
- . recall or seizure of products
- . total or partial suspension of production
- . failure of the government to grant premarket clearance or premarket approval ("PMA") for devices
- . withdrawal of marketing approvals or
- . criminal prosecution.

The FDA also has the authority to request repair, replacement or refund of the cost of any device manufactured or distributed by the Company.

Before a new device can be introduced into the market, the manufacturer must generally obtain marketing clearance through either a 510(k) notification, the HDE process or the more time-consuming PMA process. All of the Company's currently cleared products have qualified for either the 510(k) process or the accelerated HDE process. Commercial distribution of a device for which a 510(k) is required can begin only after the FDA issues an order finding the device to be "substantially equivalent" to a predicate legally marketed medical device. The FDA has recently been requiring a more rigorous demonstration of substantial equivalence than in the past. It generally takes from four to twelve months from submission of a 510(k) application to obtain a 510(k) clearance, but it might take longer. The FDA might determine that a proposed device is not substantially equivalent to a legally marketed device, or that additional information is needed before a substantial equivalence determination can be made. A request for additional data might require that additional clinical studies of the device's safety and efficacy be performed. A "not substantially equivalent" determination or a request for additional information could delay the market introduction of new products that fall into this

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category and could have a material adverse effect on the Company's business, financial condition and results of operations. For any of the Company's products that are cleared through the 510(k) process, modifications or enhancements that could significantly affect the safety or efficacy of the device or that constitute a major change to the intended use of the device will require a new 510(k). If the FDA requires the Company to submit a new 510(k) for any modification to the device, the Company might be prohibited from marketing the modified device until the 510(k) is cleared by the FDA.

Pursuant to FDA policy, manufacturers of devices labeled "for investigational use only" must establish a controlled program under which investigational devices are distributed to or utilized only by individuals, laboratories or healthcare facilities that have provided the manufacturer with a written certification of compliance indicating that:

- . the device will be used for investigational purposes only;
- . results will not be used for diagnostic purposes without confirmation of the diagnosis under another medically established diagnostic device or procedure;

- . all investigations will be conducted with approval from an institutional review board, or IRB, using an IRB-approved study protocol, and patient informed consent; and
- . the device will be labeled, and labeling will be maintained, in accordance with the applicable labeling regulations

Failure of CVDI or recipients of CVDI's "investigational use only" products to comply with these requirements could result in enforcement action by the FDA that would adversely affect CVDI's ability to conduct testing necessary to obtain market clearance and, consequently, could have a material adverse effect on the Company.

Any products manufactured or distributed by the Company pursuant to FDA clearances or approvals are subject to pervasive and continuing regulation by the FDA, including recordkeeping requirements and reporting of adverse experiences with the use of the device. Device manufacturers are required to register their facilities and list their devices with the FDA, and are subject to periodic inspections by the FDA and certain state agencies. The FDC Act requires devices to be designed and manufactured in accordance with QSR regulations which impose certain procedural and documentation requirements upon the Company with respect to design, manufacturing and quality assurance activities. The FDA has approved changes to the regulations which will increase and have increased the cost of complying with QSR requirements.

Labeling and promotion activities are subject to scrutiny by the FDA and in certain instances by the Federal Trade Commission. The FDA actively enforces regulations prohibiting marketing of products for unapproved uses.

REGULATIONS ON EXPORT

Export of products that have market clearance from the FDA in the United States do not require FDA authorization. However, foreign countries often require an FDA certificate for products for export, or CPE. To obtain a CPE, the device manufacturer must certify to the FDA that the product has been granted clearance in the United States and that the manufacturing facilities appeared to be in compliance with QSRs at the time of the last FDA inspection. The FDA will refuse to issue a CPE if significant outstanding QSR violations exist.

Export of products subject to the 510(k) requirements, but not yet cleared

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to market, are permitted without FDA authorization provided certain requirements are met. Unapproved products subject to the PMA requirements must be approved by the FDA for export. To obtain FDA export approvals certain requirements must be met and information must be provided to the FDA, including documentation demonstrating that the product is approved for import into the country to which it is to be exported and, in some instances, safety data from animal or human studies. There can be no assurance that the FDA will grant export approval when such approval is necessary, or that the countries to which the devices are to be exported will approve the devices for import.

CVDI has obtained CPEs for the PT, PT One, aPTT and HMT tests and the TAS analyzer. Failure of the Company to obtain a CPE for the export of its products in the future could have a material adverse effect on the Company. Products which the Company exports that do not have premarket clearance in the United States include the LOT test, the ECT test and the modified ECT test.

The Company believes that these products are subject to the 510(k) requirements and, consequently, has not requested FDA approval for export. However, there can be no assurance that the FDA would agree with the Company that a 510(k) is needed rather than a PMA. If the FDA disagreed, it could significantly delay and impair CVDI's ability to continue exporting these tests and could have a material adverse effect on the Company.

FOREIGN REGULATIONS

Sales of the Company's test products outside the United States are also subject to foreign regulatory requirements that vary widely from country to country. These laws and regulations range from simple product registration requirements in some countries to complex clearance and production controls in others. As a result, the processes and time periods required to obtain foreign marketing approval may be longer or shorter than those necessary to obtain FDA approval. These differences may affect the efficiency and timeliness of international market introduction of the Company's products, and there can be no assurance that the Company will be able to obtain regulatory approvals or clearances for its products in foreign countries. Delays in receipt of, or a failure to

receive, such approvals or clearances, or the loss of any previously received approvals or clearances, could have a material adverse effect on the Company.

In order to market the Company's products in the member countries of the European Union, the Company is required to comply with the European Medical Devices Directive and to obtain CE Mark certification for the TAS analyzer. The CE Mark denotes conformity with European standards for safety and allows certified devices to be placed on the market in all EU countries. Medical devices may not be sold in EU countries unless they display the CE Mark. All of the applicable Company products marketed in Europe have obtained CE Mark certification. There can be no assurance that the Company will be successful in maintaining CE Mark certification of its products. The TAS Analyzer also must and does meet the requirements of the Electromagnetic Capability Directive. In Japan, the Company relies upon its collaborative partner, Tokuyama, to comply with applicable regulations regarding the product listing, manufacture and sale of products in that country. The Company believes that the Company's products are in compliance with applicable regulations in Japan. Failure to maintain CE Mark certification in Europe or to obtain or maintain other foreign regulatory approvals could have a material adverse effect on the Company's business, financial condition and results of operations.

CLIA

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The Company's products are also subject to the requirements of the Clinical Laboratory Improvement Act of 1988, or CLIA. The CLIA requires all laboratories, including those performing blood chemistry tests, to meet specified standards in the areas of personnel qualification, administration, participation in proficiency testing, patient test management, quality control, quality assurance and inspections. The regulations have established three levels of regulatory control based on test complexity -- "waived", "moderate complexity" and "high complexity". The PT, aPTT, HMT, HTT and PRT tests performed by TAS have been categorized by the FDA and the Centers for Disease Control and Prevention as moderate complexity tests. There can be no assurance that these tests will not be recategorized, or that other tests performed by the TAS will not be categorized as high complexity tests or that such a categorization will not have a material adverse effect on the Company. Furthermore, there can be no assurance that regulations under and future administrative interpretations of CLIA will not have an adverse impact on the potential market for the Company's products.

Laboratories that perform either moderate or high complexity tests must meet certain standards, with the major difference in requirements being quality control and personnel standards. Quality control standards for moderate complexity tests (not modified by laboratories) are being implemented by the FDA in stages, while laboratories performing high complexity and modified moderate complexity tests currently must meet all of the quality control requirements. Personnel standards for high complexity tests require that personnel have more education and experience than personnel conducting moderate complexity tests. All laboratories performing moderately complex or highly complex tests are required to obtain either a registration certificate or certification of accreditation from the Health Care Financing Administration. With certain specified exceptions, each site for laboratory testing must file a separate application and separately meet all CLIA requirements. Multiple laboratory sites within a hospital located at contiguous buildings on the same campus and under common direction may file a single application. As a result of the CLIA requirements, hospitals may be discouraged from expanding point-of-care testing. Because CLIA certification must be obtained by laboratories, the Company does not possess sufficient data to make a determination as to the cost of certification to a laboratory or the potential inhibiting effect of CLIA certification on the purchase of the Company's products by laboratories.

OTHER REGULATIONS

The Company and its products are also subject to a variety of state and local laws and regulations in those states or localities where its products are or will be marketed. Any applicable state or local laws or regulations might hinder the Company's ability to market its products in those states or localities. Use of the Company's products will also be subject to inspection, quality control, quality assurance, proficiency testing, documentation and safety reporting standards pursuant to the Joint Commission on Accreditation of Healthcare Organizations. Various states and municipalities might also have similar regulations.

Manufacturers are also subject to numerous federal, state and local laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control and disposal of

hazardous or potentially hazardous substances. There can be no assurance that the Company will not be required to incur significant costs to comply with such laws and regulations now or in the future or that such laws or regulations will not have a material adverse effect upon the Company.

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Changes in existing requirements or adoption of new requirements or policies could adversely affect the ability of the Company to comply with regulatory requirements.

REIMBURSEMENT

The Company's ability to commercialize its products successfully may depend in part on the extent to which reimbursement for the cost of such products and related treatment will be available from government health administration authorities (such as the Health Care Financing Administration, or HCFA), which determines Medicare reimbursement levels, private health insurers and other organizations ("Payors"). Payors are increasingly challenging the prices of medical products and services. Payors may deny reimbursement if they determine that a prescribed device has not received appropriate FDA or other governmental regulatory clearances, is not used in accordance with cost-effective treatment methods, or is experimental, unnecessary or inappropriate. In addition, under current HCFA regulations, equipment costs generally are not reimbursed separately, but rather are included in a single, fixed-rate, per-patient reimbursement. Also, the trend towards managed healthcare in the United States and the concurrent growth of organizations such as HMOs, which could control or significantly influence the purchase of healthcare services and products, as well as legislative proposals to reform healthcare or reduce government insurance programs, might result in customers demanding lower prices for the Company's TAS products. The cost containment measures that healthcare providers are instituting and the impact of any healthcare reform could have an adverse effect on the Company's ability to sell its products and may have a material adverse effect on the Company.

There can be no assurance that reimbursement in the United States or foreign countries will be available for any of the Company's products, or that if available it will not be decreased in the future, or that any reduction in reimbursement amounts will not reduce the demand for or the price of the Company's products. The unavailability of third-party reimbursement or the inadequacy of the reimbursement for medical procedures using the Company's tests would have a material adverse effect on the Company. Moreover, the Company is unable to forecast what additional legislation or regulations, if any, relating to the healthcare industry or third-party coverage and reimbursement may be enacted in the future or what effect such legislation or regulations would have on the Company.

DISCONTINUED OPERATIONS

In June 1999, the Company sold substantially all of the operating assets and liabilities of its Coeur Laboratories, Inc. subsidiary. Prior to this sale, the Company operated Coeur as a manufacturer and seller of disposable power injection syringes. Upon the sale of Coeur, the Company retained Coeur's cash, receivables and certain other assets.

PRODUCT LIABILITY AND INSURANCE

The Company faces an inherent business risk of exposure to product liability claims in the event that the use of its products is alleged to have resulted in adverse effects. The Company maintains product liability insurance with coverage of up to \$14 million per claim, with an annual aggregate policy limit of \$15 million. There can be no assurance that liability claims will not exceed the coverage limits of such policies or that such insurance will continue to be available on commercially acceptable terms, or at all. Consequently, product liability claims could have a material adverse effect on the company's business, financial condition and results of operations.

EMPLOYEES

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The Company had 89 employees as of December 31, 2001. Twelve employees were engaged in research and development (6 of which have Ph D's), 43 in manufacturing and quality control, 18 in software, engineering and facilities, 7 in sales/marketing and 9 in finance/administration. Many of the Company's executive and technical

personnel have had experience with biomedical diagnostics companies. None of the Company's employees are covered by a collective bargaining agreement and the Company believes that employee relations are good.

The Company's success depends to a significant extent upon management and technical personnel, none of whom have employment agreements with the Company. Although the Company maintains a \$500,000 key man life insurance policy on its chief executive officer, the loss of the service of this officer could have a material adverse effect on the Company's business, financial condition and results of operations. The Company also believes that its future success will depend in large part upon its ability to attract and retain highly skilled technical, management and sales and marketing personnel. Competition for such personnel is intense, and there can be no assurance that the Company will be successful in attracting and retaining such personnel. The Company's failure to attract, hire and retain these personnel would have a material adverse effect on the Company.

ITEM 2. PROPERTIES

During 2001, the Company relocated its executive offices to a new facility located at 9401 Globe Center Drive, Suite 140, Morrisville, North Carolina 27560. The Company currently occupies approximately 55,000 square feet of development, production and administration space at this location.

ITEM 3. LEGAL PROCEEDINGS

The Company is not a party to any material legal proceedings as of the date of this Form 10-K.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were submitted to a vote of the shareholders during the fourth quarter ended December 31, 2001.

EXECUTIVE OFFICERS OF THE COMPANY

The following sets forth information as of March 21, 2002 with respect to all the executive officers of the Company, including their names, ages, positions with the Company and business experience during the last five years.

John P. Funkhouser, age 48, was elected President, Chief Executive Officer and a director of the Company in October 1993 upon the Company's acquisition of Coeur. In February 1998, Mr. Funkhouser was appointed Chairman of the Board of Directors of the Company. Mr. Funkhouser served as President and Chief Executive Officer of Coeur from 1992 until completion of the sale of Coeur in June 1999. Before his employment with Coeur, Mr. Funkhouser was a General Partner with Hillcrest Group, a venture capital firm, and worked for over nine years in managing venture capital portfolio companies. Mr. Funkhouser holds a B.A. from Princeton University and an M.B.A. from the University of Virginia.

James A. McGowan, age 58, was elected Chief Financial Officer of the Company in May 2000. Since 1982, Mr. McGowan has been a principal of McGowan Associates, a boutique venture capital and consulting firm. Venture capital activities have included a partnership with First Chicago Corp (McGowan

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Leckinger) and a co-investment with The Thomas Lee Company (Sterling Merchandise). Mr. McGowan's consulting activities have ranged from interim executive positions at Filenes Basement, The TAC Group and the TJX Companies to strategic consulting projects for Arthur Andersen and a variety of small to mid-size growth companies. Prior to founding McGowan Associates, Mr. McGowan was the chief financial officer and a principal-selling stockholder of three retail chains that were acquired by large public companies. Mr. McGowan is a Certified Public Accountant and holds a B.S. from Boston University and an M.B.A from Suffolk University.

Michael D. Riddle, age 49, has been Executive Vice President of Sales, Marketing, and Business Development since January 1999. Mr. Riddle also served as Vice President, Sales and Marketing, from January 1995 to January 1999. Prior to joining the Company, Mr. Riddle was employed by American Home Products for seven years in various positions, most recently as Vice President of Sales and Marketing for Sherwood Medical Devices. Mr. Riddle attended Bromley College of Technology (Kent, United Kingdom).

Mark X. Triscott, age 48, joined the company in May 2001 as Vice President of Research and Development. Prior to joining the company Dr. Triscott was employed at Sigma Diagnostics for more than five years in various positions including, Principal Scientist, Manager, Coagulation Research and Development, and Manager responsible for all Diagnostics Research and Development. Dr. Triscott has a Science degree with First Class Honours from the University of Queensland (Australia), where he also completed a Doctorate in Microbiology. He did a post-doctoral fellowship at Bowman Gray School of Medicine, Winston-Salem North Carolina, where he held an adjunct faculty position in Biochemistry. Dr Triscott is an inventor on several issued and pending US and foreign patents, and has published more than 30 peer reviewed articles, chapters and abstracts.

Paul T. Storey, age 35, was elected Treasurer and Secretary in February 1998. Since December 1997, Mr. Storey has also served as Director of Finance of the Company. Prior to joining the Company, Mr. Storey was employed for more than eight years at KPMG Peat Marwick LLP, most recently as a senior manager. Mr. Storey is a Certified Public Accountant and holds a B.A. in Accounting from Furman University.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

(A) PRICE RANGE OF COMMON STOCK

The Company's common stock trades on the Nasdaq National Market under the symbol "PHAR". The following sets forth the quarterly high and low closing sales prices of the common stock of the Company for the fiscal years ended December 31, 2001 and 2000 as reported by Nasdaq. These prices are based on quotations between dealers, which do not reflect retail mark-up, mark-down or commissions, and do not necessarily represent actual transactions.

	High	Low
	----	---
Fiscal year ended December 31, 2001		
First Quarter	\$ 12.813	\$ 6.813
Second Quarter	11.15	7.75
Third Quarter	10.45	6.75
Fourth Quarter	8.00	6.16

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Fiscal year ended December 31, 2000

First Quarter	\$ 18.00	\$ 9.00
Second Quarter	19.875	11.875
Third Quarter	22.75	17.062
Fourth Quarter	19.00	9.625

(B) APPROXIMATE NUMBER OF EQUITY SECURITY HOLDERS

As of March 15, 2002, the number of record holders of the company's common stock was approximately 100, and the Company believes that the number of beneficial owners was approximately 2,600.

(C) DIVIDENDS

The Company has never paid a cash dividend on its common stock and anticipates that for the foreseeable future any earnings will be retained for use in its business and, accordingly, does not anticipate the payment of cash dividends on its common stock.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The selected financial data presented below summarizes certain financial data and should be read in conjunction with the more detailed consolidated financial statements of the Company and the notes thereto included elsewhere in this Annual Report on Form 10-K along with said consolidated financial statements. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business".

PHARMANETICS, INC. AND SUBSIDIARIES

Selected Consolidated Financial Data (in thousands, except per share data)

	Year Ended December 31,				
	2001	2000	1999	1998	1997
	----	----	----	----	----
RESULTS OF OPERATIONS					
Net sales	\$ 4,539	\$ 4,269	\$ 3,909	\$ 4,141	\$ 2,924
Cost of goods sold	4,046	3,581	3,179	2,847	2,845
	-----	-----	-----	-----	-----
Gross profit	493	688	730	1,294	79
Operating expenses:					
General and administrative	4,525	3,330	2,715	2,815	3,204
Sales and marketing	1,208	1,050	799	707	1,316
Research and development	3,950	3,697	2,777	2,509	2,440
	-----	-----	-----	-----	-----
Total operating expenses	9,683	8,075	6,291	6,031	6,960
Other income, net	589	1,053	147	514	1,421
	-----	-----	-----	-----	-----
Loss from continuing operations	(8,602)	(6,334)	(5,414)	(4,223)	(5,460)
Discontinued operations:					
Income from operations	--	--	18	580	781
Loss on disposal	--	--	(826)	--	--
	-----	-----	-----	-----	-----
Net loss	(8,602)	(6,334)	(6,222)	(3,643)	(4,679)
Beneficial conversion feature of Series A					
Preferred Stock	--	(3,004)	--	--	--
Preferred stock dividends	(566)	(626)	--	--	--

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Net and comprehensive loss attributable to common shareholders	\$ (9,168)	\$ (9,964)	\$ (6,222)	\$ (3,643)	\$ (4,679)
Basic and diluted loss per common share:					
Net loss	\$ (0.97)	\$ (0.83)	\$ (0.83)	\$ (0.52)	\$ (0.70)
Net loss attributable to common shareholders	\$ (1.03)	\$ (1.31)	\$ (0.83)	\$ (0.52)	\$ (0.70)
Weighted average shares outstanding	8,877	7,626	7,469	7,007	6,722
Pro forma amounts assuming SAB 101 was retroactively applied/(1)/:					
Net and comprehensive loss attributable to common shareholders	\$ (9,168)	\$ (9,964)	\$ (5,926)	\$ (3,475)	\$ (5,144)
Basic and diluted loss attributable to common shareholders per share	\$ (1.03)	\$ (1.31)	\$ (0.79)	\$ (0.50)	\$ (0.77)

	As of December 31,				
	2001	2000	1999	1998	1997
FINANCIAL CONDITION					
Cash and cash equivalents	\$ 14,883	\$ 5,344	\$ 3,661	\$ 3,998	\$ 5,885
Short term investments	--	3,904	1,500	3,703	--
Total assets	27,014	18,314	11,647	18,693	17,685
Long term debt and capital Lease Obligations, excluding	66	36	862	1,626	2,351
Current portion					
Total liabilities	3,386	3,632	2,039	2,949	4,492
Accumulated deficit	(49,616)	(40,448)	(30,484)	(24,262)	(20,619)
Series A Preferred stock	7,520	8,102	--	--	--
Contingently redeemable common Stock	8,538	--	--	--	--
Common shareholders' equity	\$ 7,570	\$ 6,580	\$ 9,608	\$ 15,744	\$ 13,193

/(1)/ In fiscal 2000, the Company adopted SEC Staff Accounting Bulletin No. 101 ("SAB 101"). Under this method of accounting, development payments are deferred and recognized into income over the period of the related agreement. The amounts disclosed assume that SAB 101 was retroactively applied to prior years.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

OVERVIEW

PharmaNetics, Inc., through its wholly-owned subsidiary Cardiovascular Diagnostics, Inc. ("CVDI"), develops, manufactures and markets rapid turnaround diagnostics to assess blood clot formation and dissolution. CVDI's products are a proprietary analyzer and dry chemistry tests, known as the Thrombolytic Assessment System or TAS that provide, at the point of patient care, rapid and accurate evaluation of hemostasis. CVDI is also establishing itself in the emerging field of theranostics, or rapid near-patient testing, in which the diagnostic results may influence treatment decisions. Current tests and tests under development are used in the treatment of angina, heart attack, stroke, deep vein thrombosis and pulmonary and arterial emboli. The TAS technology is

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used at the point of patient care which provides many potential benefits, including faster results for better treatment of patients, reduced usage of blood products for bleeding complications, quicker patient transfers from costly critical care settings and reduced hospital costs due to less paperwork and personnel time in processing blood samples.

The Company currently derives income from the following sources: TAS product sales, interest income, and development income recognized in connection with collaboration agreements. Currently, product sales mainly consist of the Company's routine test cards, the PT, aPTT and HMT tests along with the related controls and analyzers. Upon introduction of these products in 1993 and 1995, the Company distributed these routine products through a direct sales force. However, given a consolidating hospital industry, CVDI determined that distribution arrangements, rather than a direct sales force, were needed to penetrate the market. Thus, CVDI has signed a global distribution agreement with Bayer Diagnostics to distribute its products. Bayer's strength is in critical care areas of the hospital which the Company believes should facilitate the placement of the TAS technology.

In addition, the Company's business strategy has evolved towards becoming more focused on theranostics, the development of specialty tests for drugs, some with narrow ranges between over- and under-dosage. Rapid diagnostic capabilities might improve patient care and turnover, and there is a market trend to obtain diagnostic information faster in order to effect therapy sooner. The Company believes that physicians are beginning to see the need for drug management tools and, consequently, the Company is seeking greater involvement of physician thought leaders during development of new test cards. The Company also believes that these trends should allow the Company to obtain higher pricing of these specialty tests. As a result, the Company has exhibited the flexibility of the TAS platform and the potential to expand its menu of specialty tests by signing development agreements with major pharmaceutical companies to monitor the effects of certain new drugs that are in clinical trials or currently being marketed. Increased placement of specialty tests might also further demand for analyzers and routine anticoagulant tests. The Company believes it is well positioned in its development efforts to expand its menu of tests to monitor developmental drugs where rapid therapeutic intervention is needed.

CRITICAL ACCOUNTING POLICIES

REVENUE RECOGNITION

Revenue from the sale of products is recorded when an arrangement exists, delivery has occurred or services have been rendered, the seller's price is fixed and determinable and collectibility is reasonably assured. Substantially all of the Company's product sales in 2001 were made to the Company's distributor, Bayer. Income under license and development agreements is recognized over the anticipated period of the agreements with the collaborators, in accordance with SEC Staff Accounting Bulletin No. 101 (SAB 101). SAB 101 clarifies conditions to be met to recognize up-front non-refundable payments. Such payments are recognized over the life of the related agreement unless the payment relates to products delivered or services performed that represent the completion of the earnings process. Payments received but not recognized into income in the year of receipt are deferred and recognized over the period of the respective agreements. The Company has recognized revenue related to the development agreement with Aventis. The Company is recognizing revenue related to the Aventis contract, which was entered into in 2000, over the agreement period of five years.

EQUITY

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In April 2001, the Company and Bayer entered into an amended distribution agreement to replace the previous distribution agreement between the parties entered into during 1998. The 2001 common stock purchase agreement with Bayer contains a provision that, upon the occurrence of a "change in control", as defined in the agreement, the Company may be required to compensate Bayer, in cash or shares of common stock, for any difference between per share prices originally paid by Bayer and the amount received by the Company's shareholders. In accordance with the implementation requirements of recently issued and adopted Emerging Issues Task Force Abstract No. 00-19, the Company has transferred to temporary equity an amount equal to the "change in control" payment called for by the purchase agreement. Under the new accounting guidelines, this temporary transfer is required only for those reporting periods in which the price per share paid by Bayer is in excess of the fair market value of a common share, as measured by reference to the NASDAQ National Market.

STOCK-BASED COMPENSATION

The Company applies the provisions of Statement of Financial Accounting Standards No. 123, "Accounting for Stock Based Compensation" ("SFAS No. 123"). As permitted by SFAS No. 123, the Company has chosen to continue to apply APB Opinion No. 25 "Accounting for Stock Issued to Employees" ("APB No. 25") and its related interpretations, including Interpretation No. 44, ("FIN 44") "Accounting for Certain Transactions Involving Stock Compensation - An Interpretation of APB 25", in accounting for its stock plans. Accordingly, no compensation expense has been recognized for stock options granted to employees with an exercise price equal to or above the trading price per share of the Company's common stock on the grant date.

RESULTS OF OPERATIONS

Year Ended December 31, 2001 vs. Year Ended December 31, 2000. Sales for the year ended December 31, 2001 increased to \$4.5 million compared to \$4.3 million in 2000. Specialty test card sales in 2001 were \$1.6 million, of which \$1.5 million related to a payment from AstraZeneca for specialty test cards previously purchased in 2000 that was required as part of the cessation of a collaboration agreement in 2001. This sales level compares to specialty test card revenue of approximately \$600,000 recorded in 2000 when specialty test cards were purchased by a collaborative partner for use in their clinical trials. Routine test card sales increased 9% to \$2.3 million in 2001 compared to \$2.1 million in 2000 as Bayer increased placements of the TAS system. These increases were offset by decreases in analyzer sales and controls, as total analyzer revenue in 2001 was \$290,000 compared to \$1.1 million in 2000, and control revenue was \$257,000 in 2001 compared to \$385,000 in 2000. Analyzer sales decreased in 2001 as Bayer reduced its inventory of analyzers that it had purchased from the Company during 2000. The gross profit margin in 2001 was 11% compared to 16% in 2000. Gross margin decreased mainly due to increased costs in overhead related to increased production equipment and its related depreciation, production costs associated with the Company's plant relocation during 2001 and additional manufacturing and quality control personnel. The 2001 gross margin was aided by increased revenue from specialty test cards, principally the \$1.5 million received from AstraZeneca.

Total operating expenses for 2001 totaled \$9.7 million compared to \$8.1 million 2000. General and administrative expenses increased \$1.2 million compared to 2000 due to several factors. Higher personnel costs from salary and benefit increases were incurred as well as from additional personnel hired into administration. Increased facility and equipment costs were incurred related to the Company's relocation to new facilities. In addition, the Company incurred implementation costs in improving its management information systems during 2001. Sales and marketing expenses increased due to higher compensation costs and expenditures related to marketing materials and training, mostly related to

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the enoxaparin test. Research and development expenses increased approximately 7% in 2001 compared to 2000. The change was mainly due to increased personnel and increased clinical trial costs related to the Company's enoxaparin test project and the project to further optimize our PT test.

Interest expense for the year ended December 31, 2001 decreased compared to 2000. In June 2001, the Company paid off debt to Transamerica Business Credit Corp. that had been entered into in 1997 to fund working capital and capital expenditures. Interest income decreased in 2001 compared to 2000 due to significantly decreased interest rates which lowered returns during the year.

Development income totaled \$264,000 in 2001 compared to \$492,000 in 2000. Development income in 2001 was derived from a five-year collaboration agreement signed with Aventis Pharmaceuticals during 2000 related to the Company's enoxaparin test. The milestone payments received, which total \$2 million to date, are being recognized into income over the life of this agreement. Development income in 2000 was related to agreements signed previously with Bayer Diagnostics and Aventis. The Bayer development agreement ended in 2000.

In February 2000, the Company completed a private placement of 120,000 shares of Series A convertible preferred stock. The Series A has a dividend of 6% payable quarterly in cash or in shares of common stock at the option of the Company. During the year ended December 31, 2001, the Series A dividend was paid by issuing 69,604 shares of common stock totaling \$566,210.

Year Ended December 31, 2000 vs. Year Ended December 31, 1999. Sales for the year ended December 31, 2000 increased 10% to \$4.3 million compared to \$3.9 million in 1999. This increase was largely attributable to increased analyzer sales as total analyzer revenue in 2000 was \$1.1 million compared to \$795,000 in 1999. Also, increases occurred in revenue from routine test cards and controls which totaled \$2.1 million and \$385,000, respectively, an increase over the \$1.8 million and \$345,000, respectively, recorded in 1999. These increases were offset by lower specialty test card revenues of \$637,000 in 2000 compared to \$974,000 in 1999. The gross profit margin in 2000 was 16% compared to 19% in 1999, the reduction mainly due to increased costs in overhead related to additional personnel.

Total operating expenses for 2000 totaled \$8.1 million compared to \$6.3 million 1999. General and administrative expenses increased approximately \$615,000 compared to 1999 due to more personnel and increased facility costs, some of which was related to the Company's planned move to new facilities that occurred early in 2001. Sales and marketing expenses increased approximately \$252,000, principally due to new expenditures for marketing research related to test cards then in development. Research and development expenses increased approximately 33% in 2000 compared to 1999. The change was mainly due to increased personnel and increased clinical trial costs related to the Company's development projects.

Interest expense for the year ended December 31, 2000 decreased to \$200,000 compared to \$313,000 in the prior year as the Company continued to pay down its debt. Interest income increased in 2000 compared to 1999 due to increased average investment balances during the year due to the preferred stock issuance in February 2000.

Development income totaled \$491,000 in 2000 compared to \$100,000 in 1999. This increase was due to revenues derived from collaboration agreements signed with Bayer Diagnostics and Aventis during 2000.

In February 2000, the Company completed a private placement of 120,000 shares of Series A convertible preferred stock for aggregate proceeds of

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\$11,220,000. The Series A has a dividend of 6% payable quarterly in cash or in shares of common stock at the option of the Company. During the year ended December 31, 2000, the Series A dividend was paid by issuing 40,065 shares of common stock totaling \$626,638. In addition, on the date of the Company's issuance of the Series A, the effective conversion price of the preferred stock was at a discount to the price of the common stock into which the Series A is convertible. In accordance with accounting guidelines at the time of the preferred stock issuance, this discount totaled \$975,600. It was recorded as a preferred stock dividend and amortized over the three-month period until conversion was possible. In November 2000, further accounting guidance was issued which required the Company to record an additional discount of \$2,027,990 during the Company's fourth quarter.

LIQUIDITY AND CAPITAL RESOURCES

At December 31, 2001, the Company had cash and cash equivalents and short-term investments of \$14.9 million and working capital of \$15.8 million, as compared to \$9.2 million and \$8.4 million, respectively, at December 31, 2000. During 2001, the Company used cash in operating activities of \$7.6 million. The use of cash was principally due to funding the net operating loss of the Company and increased inventories to support expected product sale increases. The operating uses of cash were partially offset by funding provided through the collaboration with Aventis that was recorded as deferred revenue.

Net cash provided by investing activities was \$440,000 in 2001. The net cash provided resulted mainly from maturities of short-term investments offset by expenditures for new equipment and leasehold improvements related to the Company's relocation to new facilities. The Company expects capital expenditures in 2002 to be much lower than in 2001 and to range from \$500,000 to \$1,000,000.

Cash provided by financing activities was \$16.7 million in 2001 as compared to \$10.6 million in 2000. This increase principally resulted from the issuance of common stock to Bayer in April 2001 when Bayer purchased 1,450,000 shares of common stock of the Company at \$12 per share for \$17.4 million. This investment increased Bayer's ownership percentage in the Company from approximately 7% to 19.9%. This increase in cash provided by financing activities was reduced by the pay off of the Company's debt with Transamerica Business Credit Corp.

In 2001, the Company and Bayer entered into an amended distribution agreement to replace the previous distribution agreement between the parties entered into during 1998. The 2001 common stock purchase agreement with Bayer contains a provision that, upon the occurrence of a "change in control", as defined in the agreement, the Company may be required to compensate Bayer, in cash or shares of common stock, for any difference between per share prices originally paid by Bayer and the amount received by the Company's shareholders in the change of control transaction. In accordance with the implementation requirements of recently issued and adopted Emerging Issues Task Force Abstract No. 00-19, the Company has transferred to temporary equity an amount equal to the "change in control" payment called for by the purchase agreement. Under the new accounting guidelines, this temporary transfer is required only for those reporting periods in which the price per share paid by Bayer is in excess of the fair market value of a common share, as measured by reference to the NASDAQ National Market.

The Company has sustained continuing operating losses in 2001 and had an accumulated deficit of \$49.6 million as of December 31, 2001. The Company expects to incur operating losses until product revenues reach a sufficient level to support ongoing operations. In addition, in the year ended December

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31, 2001, the Company had negative cash flows from operations of approximately \$7.6 million. In addition to the capital expenditures noted above, the Company expects to incur additional operating losses during 2002. The Company's working capital requirements will depend on many factors, primarily the volume of subsequent orders of TAS products from distributors, primarily Bayer, and from sales of specialty test cards such as the Enoxaparin test. In addition, the Company expects to incur costs associated with clinical trials for new test cards. The Company might acquire other products, technologies or businesses that complement the Company's existing and planned products, although the Company currently has no understanding, commitment or agreement with respect to any such acquisitions. In addition, the Company might consider a joint venture or the sale of manufacturing rights to complete the commercialization of its routine anticoagulant monitoring tests. Management believes that its existing capital resources and cash flows from operations, including that from its distribution agreement with Bayer, will be adequate to satisfy its planned liquidity and cash requirements through 2002.

If additional liquidity becomes necessary in the future, the Company will consider external sources of financing as needed. These financings may take the form of equity financings such as a private placement of common or preferred stock, a follow-on public offering of common stock or additional equity infusions from collaborative partners. Given the Company's low amount of debt at December 31, 2001, the Company would also consider debt financings such as a working capital line of credit.

CONTRACTUAL OBLIGATIONS

The Company has contractual obligations under notes payable, capital and operating lease agreements for years subsequent to 2001. Future payments as of December 31, 2001 are as follows:

Year ending December 31,

	Notes Payable	Capital Leases	Operating Leases	Total
	-----	-----	-----	-----
2002	\$ 3,705	\$ 27,379	\$ 362,720	\$ 393,804
2003	4,119	26,724	370,469	401,312
2004	2,325	19,521	373,618	395,464
2005	-	19,521	370,917	390,438
2006	-	6,512	347,865	354,377
Thereafter	-	-	1,498,995	1,498,995
	-----	-----	-----	-----
Total payments	\$ 10,149	\$ 99,657	\$ 3,324,584	\$ 3,434,390
	=====	=====	=====	=====

RECENT ACCOUNTING PRONOUNCEMENTS

In 2001, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 141, Business Combinations, and SFAS No. 142, Goodwill and Other Intangible Assets. SFAS Nos. 141 and 142 change the accounting for business combinations and goodwill in two significant ways. First, SFAS No. 141 requires that the purchase method of accounting be used for all business combinations initiated after June 30, 2001. Second, SFAS No. 142 changes the accounting for goodwill from an amortization method to an impairment-only approach. Thus, amortization of goodwill, including goodwill recorded in past business transactions, will cease upon adoption of SFAS No. 142 which will be January 1, 2002. These standards have not had any material impact on the Company's financial condition, results of operations or cash flows.

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In 2001, the FASB issued Statement of Financial Accounting Standards No. 143 ("FAS 143"), "Accounting for Asset Retirement Obligations", and in July 2001 the FASB issued Statement of Financial Accounting Standards No. 144 ("FAS 144"), "Accounting for the Impairment of Disposal of Long-Lived Assets". FAS 143 requires that obligations associated with the retirement of tangible long-lived assets be recorded as a liability when those obligations are incurred, with the amount of the liability initially measured at fair value. FAS 143 will be effective for financial statements beginning after June 15, 2002, though early adoption is encouraged. The application of this statement is not expected to have a material impact on the Company's financial statements.

FAS 144 supersedes FAS 121, amends Accounting Principles Board Opinion No. 30 ("APB 30") "Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions" and applies to all long-lived assets, including discontinued operations. FAS 144 requires that long-lived assets that are to be disposed of by sale be measured at the lower of book or fair value less costs to sell. FAS 144 is effective for financial statements issued for fiscal years beginning after December 15, 2001 and its provisions are generally expected to be applied prospectively. The Company does not expect the application of this statement to have a material impact on the Company's financial statements.

FACTORS THAT MIGHT AFFECT FUTURE RESULTS

A number of uncertainties exist that might affect the Company's future operating results and stock price. There can be no assurance that new tests, particularly specialty tests, can be developed, receive regulatory approval, and be commercialized and accepted in the market. Other risks include: market acceptance of TAS; the Company's continuing losses and the resulting potential need for additional capital in the future; managed care and continuing market consolidation, which may result in price pressure, particularly on routine tests; competition within the diagnostic testing industry and FDA regulations and other regulatory guidelines affecting the Company and/or its collaborators. The market price of the common stock could be subject to significant fluctuations in response to variations in the Company's quarterly operating results as well as other factors which may be unrelated to the Company's performance. The stock market in recent years has experienced extreme price and volume fluctuations

that often have been unrelated or disproportionate to the operating performance of and announcements concerning public companies. Such broad fluctuations may adversely affect the market price of the Company's common stock. Securities of issuers having relatively limited capitalization are particularly susceptible to volatility based on short-term trading strategies of certain investors.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

In the normal course of business, the Company is exposed to variety of risks including market risk associated with interest rate movements. The Company's exposure to market risk for changes in interest rates relates primarily to any investments the Company may hold at various times and also related to its small amount of long-term debt. When investing, the Company's purchases consist of highly liquid investments with maturities at the date of purchase between three and twelve months, thus, due to the short-term nature of such investments and the Company's usual intention to hold these investments until maturity, the impact of interest rate changes would not have a material impact on the Company's results of operations. In addition, the Company has a small amount of long-term debt obligations at a fixed interest rate. Given the fixed rate nature of this debt, the impact of interest rate changes also would not have a material impact on the Company's results of operations.

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ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See Index to Consolidated Financial Statements on page F-1.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable

PART III

Certain information required by Part III is omitted from this report because the Registrant intends to file a definitive proxy statement for its 2002 Annual Meeting of Shareholders (the "Proxy Statement") within 120 days after the end of its fiscal year pursuant to Regulation 14A promulgated under the Securities Exchange Act of 1934, as amended, and the information included therein is incorporated herein by reference to the extent provided below.

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information required by Item 10 of Form 10-K concerning the Registrant's executive officers is set forth under the heading "Executive Officers of the Company" located at the end of Part I of this Form 10-K.

The other information required by Item 10 of Form 10-K is incorporated by reference to the information under the headings "Election of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Item 11 of Form 10-K is incorporated by reference to the information under the heading "Proposal No. 1- Election of Directors- Information Concerning the Board of Directors and Its Committees", "Other Information - Compensation of Executive Officers", "Compensation of Directors", "Report of the Compensation Committee on Executive Compensation", "Compensation Committee Interlocks and Insider Participation", and "Performance Graph" in the Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required by Item 12 of Form 10-K is incorporated by reference to the information under the heading "Other Information - Principal Shareholders" in the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by Item 13 of Form 10-K is incorporated by reference to the information under the heading "Other Information - Certain Transactions" in the Proxy Statement.

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

(a) The following Financial Statements, Financial Statement Schedules and Exhibits are filed as part of this report or incorporated herein by reference:

- (1) Financial Statements.

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See Index to Consolidated Financial Statements on page F-1.

(2) Financial Statement Schedules.

Schedule II, Valuation and Qualifying Accounts, is found on page S-1 of this Form 10-K.

All other schedules for which provision is made in Regulation S-X are not required under the related instructions, are inapplicable, or the required information is given in the financial statements, including the notes thereto and therefore, have been omitted.

(3) The exhibits filed as part of this Report are listed in Item 14(c) below.

(b) The Company did not file any Current Reports on Form 8-K during the quarter ended December 31, 2001.

(c) Exhibits

Exhibit Number -----	Description -----
3.3(a)	Bylaws.
3.4(f)	Amended and Restated Articles of Incorporation filed with the North Carolina Secretary of State on February 24, 2000
4.1(a)	Form of Common Stock certificate.
10.2(a) *	License Agreement with Tokuyama Soda Company, Ltd., dated October 6, 1988.
10.3(a)	Form of International Distributor Agreement.
10.4(a) *	Purchasing Agreement with VHA Inc., dated April 1, 1995
10.8(a)	1994 Stock Plan, as amended.
10.9(a)	1995 Stock Plan, as amended.
10.10(a) *	License Agreement with Duke University, dated January 22, 1993.
10.18(b) *	Amendment Agreement, dated December 14, 1995, to License Agreement with Tokuyama Soda Company, Ltd.
10.20(d) *	Patent Sublicense Agreement, dated December 1, 1996, with Knoll AG.
10.21(d)	Development Agreement, dated August 21, 1996, with Bayer Corporation.
10.22(e) *	Distribution Agreement with Chiron Diagnostics Corporation dated August 28, 1998
10.23(e)	Common Stock Purchase Agreement with Chiron Diagnostics Corporation dated August 28, 1998
10.24(f)	Series A Preferred Stock and Warrant Purchase Agreement dated February 24, 2000
10.25(f)	Form of Warrant between the Company and the Series A Investors dated February 25, 2000
10.26(g)	Lease Agreement dated July 27, 2000 relating to 9401 Globe Center Drive, as amended by the First Lease Amendment dated September 25, 2000.
10.27(h)	Common Stock Purchase Agreement between the Registrant and Bayer Corporation dated April 23, 2001
10.28(h)	Amended and Restated Distribution Agreement between Registrant and Bayer Corporation dated April 23, 2001
21.1(a)	List of Subsidiaries

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23.1 Consent of Independent Accountants.

- * Confidential treatment granted.
- (a) Incorporated herein by reference to the identically-numbered exhibit to the Registrant's Registration Statement on Form S-1 (Registration No. 33-98078) initially filed October 12, 1995, as amended.
- (b) Incorporated herein by reference to the identically-numbered exhibit to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1995.
- (c) Not used
- (d) Incorporated herein by reference to the identically-numbered exhibit to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1996.
- (e) Incorporated herein by reference to the identically-numbered exhibit to the Registrant's Registration Statement on Form S-4 (No. 333-66017) as filed with the SEC on October 22, 1998.
- (f) Incorporated by reference to the identically-numbered exhibit to the Registrant's Current Report on Form 8-K filed March 1, 2000.
- (g) Incorporated by reference to the identically-numbered exhibit to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000.
- (h) Incorporated by reference to the identically-numbered exhibit to the Registrant's Current Report on Form 8-K filed April 27, 2001.

SIGNATURE

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

PHARMANETICS, INC.

Date:

BY: /s/ John P. Funkhouser

John P. Funkhouser
President and Chief
Executive Officer

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

Signature -----	Title -----	Date ----
/s/ John P. Funkhouser ----- John P. Funkhouser	President, Chief Executive Officer and Chairman (Principal Executive Officer)	March 21, 2002
/s/ James A. McGowan ----- James A. McGowan	Chief Financial Officer (Principal Financial Officer)	March 21, 2002
/s/ Paul T. Storey ----- Paul T. Storey	Treasurer and Director of Finance (Principal Accounting Officer)	March 21, 2002
/s/ John K. Pirotte	Director	March 21, 2002

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John K. Pirotte
/s/ Stephen R. Puckett Director March 21, 2002

Stephen R. Puckett
/s/ Philip R. Tracy Director March 21, 2002

Philip R. Tracy
/s/ Frances L. Tuttle Director March 21, 2002

Frances L. Tuttle
/s/ James B. Farinholt, Jr. Director March 21, 2002

James B. Farinholt, Jr.
/s/ William A. Hawkins Director March 21, 2002

William A. Hawkins

PHARMANETICS, INC.
AND SUBSIDIARIES

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F-1

REPORT OF INDEPENDENT ACCOUNTANTS

The Board of Directors and Shareholders of PharmaNetics, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of shareholders' equity and of cash flows present fairly, in all material respects, the financial position of

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PharmaNetics, Inc. and subsidiaries (the "Company") at December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

February 15, 2002

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PHARMANETICS, INC. AND SUBSIDIARIES Consolidated Balance Sheets December 31, 2001 and 2000

ASSETS	2001 -----	2000 -----
Current assets:		
Cash and cash equivalents	\$ 14,882,589	\$ 5,343,749
Short term investments, held-to-maturity (estimated market value of \$3,902,489 in 2000)	--	3,904,123
Receivables:		
Trade, net of allowance for doubtful accounts of \$1,995 and \$4,339, respectively	305,970	244,772
Other	156,425	56,301
	-----	-----
Total receivables	462,395	301,073
Inventories	2,223,240	1,285,983
Other current assets	241,574	217,894
	-----	-----
Total current assets	17,809,798	11,052,822
Property and equipment, net	8,502,558	6,423,830
Patents and intellectual property, net	550,663	536,219
Other noncurrent assets	150,586	301,555
	-----	-----
Total assets	\$ 27,013,605 =====	\$ 18,314,426 =====

LIABILITIES, REDEEMABLE PREFERRED STOCK,
CONTINGENTLY REDEEMABLE COMMON STOCK AND
SHAREHOLDERS' EQUITY

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Current liabilities:		
Accounts payable	\$ 740,785	\$ 958,104
Accrued expenses	723,249	648,766
Deferred revenue, current portion	487,462	232,143
Current portion of long-term debt	3,705	844,072
Current portion of capital lease obligations	18,904	16,617
	-----	-----
Total current liabilities	1,974,105	2,699,702
	-----	-----
Deferred revenue, less current portion	1,345,434	896,726
Long-term debt, less current portion	6,444	10,149
Capital lease obligations, less current portion	59,652	25,885
	-----	-----
Total noncurrent liabilities	1,411,530	932,760
	-----	-----
Total liabilities	3,385,635	3,632,462
	-----	-----
Commitments and contingencies (Note 8)		
Series A convertible preferred stock, no par value; authorized 120,000 shares; 90,500 and 97,500 shares issued and outstanding at December 31, 2001 and 2000, respectively (aggregate liquidation value at December 31, 2001 of \$9,050,000)		
	7,520,446	8,102,168
Contingently redeemable common stock	8,537,500	--
Shareholders' equity:		
Common stock, no par value; authorized 40,000,000 shares; 9,485,294 and 7,851,225 issued and outstanding at December 31, 2001 and 2000, respectively		
	57,185,936	47,027,959
Accumulated deficit	(49,615,912)	(40,448,163)
	-----	-----
Total shareholders' equity	7,570,024	6,579,796
	-----	-----
Total liabilities, redeemable preferred stock, contingently redeemable common stock and shareholders' equity	\$ 27,013,605	\$ 18,314,426
	=====	=====

The accompanying notes are an integral part of the consolidated financial statements.

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PHARMANETICS, INC. AND SUBSIDIARIES
Consolidated Statements of Operations
For the years ended December 31, 2001, 2000 and 1999

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	2001 -----	2000 -----
Net sales	\$ 4,538,842	\$ 4,269,236
Cost of sales:		
Materials and labor	1,222,774	1,422,187
Overhead	2,823,555	2,167,645
	-----	-----
Total cost of sales	4,046,329	3,589,832
	-----	-----
Gross profit	492,513	679,404
	-----	-----
Operating expenses:		
General and administrative	4,524,361	3,330,377
Sales and marketing	1,207,939	1,050,733
Research and development	3,950,289	3,684,573
	-----	-----
Total operating expenses	9,682,589	8,065,683
	-----	-----
Loss from operations	(9,190,076)	(7,386,279)
	-----	-----
Other income (expense):		
Interest expense	(72,194)	(200,391)
Interest income	421,486	702,572
Development income	263,833	491,666
License fee and royalty income	24,000	46,095
Other income (expense)	(48,588)	12,814
	-----	-----
Other income, net	588,537	1,052,756
	-----	-----
Loss from continuing operations	(8,601,539)	(6,333,523)
	-----	-----
Discontinued operations:		
Income from operations of Coeur Laboratories, Inc. (net of income taxes of \$13,685)	--	--
Loss on disposal of Coeur Laboratories, Inc. (including income taxes of \$14,000)	--	--
	-----	-----
Net and comprehensive loss	(8,601,539)	(6,333,523)
	-----	-----
Amortization of beneficial conversion feature of Series A convertible preferred stock	--	(3,003,590)
Preferred stock dividends	(566,210)	(626,638)
	-----	-----
Net and comprehensive loss attributable to common shareholders	\$ (9,167,749)	\$ (9,963,751)
	=====	=====
Basic and diluted net loss per common share:		
Net and comprehensive loss	\$ (0.97)	\$ (0.83)

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Basic and diluted net loss attributable to common shareholders	\$ (1.03)	\$ (1.31)
Weighted average number of outstanding common shares	8,877,270	7,626,473

The accompanying notes are an integral part of the consolidated financial statements.

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PHARMANETICS, INC. AND SUBSIDIARIES
 Consolidated Statements of Shareholders' Equity
 For the years ended December 31, 2001, 2000 and 1999

	Common Stock		Accumulated Deficit
	Number of Shares	Amount	
Balances at December 31, 1998	7,452,781	\$ 40,017,046	\$ (24,261,
Stock options exercised	16,138	24,647	
Stock-based compensation	12,000	51,000	
Amortization of unearned compensation	--	--	
Net loss for the year ended December 31, 1999	--	--	(6,222,
Balances at December 31, 1999	7,480,919	40,092,693	(30,484,
Issuance of warrants	--	1,106,403	
Conversions of preferred stock to common stock	225,000	2,011,050	
Stock options exercised	104,241	177,585	
Warrants exercised	1,000	10,000	
Issuance of stock dividends	40,065	626,638	(626,
Amortization of beneficial conversion feature	--	3,003,590	(3,003,
Net loss for the year ended December 31, 2000	--	--	(6,333,
Balances at December 31, 2000	7,851,225	47,027,959	(40,448,
Conversions of preferred stock to common stock	70,000	581,722	
Stock options exercised	79,965	314,441	
Common stock issued	1,450,000	17,359,464	
Issuance of stock dividends	69,604	566,210	(566,
Common stock repurchases	(35,500)	(126,360)	
Reclassification to contingently redeemable common stock	--	(8,537,500)	
Net loss for the year ended December 31, 2001	--	--	(8,601,
Balances at December 31, 2001	9,485,294	\$ 57,185,936	\$ (49,615,

The accompanying notes are an integral part of the consolidated financial statements.

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PHARMANETICS, INC. AND SUBSIDIARIES
 Consolidated Statements of Cash Flows
 For the years ended December 31, 2001, 2000 and 1999

	2001	2000	1999
	-----	-----	-----
Cash flows from operating activities:			
Net loss	\$ (8,601,539)	\$ (6,333,523)	\$ (6,333,523)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock based compensation	--	--	--
Depreciation and amortization of property and equipment	1,301,912	971,781	1,301,912
Amortization of intangible assets	203,951	159,421	203,951
Loss on disposal of Coeur Laboratories, Inc.	--	--	--
Amortization of discount on investments, net	(30,877)	(371,042)	(30,877)
Loss on trading investments	8,120	--	8,120
Amortization of unearned compensation	--	--	--
Provision for doubtful accounts	--	3,574	--
Provision for inventory obsolescence	84,574	109,460	84,574
Loss on disposal of fixed assets	61,121	(9,782)	61,121
Change in operating assets and liabilities:			
Receivables	(161,322)	661,634	(161,322)
Inventories	(1,021,832)	(65,950)	(1,021,832)
Other assets	81,173	(190,731)	81,173
Accounts payable and accrued expenses	(198,586)	1,225,297	(198,586)
Deferred revenue	704,027	1,128,869	704,027
	-----	-----	-----
Net cash used in operating activities	(7,569,278)	(2,710,993)	(7,569,278)
	-----	-----	-----
Cash flows from investing activities:			
Purchases of property and equipment	(3,314,221)	(4,146,849)	(3,314,221)
Costs incurred to obtain patents and other intangibles	(87,398)	(37,223)	(87,398)
Purchases of short-term investments, held to maturity	--	(10,533,081)	--
Purchases of trading investments	(93,000)	--	(93,000)
Proceeds from maturities of investments	3,935,000	8,500,000	3,935,000
Proceeds from sale of segment	--	--	--
	-----	-----	-----
Net cash provided by (used in) investing activities	440,381	(6,217,152)	440,381
	-----	-----	-----
Cash flows from financing activities:			
Principal payments on long-term debt and capital lease obligations	(879,808)	(796,218)	(879,808)
Proceeds from exercise of stock options and warrants	314,441	187,585	314,441
Proceeds from issuance of common stock, net	17,359,464	--	17,359,464
Repurchase of common stock	(126,360)	--	(126,360)
Proceeds from issuance of Series A preferred stock	--	11,219,621	--
	-----	-----	-----
Net cash provided by (used in) financing activities	16,667,737	10,610,988	16,667,737
	-----	-----	-----

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Net increase (decrease) in cash and cash equivalents	9,538,840	1,682,843	
Cash and cash equivalents at beginning of year	5,343,749	3,660,906	3
	-----	-----	----
Cash and cash equivalents at end of year	\$ 14,882,589	\$ 5,343,749	\$ 3
	=====	=====	=====
Supplemental disclosures of cash flow information:			
Cash paid during the year for interest expense	\$ 72,194	\$ 200,391	\$
	=====	=====	=====
Cash paid during the year for income taxes	\$ 0	\$ 0	\$
	=====	=====	=====

The accompanying notes are an integral part of the consolidated financial statements.

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PHARMANETICS, INC. AND SUBSIDIARIES Notes to Consolidated Financial Statements

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

ORGANIZATION

PharmaNetics, Inc. (the "Company") is a holding company incorporated in July 1998 as the parent company of Cardiovascular Diagnostics, Inc. ("CVDI"). CVDI was incorporated in November 1985 and develops, manufactures and markets rapid turnaround diagnostics to assess blood clot formation and dissolution. CVDI develops tests based on its proprietary dry chemistry diagnostic test system, known as the Thrombolytic Assessment System ("TAS"), to provide rapid and accurate evaluation of hemostasis at the point of patient care. Coeur Laboratories, Inc. ("Coeur"), which formally sold and manufactured disposable power injection syringes, is a wholly-owned subsidiary of Cardiovascular Diagnostics, Inc., however, in June 1999, substantially all of the operating assets and liabilities of Coeur were sold. Cardiovascular Diagnostics Europe, BV ("CDE") is a wholly-owned Dutch company that distributed the Company's products in Europe until March 1997 when it ceased operations.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries, including Coeur through June 15, 1999. All intercompany balances and transactions have been eliminated in consolidation.

RECLASSIFICATIONS

Certain reclassifications were made to the prior year financial statements to conform them to the current presentation.

CASH EQUIVALENTS

The Company considers all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash equivalents.

INVESTMENTS

Investments consist primarily of United States government agency obligations,

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notes and corporate bonds. The Company invests in high-credit quality investments in accordance with its investment policy which minimizes the possibility of loss. Investments with original maturities at date of purchase beyond three months and which mature at or less than twelve months from the balance sheet date are classified as current. Investments are considered to be either trading or held-to-maturity and are accounted for in accordance with Statement of Financial Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities." Realized gains and losses are determined using the specific identification method and transactions are recorded on a settlement date basis.

INVENTORIES

Inventories are stated at the lower of standard cost (which approximates cost on a first-in, first-out basis) or market. The Company assesses its inventory on a periodic basis and recognizes reserves for obsolescence when necessary.

PROPERTY AND EQUIPMENT

Property and equipment are stated at cost and are depreciated using the straight-line method over the estimated useful lives of the respective assets, which range from three to seven years. Leasehold improvements and capital leases are amortized over the shorter of the estimated useful lives of the asset, or the term of the lease.

Expenditures for repairs and maintenance are charged to expense as incurred. The costs of major renewals and betterments are capitalized and depreciated over their estimated useful lives. Upon disposition, the cost and related accumulated depreciation of property and equipment are removed from the accounts and any resulting gain or loss is reflected in operations.

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1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

PATENTS AND INTELLECTUAL PROPERTY

Patents and intellectual property costs are capitalized and are amortized using the straight-line method over their estimated useful lives, generally 17 years. Periods of amortization are evaluated periodically to determine whether later events and circumstances warrant revised estimates of useful lives.

IMPAIRMENT OF LONG-LIVED ASSETS

The Company evaluates the recoverability of its property and equipment, patents and intellectual property in accordance with Statement of Financial Accounting Standards No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of " ("SFAS No. 121"). SFAS No. 121 requires recognition of impairment of long-lived assets in the event the net book value of such assets exceeds the future undiscounted cash flows attributable to such assets. No such impairments were required to be recognized during the years ended December 31, 2001, 2000 and 1999. SFAS No. 121 will be superceded by SFAS No. 144 as of January 1, 2002. The Company has determined that the adoption of SFAS No. 144 will not have a material effect.

REVENUE AND INCOME RECOGNITION POLICIES

Revenue from the sale of products is recorded when an arrangement exists, delivery has occurred or services have been rendered, the seller's price is fixed and determinable and collectibility is reasonably assured. Income under

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license and development agreements is recognized over the anticipated period of the agreements with the collaborators. The Company periodically enters into agreements to sell its products under fixed price contracts. Management evaluates these contracts and recognizes a reserve if it becomes evident that the Company will incur losses under these agreements. No such reserves were necessary at December 31, 2001 or 2000.

INCOME TAXES

Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities. These deferred tax assets, liabilities and tax carryforwards are determined using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts more likely than not expected to be realized.

NET LOSS PER COMMON SHARE

Basic net loss per common share attributable to common shareholders excludes dilution and is computed by dividing net loss attributable to common shareholders by the weighted average number of common shares outstanding for the period. Diluted net income attributable to common shareholders is computed using the weighted average number of shares of common and dilutive potential common shares outstanding during the period. The Company's basic and diluted net loss attributable to common shareholders for the years ended December 31, 2001, 2000 and 1999 is the same because, for loss periods, potential common shares would be antidilutive. Warrants and preferred stock outstanding that could be dilutive in the future are summarized in Note 9. Options currently outstanding that could be dilutive in the future are summarized in Note 11.

STOCK-BASED COMPENSATION

The Company applies the provisions of Statement of Financial Accounting Standards No. 123, "Accounting for Stock Based Compensation" ("SFAS No. 123"). As permitted by SFAS No. 123, the Company has chosen to continue to apply APB Opinion No. 25 "Accounting for Stock Issued to Employees" ("APB No. 25") and related interpretations in accounting for its stock plans. Accordingly, no compensation expense has been recognized for stock options granted to employees with an exercise price equal to or above the trading price per share of the Company's common stock on the grant date. Note 11 summarizes the pro forma compensation cost for the plans if the grants had been based on the fair value at the grant dates consistent with SFAS No. 123.

In March 2000, the Financial Accounting Standards Board issued Interpretation No. 44, ("FIN 44") "Accounting for Certain Transactions Involving Stock Compensation - An Interpretation of APB 25". This interpretation clarifies: the definition of employee for purposes of applying APB 25, the criteria for determining whether a plan qualifies as a noncompensatory plan, the accounting consequence of various modifications to the terms of previously fixed stock options or awards, and the accounting for an exchange of stock compensation awards in business combinations. FIN 44 was effective on July 1, 2000 and the Company adopted its provisions. The adoption did not have a material impact on the Company's consolidated results of operations.

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1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

FAIR VALUE OF FINANCIAL INSTRUMENTS

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The carrying amount of cash and cash equivalents, accounts receivable, accounts payable and accrued expenses approximates fair value because of the short maturity of those instruments. The estimated values of the Company's short-term investments are provided in Note 2. The fair value of the Company's debt is provided in Note 7.

USE OF ESTIMATES IN THE PREPARATION OF THE FINANCIAL STATEMENTS

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

COMPREHENSIVE INCOME (LOSS)

The Company calculates and discloses comprehensive income in accordance with Statement of Financial Accounting Standards No. 130 "Reporting Comprehensive Income" ("SFAS No. 130"). SFAS No. 130 requires the Company to display an amount representing comprehensive income (loss) for all reporting periods in the financial statements. Comprehensive income (loss) must be displayed with the same prominence as other financial statements. There were no items of other comprehensive income (loss) for the years ended December 31, 2001, 2000 or 1999.

CASH FLOW INFORMATION

A supplemental schedule of non-cash investing and financing activities during the three years ended December 31, 2001 is as follows:

	2001	2000	1999
	----	----	----
Acquisition of assets through capital leases	\$71,790	\$ 20,863	\$39,5
Dividends on convertible preferred stock	566,210	626,638	
Conversion of Series A Preferred Stock into common stock	581,722	2,011,050	
Purchases of property, plant and equipment in accounts payable at year end	55,750	734,162	5
Amortization of beneficial conversion feature of Series A Preferred Stock	-	3,003,590	
Issuance of warrants in conjunction with preferred stock financing	-	62,400	

RECENT ACCOUNTING PRONOUNCEMENTS

In 2001, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 141, "Business Combinations", and SFAS No. 142, "Goodwill and Other Intangible Assets". SFAS Nos. 141 and 142 change the accounting for business combinations and goodwill in two significant ways. First, SFAS No. 141 requires that the purchase method of accounting be used for all business combinations initiated after June 30, 2001. Second, SFAS No. 142 changes the accounting for goodwill from an amortization method to an impairment-only approach. Thus, amortization of goodwill, including goodwill recorded in past business transactions, will cease upon adoption of SFAS No. 142 which will be January 1, 2002. These standards are not expected to have a material impact on the Company's financial condition, results of operations or cash flows.

In 2001, the FASB issued Statement of Financial Accounting Standards No. 143

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("FAS 143"), "Accounting for Asset Retirement Obligations", and in July, 2001 the FASB issued Statement of Financial Accounting Standards No. 144 ("FAS 144"), "Accounting for the Impairment of Disposal of Long-Lived Assets". FAS 143 requires that obligations associated with the retirement of tangible long-lived assets be recorded as a liability when those obligations are incurred, with the amount of the liability initially measured at fair value. FAS 143 will be effective for financial statements beginning after June 15, 2002, though early adoption is encouraged. The application of this statement is not expected to have a material impact on the Company's financial statements.

FAS 144 supersedes FAS 121, amends Accounting Principles Board Opinion No. 30 ("APB 30") "Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions" and applies

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RECENT ACCOUNTING PRONOUNCEMENTS (continued)

to all long-lived assets, including discontinued operations. FAS 144 requires that long-lived assets that are to be disposed of by sale be measured at the lower of book or fair value less costs to sell. FAS 144 is effective for financial statements issued for fiscal years beginning after December 15, 2001 and its provisions are generally expected to be applied prospectively. The application of this statement is not expected to have a material impact on the Company's financial statements.

2. SHORT-TERM INVESTMENTS

Short-term investments held-to-maturity at December 31, 2000 consisted of United States government agency obligations and corporate bonds as follows:

	Amortized Cost ----	Gross Unrealized -----		Estimated Market Value -----
		Gains -----	Losses -----	
Held-to-maturity:				
Corporate Bonds	\$ 934,364	\$147	\$ 253	\$ 934,259
U.S. Agency obligations	2,969,759	--	1,529	2,968,230
	-----	-----	-----	-----
	\$3,904,123	\$147	\$1,782	\$3,902,489
	=====	=====	=====	=====

Included in other current assets at December 31, 2001 are trading investments consisting of marketable equity securities related to the Company's Supplemental Executive Retirement Plan.

3. INVENTORIES

Inventories at December 31, 2001 and 2000 consisted of the following:

	2001 -----	2000 -----
Raw materials, net of allowance	\$1,819,702	\$1,132,168
Finished goods	403,538	153,815

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	-----	-----
Total	\$2,223,240	\$1,285,983
	=====	=====

4. PROPERTY AND EQUIPMENT

Property and equipment at December 31, 2001 and 2000 consisted of the following:

	2001	2000
	-----	-----
Machinery and equipment	\$7,652,295	\$6,588,786
Leasehold improvements, furniture and fixtures	3,377,585	3,281,669
IT equipment	1,402,229	957,064
Equipment under capital leases	92,653	305,587
	-----	-----
	12,524,762	11,133,106
Less accumulated depreciation and amortization	(4,022,204)	(4,709,276)
	-----	-----
Total	\$8,502,558	\$6,423,830
	=====	=====

The accumulated amortization of equipment under capital leases at December 31, 2001 and 2000 was \$17,106 and \$265,539 respectively.

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5. PATENTS AND INTELLECTUAL PROPERTY

Patents and intellectual property at December 31, 2001 and 2000 consisted of the following:

	2001	2000
	-----	-----
Patents	707,351	619,952
Intellectual property	197,446	197,446
	-----	-----
	904,797	817,398
Less accumulated amortization	(354,134)	(281,179)
	-----	-----
Total	\$ 550,663	\$ 536,219
	=====	=====

During 2001, 2000 and 1999, the Company recognized \$73,802, \$69,722, and \$68,900, respectively, of amortization related to these assets.

6. DEVELOPMENT INCOME AND DEFERRED REVENUE

The Company recognizes development income in accordance with SEC Staff Accounting Bulletin No. 101. During 2001, 2000 and 1999, the Company received payments as part of collaboration agreements with other entities and recognized \$263,833, \$491,666, and \$100,000, respectively, of development income related to these agreements. Payments received but not recognized into income in the year of receipt are deferred and recognized over the period of the respective agreements. At December 31, 2001, total payments received but deferred to future periods aggregate \$1,832,896.

7. LONG-TERM DEBT

Long-term debt as of December 31, 2001 and 2000 consisted of the following:

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	2001	2000
	-----	-----
Notes payable	\$ 10,149	\$854,221
Current portion of notes payable	3,705	844,072
	-----	-----
Notes payable, excluding current portion	\$ 6,444	\$ 10,149
	=====	=====

Notes payable mature as follows: 2002 - \$3,705; 2003 - \$4,119; and 2003 - \$2,325.

The fair value of the debt is estimated by discounting the future cash flows using current rates that would be offered to the Company for similar debt issues. The fair values of long-term debt at December 31, 2001 and 2000 were approximately \$10,149 and \$868,000, respectively.

8. LEASES

As of December 31, 2001, the Company leases its current facility under an operating lease agreement that extends until 2011. In addition, the Company leases certain equipment under various capital and operating lease agreements. Rent expense related to operating leases totaled \$511,541, \$435,386, and \$413,010 for the years ended December 31, 2001, 2000 and 1999, respectively. Future minimum lease payments as of December 31, 2001 are as follows:

Year ending December 31,

	Capital Leases	Operating Leases
	-----	-----
2002	\$ 27,379	\$ 362,720
2003	26,724	370,469
2004	19,521	373,618
2005	19,521	370,917
2006	6,512	347,865
Thereafter	--	1,498,995
	-----	-----

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8. LEASES (continued)

	Capital Leases	Operating Leases
	-----	-----
Total minimum lease payments	99,657	\$3,324,584
		=====
Imputed interest	(21,101)	

Present value of minimum lease payments	78,556	
Less current maturities	18,904	

Long-term capital lease obligations	\$ 59,652	
	=====	

9. PREFERRED STOCK

During 2000, the Company completed a private placement of 120,000 shares of

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Series A convertible preferred stock ("Series A"), resulting in net proceeds of approximately \$11,219,621, together with five-year warrants to acquire 240,000 shares of common stock at \$10.00 per share. Approximately \$1,275,000 of the net proceeds was allocated to the warrants based on their relative fair value. At December 31, 2001 and 2000, there were 251,000 warrants outstanding that could be converted into common stock at the exercise price of \$10.00 per share. The Series A has a dividend of 6% payable quarterly in cash or in shares of common stock at the option of the Company. During the year ended December 31, 2001, the Series A dividend was paid by issuing 69,604 shares of common stock.

Each share of the Series A is convertible into ten shares of common stock at \$10.00 per share. The number of common shares currently reserved for conversion of preferred stock and warrants, including related dividends, is 1,370,000. The Series A is convertible at any time at the option of the holder or may be redeemed by the Company upon the occurrence of any of the following events: (a) the common stock closes at or above \$20.00 per share for 20 consecutive trading days, (b) a completion by the Company of a follow-on public offering of at least \$10 million at a per share price of at least \$15.00, (c) the acquisition of the Company by another entity by means of a transaction that results in the transfer of 50% or more of the outstanding voting power of the Company, (d) a sale of all or substantially all of the Company's assets, or (e) at any time after February 28, 2004.

The holders of the Series A have a liquidation preference of \$100 per share plus any accrued but unpaid dividends then held, such amounts subject to certain adjustments. The holders also have the right to vote together with the common stock on an as-converted basis.

On the date of issuance of the Series A, the effective conversion price of the Series A was at a discount to the price of the common stock into which the Series A is convertible. In accordance with EITF 98-5 "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios", this discount totaled \$3,003,590 and was recorded as a preferred stock dividend.

10. COMMON STOCK

In April 2001, Bayer Diagnostics, the Company's distributor, purchased 1,450,000 shares of common stock of the Company at \$12 per share for \$17.4 million. This investment increased Bayer's ownership percentage in the Company from approximately 7% to 19.9%. At that time, the Company and Bayer entered into an amended distribution agreement to replace the previous distribution agreement between the parties entered into during 1998.

The 2001 common stock purchase agreement with Bayer contains a provision that, upon the occurrence of a "change in control", as defined in the agreement, the Company may be required to compensate Bayer, in cash or shares of common stock, for any difference between per share prices originally paid by Bayer and the amount received by the Company's shareholders in such a change of control transaction. In accordance with the implementation requirements of recently issued and adopted Emerging Issues Task Force Abstract No. 00-19, the Company has transferred to temporary equity an amount equal to the "change in control" payment called for by the purchase agreement. Under the new accounting guidelines, this temporary transfer is required only for those reporting periods in which the price per share paid by Bayer is in excess of the fair market value of a common share, as measured by reference to the NASDAQ National Market.

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11. STOCK OPTIONS

The Company maintains two stock option plans whereby nonqualified and incentive stock options may be granted to employees, consultants and directors of the Company. Under these plans, options to purchase common stock are granted at a price determined by the Board of Directors. The options may be exercised during specified future periods and generally vest over four years and generally expire ten years from the date of grant. In 1994, the Company established the 1994 Stock Plan in which 639,249 shares of the Company's common stock were reserved for issuance. In 1995, the shareholders of the Company approved, effective upon completion of the Company's initial public offering, the adoption of the Company's 1995 Stock Plan. Shares reserved for issuance under the 1995 Stock Plan total 1,188,150.

A summary of the status of the Company's Plans as of December 31, 2001, 2000 and 1999, and changes during the years ending on those dates, including the weighted average exercise price (WAEP) is presented below:

	2001		2000		1999	
	Shares	WAEP	Shares	WAEP	Shares	WAEP
Outstanding at beginning of year	1,311,898	\$5.63	1,211,887	\$ 4.09	841,066	\$3.
Granted at fair value	236,992	\$8.46	228,000	\$12.73	453,500	\$5.
Exercised	(82,223)	\$5.36	(113,987)	\$ 3.14	(16,138)	\$1.
Forfeited	(79,500)	\$5.83	(14,002)	\$ 6.07	(66,541)	\$5.
Outstanding at end of year	1,387,167	\$6.12	1,311,898	\$ 5.63	1,211,887	\$4.
Options exercisable at year-end	854,300		787,273		623,261	

The weighted average fair value of options granted during the years ended December 31, 2001, 2000 and 1999 was \$7.71, \$8.97 and \$3.90, respectively.

The following table summarizes information about the Plan's stock options, including the weighted average remaining contractual life (Life), at December 31, 2001:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number	Life	WAEP	Number	WAEP
\$ 0.79	289,791	2.4 years	\$.79	289,791	\$.79
\$ 3.75-\$4.50	132,759	4.1 years	\$ 4.41	132,759	\$ 4.41
\$ 5.00-\$6.38	505,625	7.1 years	\$ 5.60	329,500	\$ 5.51
\$ 7.10-\$9.87	279,992	9.5 years	\$ 8.56	44,500	\$ 9.67
\$10.00-\$15.06	179,000	8.5 years	\$13.64	57,750	\$14.28
	1,387,167			854,300	

For purposes of the proforma disclosures required by SFAS No. 123, the fair value of each option grant is estimated on the date of grant using the

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Black-Scholes option-pricing model with the following assumptions used for grants in 2001, 2000 and 1999:

	2001 -----	2000 -----	1999 -----
Dividend yield	0%	0%	0%
Volatility	133%	75%	69%
Risk free interest rate	4.5%-5%	5%-6.5%	6.1%
Expected life of options	6 years	6 years	6 years

For purposes of the proforma disclosures required by SFAS No. 123, the estimated fair value of equity instruments is amortized to expense over their respective vesting periods. Had compensation cost for the Company's stock-based compensation plans, as described above, been determined consistent with SFAS No. 123, the Company's net loss and net loss per share would have been increased to the pro forma amounts indicated below. The compensation costs disclosed here may not be representative of the effects on pro forma net income in future years.

		2001 ----	2000 ----
Net loss attributable to common shareholders	As reported	\$ (9,167,749)	\$ (9,963,751)
	Pro forma	\$ (10,361,598)	\$ (11,136,256)
Net loss attributable to common shareholders per common share	As reported	\$ (1.03)	\$ (1.31)
	Pro forma	\$ (1.17)	\$ (1.46)

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12. RELATED PARTY

The Company has identified Bayer as a related party due to its approximately 19.9 % ownership of the Company's outstanding stock. During the years ended December 31, 2001, 2000 and 1999 sales to Bayer totaled \$2,859,130, \$3,335,775 and \$1,857,353. At December 31, 2001 and 2000, outstanding receivables from Bayer totaled \$296,751 and \$224,468, respectively.

13. SIGNIFICANT CUSTOMERS

During the years ended December 31, 2001, 2000 and 1999, there were sales to individual customers that exceeded 10% of net consolidated sales. Sales to these customers were:

	2001 ----	2000 ----	1999 ----
Customer A	\$ --	\$ 257,561	\$ 991,345
Customer B	2,859,130	3,335,775	1,857,353
Customer C	--	--	431,380
Customer D	1,500,000	600,000	320,000

As of December 31, 2001 and 2000, there were outstanding receivables from a customer that exceeded 10% of total trade receivables. Receivables from this customer as a percentage of total trade receivables were as follows: 2001-customer B, 96%; 2000 - customer B, 92%.

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The Company generated revenue from sales to different geographic areas for 2001, 2000 and 1999 as follows:

	2001 ----	2000 ----	1999 ----
United States	\$3,038,842	\$3,669,236	\$3,007,657
United Kingdom	-	-	83,157
Germany	-	-	440,042
Sweden	1,500,000	600,000	327,750
Other foreign sales	-	-	50,773
	-----	-----	-----
Total sales	\$4,538,842 =====	\$4,269,236 =====	\$3,909,379 =====

14. CONCENTRATION OF CREDIT RISK

Financial instruments which potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents and accounts receivable. The Company places its temporary cash in accounts with federally insured depository institutions (up to \$100,000). At December 31, 2001 the Company had a majority of its cash and cash equivalents in one financial institution. Concentrations of credit risk with respect to trade receivables exist due to the Company's small customer base. Periodic credit evaluations of customers' financial condition are performed and generally no collateral is required. The Company establishes reserves for expected credit losses and such historical losses, in the aggregate, have not exceeded management's expectations.

15. LICENSE AGREEMENTS

The Company entered into a license agreement with Tokuyama Soda Company, Ltd. ("TS"), as amended in December 1995, pursuant to which the Company granted TS exclusive rights to manufacture and sell PT and aPTT tests and analyzers in certain Asian countries. The Company received royalty payments under this agreement of \$24,000, \$58,909, and \$89,507 during the years ended December 31 2001, 2000 and 1999, respectively.

16. INCOME TAXES

Income tax expense consisted entirely of current state taxes of \$0, \$0 and \$27,753 for the years ended December 31, 2001, 2000 and 1999, respectively. A reconciliation of expected income tax at the statutory Federal rate of 34% with the actual income tax expense for the years ended December 31, 2001, 2000 and 1999 is as follows:

	2001 ----	2000 ----	1999 ----
Expected income tax benefit at federal statutory rate	\$(2,923,015)	\$(2,148,144)	\$(2,115,640)
State tax provision (benefit)	(397,096)	(194,935)	(210,074)
Goodwill amortization	--	--	303,681
Other	669	91,694	39,515
Research and development credit	(47,057)	(60,849)	(166,625)
Change in valuation allowance	3,366,499	2,312,234	2,176,896
	-----	-----	-----
Net income tax provision	\$ -- =====	\$ -- =====	\$ 27,753 =====

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16. INCOME TAXES (continued)

The components of the net deferred tax assets and net deferred tax liabilities as of December 31, 2001 and 2000 were as follows:

	2001	2000
	----	----
Deferred tax assets:		
Net operating loss carryforward	\$ 15,581,000	\$ 12,989,000
Research and development credits	503,000	456,000
Foreign tax credits	35,000	35,000
Other	872,000	194,000
	-----	-----
Total gross deferred tax assets	16,991,000	13,674,000
Valuation allowance	(16,294,000)	(12,927,000)
	-----	-----
Net deferred tax assets	697,000	747,000
	-----	-----
Deferred tax liabilities:		
Patents	168,000	163,000
Investment adjustment	488,000	488,000
Fixed assets	41,000	96,000
	-----	-----
Total gross deferred tax liabilities	697,000	747,000
	-----	-----
Net deferred taxes	\$ -	\$ -
	=====	=====

At December 31, 2001 and 2000, the Company had approximately \$40,712,000 and \$34,000,000, respectively, of combined federal net operating losses. These losses expire in varying amounts beginning in 2004 if not utilized. At December 31, 2001 and 2000 for state income tax purposes, Cardiovascular Diagnostics, Inc. had net operating loss carryforwards of approximately \$37,647,000 and \$30,935,000, respectively. These carryforwards expire in varying amounts beginning in 2008 if not utilized. To the extent that Coeur's net operating losses incurred through 1994 (approximately \$2,000,000 at December 31, 2001) are utilized in the future, the benefit will reduce the excess cost over fair value of net assets acquired. The 2000 and 1999 valuation allowance includes an allowance against net operating losses generated by tax only deductions for stock options for approximately \$140,000, for which the benefit will go directly to shareholders' equity.

Due to the Company's history of operating losses and uncertainty regarding its ability to generate taxable income in the future, management has determined that a valuation allowance equal to the amount of net deferred tax assets is required at December 31, 2001 and 2000.

As a result of changes in ownership in prior years, as defined by Internal Revenue Code Section 382, the utilization of Coeur's loss carryforwards generated through December 31, 1993 and the Company's consolidated loss carryforwards generated through January 1994 will be subject to an annual limitation of \$175,000 and \$482,000, respectively.

An additional change in ownership occurred in 1995 in connection with the Company's initial public offering which subjects the loss carryforwards generated during the period from January 1994 to December 1995 to an

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incremental annual limitation of \$1,954,000 per year.

17. SUMMARY QUARTERLY FINANCIAL DATA (UNAUDITED)

The following represents a summary of operations for the quarters of 2001 and 2000:

	2001					
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter
Net sales	\$ 802,000	\$1,322,000	\$1,235,000	\$1,180,000	\$1,489,000	\$1,377,000
Gross profit	56,000	210,000	231,000	(4,000)	581,000	404,000
Net loss before preferred stock charges	(1,761,000)	(2,333,000)	(2,026,000)	(2,482,000)	(1,031,000)	(1,270,000)
Net loss attributable to common shareholders	(1,908,000)	(2,477,000)	(2,160,000)	(2,623,000)	(1,479,000) (a)	(2,047,000)
Net loss before preferred stock charges per common share	(0.22)	(0.26)	(0.22)	(0.26)	(0.14)	(0.20)

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Net loss attributable to common shareholders per common share	\$	(0.24)	\$	(0.28)	\$	(0.23)	\$	(0.28)	\$	(0.20)	\$	(0.20)
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17. SUMMARY QUARTERLY FINANCIAL DATA (UNAUDITED) (continued)

(a) Includes \$377,000 of amortization of beneficial conversion feature of the Series A Preferred Stock

(b) Includes \$598,000 of amortization of beneficial conversion feature of the Series A Preferred Stock

(c) Includes \$2,028,000 of amortization of beneficial conversion feature of the Series A Preferred Stock. This amount resulted from a change in accounting principle retroactively applied to the Series A Preferred Stock transaction.

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	Balance at Beginning of Period -----	Charge to Costs and Expenses -----	Deductions -----	Balance End of Per -----
YEAR ENDED DECEMBER 31, 2001				
Deducted from asset accounts:				
Accounts Receivable Reserve (a)	\$ 4,339 =====	\$ -- =====	\$ 2,344 (e) =====	\$ =====
Inventory Reserves (b)	\$ 125,000 =====	\$ 84,574 =====	\$134,574 (d) =====	\$ 7 =====
Deferred Tax Valuation Allowance (c)	\$12,927,000 =====	\$ 3,367,000 =====	\$ -- =====	\$16,29 =====
YEAR ENDED DECEMBER 31, 2000				
Deducted from asset accounts:				
Accounts Receivable Reserve (a)	\$ 29,556 =====	\$ 3,574 =====	\$ 28,791 (e) =====	\$ =====
Inventory Reserves (b)	\$ 100,000 =====	\$ 109,460 =====	\$ 84,460 (d) =====	\$ 12 =====
Deferred Tax Valuation Allowance (c)	\$10,615,000 =====	\$ 2,312,000 =====	\$ -- =====	\$12,92 =====
YEAR ENDED DECEMBER 31, 1999				
Deducted from asset accounts:				
Accounts Receivable Reserves (a)	\$ 14,226 =====	\$ 40,000 =====	\$ 24,670 (e) =====	\$ 2 =====
Inventory Reserves (b)	\$ 85,000 =====	\$ 95,462 =====	\$ 80,462 (d) =====	\$ 10 =====
Deferred Tax Valuation Allowance (c)	\$ 8,417,000 =====	\$ 2,198,000 =====	\$ -- =====	\$10,61 =====

(a) Represents an allowance for both product returns and doubtful accounts. Activity represents doubtful accounts only. Revenues have been reduced directly for product returns.

(b) Represents an allowance for excess and aging inventory and lower of cost or market adjustments.

(c) Represents an allowance for deferred tax assets

(d) Represents inventory items written down to lower of cost or market.

(e) Represents uncollectible accounts written off.

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Report of Independent Accountants on Financial Statement Schedules

To the Board of Directors of PharmaNetics, Inc.

Our audits of the consolidated financial statements referred to in our report dated February 15, 2002 appearing in this Form 10-K of PharmaNetics, Inc., also included an audit of the financial statement schedule listed in Item 14(a)(2) of this Form 10-K. In our opinion, this financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

/s/ PricewaterhouseCoopers LLP

Raleigh, North Carolina
February 15, 2002