VERMILLION, INC.
Form POS AM
April 17, 2008

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As Filed with the Securities and Exchange Commission on April 17, 2008
Registration No. 333-146354

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

Post-Effective Amendment No. 1
to
Form S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Vermillion, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**3826**	**33-0595156**
(State or Other Jurisdiction of Incorporation or Organization)	*(Primary Standard Industrial Classification Code Number)*	*(I.R.S. Employer Identification Number)*

6611 Dumbarton Circle
Fremont, California 94555
(510) 505-2100
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant s Principal Executive Offices)

Copies to:

Gail S. Page	**Robert Claassen, Esq.**
President and Chief Executive Officer	**Paul, Hastings, Janofsky & Walker LLP**
6611 Dumbarton Circle	**Five Palo Alto Square, Sixth Floor**
Fremont, California 94555	**Palo Alto, CA 94306**
(510) 505-2100	**(650) 320-1800**
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service)	

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. þ

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

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

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

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

Large accelerated filer o	Accelerated filer o	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company þ

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

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The information in this prospectus is not complete and may be changed. The Selling Stockholders named herein may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED APRIL 17, 2008

PROSPECTUS

Vermillion, Inc.

4,223,389 Shares of Common Stock

We are registering our common stock, par value $0.001 per share, for resale by the selling stockholders identified in this prospectus.

The selling stockholders or their permitted transferees or other successors in interest may, but are not required to, sell their common stock in a number of different ways and at varying prices. See Plan of Distribution on page 69, for a description of how the selling stockholders may dispose of the shares covered by this prospectus. We do not know when or in what amount the selling stockholders may offer the shares for sale.

We will not receive any of the proceeds from sales of common stock made by the selling stockholders pursuant to this prospectus. We have agreed to pay certain expenses related to the registration of the shares of common stock.

Our common stock trades in the NASDAQ Capital Market under the symbol VRML . On April 16, 2008, the last reported sale price of our common stock on the NASDAQ Capital Market was $3.08 per share.

Investing in our common stock involves risks. See Risk Factors beginning on page 5.

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

You should rely only on the information contained in this prospectus. We have not authorized anyone else to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information appearing in this prospectus is accurate only as of its date.

The date of this prospectus is , 2008.

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PROSPECTUS SUMMARY

This summary highlights selected information from this prospectus. The following summary information is qualified in its entirety by the information contained elsewhere in this prospectus. This summary is not complete and may not contain all of the information that you should consider prior to making an investment decision. You should read the entire prospectus carefully, including the Risk Factors section beginning on page 5 of this prospectus and the audited consolidated financial statements and notes thereto contained in this prospectus before making an investment decision. Unless the context otherwise requires, references to Vermillion, we, us, or the Company refer to Vermillio Inc. and its wholly owned subsidiaries.

At the special meeting of stockholders held on February 14, 2008, our stockholders approved the proposal to authorize the Board of Directors in its discretion, without further authorization of our stockholders, to amend our Certificate of Incorporation to effect a reverse split of our common stock by a ratio of between 1 for 6 to 1 for 10. On February 15, 2008, our Board of Directors approved a 1 for 10 reverse stock split, referred to herein as the reverse stock split, of our common stock effective at the close of business on March 3, 2008. Accordingly, all share and per share amounts in this prospectus have been adjusted to reflect the impact of the 1 for 10 reverse stock split.

Company Information

We were originally incorporated in California on December 9, 1993, under the name Abiotic Systems. In March 1995, we changed our corporate name to Ciphergen Biosystems, Inc. and subsequently on June 21, 2000, we reincorporated in Delaware. Under the name Ciphergen Biosystems, Inc., we had our initial public offering on September 28, 2000. On November 13, 2006, we sold assets and liabilities of our protein research products and collaborative services business, referred to herein as the Instrument Business Sale, to Bio-Rad Laboratories, Inc., referred to herein as Bio-Rad, in order to concentrate our resources on developing clinical protein biomarker diagnostic products and services. On August 21, 2007, we changed our corporate name to Vermillion, Inc. In conjunction with the name change, we changed our common stock ticker symbol on the NASDAQ Capital Market from CIPH to VRML .

Prior to the Instrument Business Sale, we developed, manufactured and sold ProteinChip Systems for life science research. This patented technology is recognized as Surface Enhanced Laser Desorption/Ionization, or SELDI. The systems consist of ProteinChip Readers, ProteinChip Software and related accessories, which were used in conjunction with consumable ProteinChip Arrays. These products were sold primarily to pharmaceutical companies, biotechnology companies, academic research laboratories and government research laboratories. We also provided research services through our Biomarker Discovery Center laboratories, and offered consulting services, customer support services and training classes to our customers and collaborators.

Since the Instrument Business Sale, we have dedicated ourselves to the discovery, development and commercialization of novel diagnostic tests that help physicians diagnose, treat and improve outcomes for patients. We use the process of utilizing advanced protein separation methods to identify and resolve variants of specific biomarkers commonly known as translational proteomics, for developing a procedure to measure a property or concentration of an analyte commonly known as an assay, and commercializing novel diagnostic tests.

Through collaborations with leading academic and research institutions, including The Johns Hopkins University School of Medicine, referred to herein as Johns Hopkins; The University of Texas M.D. Anderson Cancer Center, referred to herein as M.D. Anderson; University College London; The University of Texas Medical Branch, referred to herein as UTMB; The Katholieke Universiteit Leuven; The Ohio State University Research Foundation, referred to herein as Ohio State University; and Stanford University, we plan to develop diagnostic tests in the fields of oncology,

hematology, cardiology and women s health. We will also address clinical questions related to early disease detection, treatment response, monitoring of disease progression, prognosis and others. These research collaborations have provided us with the clinical data and intellectual property portfolio that form the basis of our product pipeline. We are now engaged in product development and commercialization of discoveries made under these collaborations.

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In July 2005, we entered into a strategic alliance agreement with Quest Diagnostics Incorporated, referred to herein as Quest, pursuant to which the parties have agreed to develop and commercialize up to three diagnostic tests. The term of the agreement ends on the later of (i) the three-year anniversary of the agreement and (ii) the date on which Quest commercializes the three diagnostic tests. Thus, our major initiatives are currently aimed at commercializing these diagnostic tests, both within the context of our strategic alliance agreement with Quest as well as markets in which Quest does not participate, to the extent permitted under the strategic alliance agreement.

Recent Developments

On February 22, 2008, we were notified by NASDAQ Listing Qualifications that we did not comply with Marketplace Rule 4310(c)(3) for continued inclusion as a result of the market value of our common stock falling below $35,000,000 for 10 consecutive business days, and as required by Marketplace Rule 4310(c)(8)(C), we had 30 days, or until March 24, 2008, to regain compliance. We did not regain compliance by March 24, 2008, and, accordingly, on March 25, 2008, we received written notification from NASDAQ Listing Qualifications, referred to herein as the Staff Determination Notice, that our securities would be subject to delisting as a result of the deficiency unless we request a hearing before a NASDAQ Listing Qualifications Panel. We are currently scheduled for a hearing before a NASDAQ Listing Qualifications Panel. As a result, the delisting action has been stayed and our securities will remain listed on the NASDAQ Capital Market at least until the NASDAQ Listing Qualifications Panel renders its decision following the hearing. It is anticipated that the NASDAQ Listing Qualifications Panel will issue its decision in May 2008. There can be no assurance that the NASDAQ Listing Qualifications Panel will grant our request for continued listing.

On September 6, 2007, we were notified by the NASDAQ Listing Qualifications that our common stock bid price closed below the minimum $1.00 per share requirement for continued listing under Marketplace Rule 4310(c)(4) and, as required by Marketplace Rule 4310(c)(8)(D), we had 180 days, or until March 4, 2008, to regain compliance. To regain compliance, the bid price of our common stock must close at $1.00 per share or more for a minimum of 10 consecutive business days. In an effort to meet the minimum $1.00 per share requirement for continued inclusion by Marketplace Rule 4310(c)(4), we held a special meeting of our stockholders on February 14, 2008. At the special meeting, our stockholders approved the proposal to authorize the Board of Directors in their discretion, without further authorization of our stockholders, to amend our Certificate of Incorporation to effect a reverse split of our common stock by a ratio of between 1 for 6 to 1 for 10. To regain compliance with Marketplace Rule 4310(c)(4), the Board of Directors approved on February 15, 2008, a 1 for 10 reverse stock split of our common stock effective at the close of business on March 3, 2008. Cash will be paid for post-split fractional shares based on the average closing sales price for the 20 trading days immediately before the effective time. As of March 31, 2008, we had paid out $21 in cash for fractional shares. On March 4, 2008, our common stock began trading under the reverse stock split basis. Additionally, beginning on March 4, 2008, our common stock traded for a period of 20 trading days under ticker symbol VRMLD as an interim symbol to denote its new status. After this 20 trading day period, our common stock resumed trading under the ticker symbol VRML . Subsequently, on March 18, 2008, NASDAQ Listing Qualifications notified us that we had regained compliance with Marketplace Rule 4310(c)(4) with our common stock closing above $1.00 per share or greater for at least 10 consecutive business days.

In an effort to further streamline operations, we reduced our workforce by 9 employees during March 2008. As a result of the reduction in workforce, we had 19 employees as of March 31, 2008.

On January 30, 2008, we renewed our research collaboration agreement with Johns Hopkins. The agreement has an effective period from January 1, 2008 through December 31, 2010, with automatic one-year extensions for up to three additional years unless terminated by us or Johns Hopkins. Additionally, on February 29, 2008, we entered into an exclusive agreement with Stanford University to license an assay for peripheral arterial disease, referred to herein as PAD.

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On March 20, 2008, we announced our preliminary results from a clinical trial evaluating our ovarian tumor triage test. The study met its primary endpoints, demonstrating that the test successfully stratifies women with pelvic masses into high- and low-risk categories to determine whether the patient should be referred to a specialist prior to surgery. These results indicate that the use of this test could significantly increase the percentage of high-risk cases referred to the appropriate specialist for treatment, ultimately improving survival rates. Our novel ovarian biomarker panel ruled out malignancy with approximately 95% certainty or negative predictive value. Negative predictive value is the probability that the patient is free of disease based on diagnostic evaluation. The panel also showed approximately 90% sensitivity for detecting malignant ovarian tumors. The prospective clinical trial was one of the largest ever conducted and assessed more than 550 patients with a confirmed adnexal mass at 27 clinical trial sites in the United States. We plan to submit this in vitro diagnostic, referred to herein as IVD, test to the United States Food and Drug Administration, referred to herein as the FDA, for clearance.

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The Offering

Common stock offered by selling stockholders.	4,223,389 shares
Use of Proceeds	We will not receive any proceeds from the shares of common stock offered by this prospectus; however, we will receive proceeds from the exercise of warrants to purchase the shares included in the shares that are being offered by the selling stockholders hereunder. Any proceeds we receive from such exercises of warrants will be used for working capital purposes. See Use of Proceeds on page 15.
Risk Factors	See Risk Factors beginning on page 5 and other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in the shares.
NASDAQ Capital Market Trading Symbol	VRML

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RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the following risk factors together with all of the other information contained in this prospectus, including our audited consolidated financial statements and the notes thereto, before deciding whether to invest in shares of our common stock. Each of these risks could harm our business, operating results, financial condition and/or growth prospects. As a result, the trading price of our common stock could decline and you might lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also adversely affect our business.

Risks Related to Our Business

We expect to continue to incur net losses in 2008. If we are unable to generate significant diagnostic products revenue, we may never achieve profitability.

From our inception through December 31, 2007, we have generated cumulative revenue from the sale of products and services to customers of $229,300,000 and have incurred net losses of $239,142,000. We have experienced significant operating losses each year since our inception and expect these losses to continue for at least the next several quarters, resulting in an expected net loss for the year ending December 31, 2008. For example, we experienced net losses of $21,282,000 and $22,066,000 for the years ended December 31, 2007 and 2006, respectively. Our losses have resulted principally from costs incurred in research and development, sales and marketing, litigation, and general and administrative costs associated with our operations. These costs have exceeded our gross profit which, to date, has been generated principally from product sales and service income derived from our Instrument Business. We expect to incur additional operating losses that may be substantial. Our failure to become and remain profitable may depress the market price of our common stock and impair our ability to raise capital and continue our operations. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

We will need to raise additional capital in the future, and if we are unable to secure adequate funds on terms acceptable to us, we may be unable to execute our business plan.

We believe that our current cash balances may not be sufficient to fund planned expenditures. This raises substantial doubt about our ability to continue as a going concern. During 2008, we will need to raise additional funds through the issuance of equity or debt securities, or a combination thereof, in the public or private markets in order to continue operations. Additional financing opportunities may not be available, or if available, may not be on favorable terms. The availability of financing opportunities will depend, in part, on market conditions, and the outlook for our company. Any future equity financing would result in substantial dilution to our stockholders. If we raise additional funds by issuing debt, we may be subject to limitations on our operations, through debt covenants or other restrictions. If adequate and acceptable financing is not available, we may have to delay development or commercialization of certain of our products or license to third parties the rights to commercialize certain of our products or technologies that we would otherwise seek to commercialize. We may also reduce our marketing or other resources devoted to our products. Any of these options could reduce our ability to successfully execute our business plan.

Substantial leverage and debt service obligations may adversely affect our consolidated cash flows.

As of December 31, 2007, we had $19,000,000 of convertible senior notes outstanding and $10,000,000 outstanding under our secured line of credit with Quest. As a result of this indebtedness, we have high principal and interest payment obligations. The degree to which we are leveraged could, among other things:

make it difficult for us to make payments on the convertible senior notes and the secured line of credit;

make it difficult for us to obtain financing for working capital, acquisitions or other purposes on favorable terms, if at all;

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make us more vulnerable to industry downturns and competitive pressures; and

limit our flexibility in planning for, or reacting to changes in, our business.

Our ability to meet our debt service obligations will depend upon our future performance, which will be subject to financial, business and other factors affecting our operations, many of which are beyond our control. If we cannot meet our debt service obligation, it would have a material adverse effect on our consolidated financial position.

We hold auction rate securities in our portfolio of investments. Due to failed auctions for some of our auction rate investments through March 31, 2008, we are currently unable to liquidate our auction rate securities into cash. If we are unable to liquidate our investments in auction rate securities within the next several months, other financing sources will be required in order to continue operations.

At December 31, 2007, our investments consisted of $12,777,000 invested in auction rate securities, including $3,902,000 classified as available-for-sale long-term investments as a result of certain auction rate securities failing to settle at auctions subsequent to December 31, 2007.

As of March 31, 2008, our entire investment portfolio of $6,550,000 was invested in auction rate securities, which failed to settle at auctions from January 1, 2008, to March 31, 2008, due to the current overall credit concerns in the United States capital markets, and are classified as available-for-sale long-term investments. Our investment portfolio at March 31, 2008, consisted of $3,902,000 of auction rate securities classified as available-for-sale long-term investments at December 31, 2007, and an additional $2,550,000 of auction rate securities purchased during January and February 2008, which failed to settle at auctions during March 2008. These auction rate securities provide liquidity via an auction process that resets the applicable interest rate at predetermined calendar intervals, which is generally every 28 days. Upon an auction failure, the interest rates do not reset at a market rate but instead reset based on a formula contained in the security, which rate is generally higher than the current market rate. The failure of the auctions means we may be unable to liquidate our auction rate securities into cash until a future auction of these investments is successful or the auction rate security is refinanced by the issuer into another type of debt instrument. If we are unable to liquidate our investments in auction rate securities or there is an other-than-temporary impairment in the market value of our investments in auction rate securities, this will have an adverse effect on our business, consolidated results of operations, financial condition and cash flows, and may increase the volatility of our stock price. In addition, if we are unable to liquidate our investments in auction rate securities or borrow against these investments within the next several months, we will require other financing sources in order to continue operations, and there can be no assurance that other funding sources will be available.

We may not succeed in developing diagnostic products and even if we do succeed in developing diagnostic products, the diagnostic products may never achieve significant commercial market acceptance.

Our success depends on our ability to develop and commercialize diagnostic products. There is considerable risk in developing diagnostic products based on our biomarker discovery efforts as potential tests may fail to validate results in larger clinical studies and may not achieve acceptable levels of clinical sensitivity and specificity. If we do succeed in developing diagnostic tests with acceptable performance characteristics, we may not succeed in achieving significant commercial market acceptance for those tests. Our ability to successfully commercialize diagnostic products that we may develop, such as tests, kits and devices, will depend on several factors, including:

our ability to convince the medical community of the safety and clinical efficacy of our products and their advantages over existing diagnostic products;

our ability to further establish business relationships with other diagnostic companies that can assist in the commercialization of these products; and

the agreement by Medicare and third-party payers to provide full or partial reimbursement coverage for our products, the scope and extent of which will affect patients willingness to pay for our products and will likely heavily influence physicians decisions to recommend our products.

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These factors present obstacles to significant commercial acceptance of our potential diagnostic products, which we will have to spend substantial time and financial resources to overcome, if we can do so at all. Our inability to successfully do so would prevent us from generating revenue from diagnostic products and from developing a profitable business.

Our ability to commercialize our potential diagnostic tests is heavily dependent on our strategic alliance with Quest.

On July 22, 2005, we entered into a strategic alliance with Quest, which focuses on commercializing up to three diagnostic tests chosen from our pipeline. The term of the agreement ends on the later of (i) the three-year anniversary of the agreement and (ii) the date on which Quest commercializes the three diagnostic tests covered by such agreement. If this strategic alliance does not continue for its full term or if Quest fails to proceed to diligently perform its obligations as a part of the strategic alliance, such as independently developing, validating, and commercializing potential diagnostic tests, our ability to commercialize our potential diagnostic tests would be seriously harmed. Due to the current uncertainty with regard to FDA regulation of analyte specific reagents, referred to herein as ASRs, or for other reasons, Quest may elect to forgo development of ASR home brew laboratory tests and instead elect to wait for the development of IVD test kits, which would adversely affect our revenues. If we elect to increase our expenditures to fund in-house diagnostic development programs or research programs, we will need to obtain additional capital, which may not be available on acceptable terms, or at all.

The commercialization of our potential diagnostic tests may be adversely affected by changing FDA regulations.

The current regulatory environment with regard to ASRs and in vitro diagnostic multivariate index assays, or IVDMIAs, in particular, such as our potential ovarian cancer diagnostic test, is very unclear. To the extent the FDA requires that our potential diagnostic tests receive FDA 510(k) clearance or FDA pre-market approval, our ability to develop and commercialize our potential diagnostic tests may be prevented or significantly delayed, which would adversely affect our consolidated revenues, results of operations and financial condition.

If we fail to continue to develop our technologies, we may not be able to successfully foster adoption of our products and services or develop new product offerings.

Our technologies are new and complex, and are subject to change as new discoveries are made. New discoveries and advancements in the diagnostic field are essential if we are to foster the adoption of our product offerings. Development of these technologies remains a substantial risk to us due to various factors, including the scientific challenges involved, our ability to find and collaborate with others working in the diagnostic field, and competing technologies, which may prove more successful than our technologies. In addition, we have reduced our research and development headcount and expenditures, which may adversely affect our ability to further develop our technologies.

If we fail to maintain our rights to utilize intellectual property directed to diagnostic biomarkers, we may not be able to offer diagnostic tests using those biomarkers.

One aspect of our business plan is to develop diagnostic tests based on certain biomarkers, which we have the right to utilize through licenses with our academic collaborators, such as Johns Hopkins University and M.D. Anderson. In some cases, our collaborators own the entire right to the biomarkers. In other cases we co-own the biomarkers with our collaborators. If, for some reason, we lose our license to biomarkers owned entirely by our collaborators, we may not be able to use those biomarkers in diagnostic tests. If we lose our exclusive license to biomarkers co-owned by us and our collaborators, our collaborators may license their share of the intellectual property to a third party that may compete with us in offering diagnostic tests, which would materially adversely affect our consolidated revenues, results of operations and financial condition.

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We have drawn $10,000,000 from the secured line of credit provided by Quest. If we fail to achieve the milestones for the forgiveness of the secured line of credit set forth therein, we will be responsible for full repayment of the secured line of credit.

As of December 31, 2007, we have drawn $10,000,000 from the secured lined of credit in connection with our strategic alliance with Quest. We borrowed in monthly increments of $417,000 over a two-year period and made monthly interest payments. Funds from this secured line of credit may only be used for certain costs and expenses directly related to the strategic alliance, with forgiveness of the repayment obligations based upon our achievement of milestones related to the development, regulatory approval and commercialization of certain diagnostic tests. Should we fail to achieve these milestones, we would be responsible for the repayment of the outstanding principal amount and any unpaid interest on the secured line of credit on or before July 22, 2010, which would materially adversely affect our consolidated results of operations and financial condition.

If a competitor infringes on our proprietary rights, we may lose any competitive advantage we may have as a result of diversion of management s time, enforcement costs and the loss of the exclusivity of our proprietary rights.

Our success depends in part on our ability to maintain and enforce our proprietary rights. We rely on a combination of patents, trademarks, copyrights and trade secrets to protect our technology and brand. In addition to our licensed SELDI technology, we also have submitted patent applications covering biomarkers that may have diagnostic or therapeutic utility. Our patent applications may not result in additional patents being issued.

If competitors engage in activities that infringe our proprietary rights, our management s focus will be diverted and we may incur significant costs in asserting our rights. We may not be successful in asserting our proprietary rights, which could result in our patents being held invalid or a court holding that the competitor is not infringing, either of which would harm our competitive position. We cannot be sure that competitors will not design around our patented technology.

We also rely upon the skills, knowledge and experience of our technical personnel. To help protect our rights, we require all employees and consultants to enter into confidentiality agreements that prohibit the disclosure of confidential information. These agreements may not provide adequate protection for our trade secrets, knowledge or other proprietary information in the event of any unauthorized use or disclosure. If any trade secret, knowledge or other technology not protected by a patent were to be disclosed to or independently developed by a competitor, it could have a material adverse effect on our business and consolidated results of operations and financial condition.

If others successfully assert their proprietary rights against us, we may be precluded from making and selling our products or we may be required to obtain licenses to use their technology.

Our success depends on avoiding infringing on the proprietary technologies of others. If a third party were to assert claims that we are violating their patents, we might incur substantial costs defending ourselves in lawsuits against charges of patent infringement or other unlawful use of another s proprietary technology. Any such lawsuit may not be decided in our favor, and if we are found liable, we may be subject to monetary damages or injunction against using the technology. We may also be required to obtain licenses under patents owned by third parties and such licenses may not be available to us on commercially reasonable terms, if at all.

Current and future litigation against us could be costly and time consuming to defend.

We are from time to time subject to legal proceedings and claims that arise in the ordinary course of business, such as claims brought by our clients in connection with commercial disputes, employment claims made by our current or

former employees, and claims brought by third parties alleging infringement on their intellectual property rights. In addition, we may bring claims against third parties for infringement on our intellectual property rights. Litigation may result in substantial costs and may divert management s attention and resources, which may seriously harm our business, consolidated results of operations and financial condition.

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An unfavorable judgment against us in any legal proceeding or claim could require us to pay monetary damages. In addition, an unfavorable judgment in which the counterparty is awarded equitable relief such as an injunction could have an adverse impact on our licensing and sublicensing activities which could harm our business, consolidated results of operations and consolidated financial condition.

On September 17, 2007, Molecular Analytical Systems, referred to herein as MAS, filed a lawsuit naming us and Bio-Rad as defendants. Under the lawsuit, MAS seeks an unspecified amount of damages and alleges, among other things, that we are in breach of our license agreement with MAS relating to SELDI technology as a result of our entry into a sublicense agreement with Bio-Rad. We filed our general denial and affirmative defense on April 1, 2008. We intend to vigorously defend this action. Given the early stage of this action, we cannot predict the ultimate outcome of this matter at this time.

We depend on a single supplier to manufacture and supply our products and any interruption in this supplier relationship could materially and adversely affect our consolidated revenues, results of operations and financial condition.

In connection with the Instrument Business Sale, we entered into a manufacture and supply agreement with Bio-Rad pursuant to which Bio-Rad manufactures and supplies us with SELDI instruments and consumables, referred to herein as SELDI Products. The initial term of the agreement expires on November 12, 2011, and is renewable for two additional two-year terms. If the manufacture and supply agreement is terminated or is not renewed, or if Bio-Rad ceases manufacturing the SELDI Products for another reason, we would have to find another third party supplier to manufacture and supply the SELDI Products or begin manufacturing and supplying the SELDI Products ourselves. We or another third-party supplier may not be able to produce the SELDI Products at a cost that is available to Bio-Rad or at the quantities or quality similar to Bio-Rad. Any such interruption could delay or diminish our ability to satisfy our customers orders and adversely affect our relationships with our customers. Additionally, any such interruption may have a material and adverse effect on our consolidated revenues, results of operations and financial condition.

Our failure to meet our purchase commitments pursuant to a manufacture and supply agreement with Bio-Rad, could adversely affect our consolidated financial condition and results of operations.

We are a party to a manufacture and supply agreement with Bio-Rad, dated November 13, 2006, whereby we agreed to purchase from Bio-Rad the ProteinChip Systems and ProteinChip Arrays necessary to support our diagnostics efforts. Under the terms of the agreement, we are required to purchase a specified number of ProteinChip Systems and ProteinChip Arrays in each of the three years following the date of the agreement. We estimated our total obligation under the agreement to be $6,610,000. As of December 31, 2007, we had an estimated purchase obligation of $804,000 remaining with respect to the first year of the agreement. If we fail to renegotiate our initial purchase commitment under the agreement, we may need to make additional provisions for excess inventory, which would have an adverse effect on our financial condition and results of operations. Furthermore, if future demand declines such that we cannot meet our minimum purchase requirements for 2008 and 2009, our excess inventory could increase, thereby exacerbating the negative effect on our consolidated results of operations and financial condition.

If we or our suppliers fail to comply with FDA requirements, we may not be able to market our products and services and may be subject to stringent penalties; further improvements to our or our suppliers manufacturing operations may be required that would entail additional costs.

The commercialization of our products could be affected by being delayed, halted or prevented by applicable FDA regulations. If the FDA were to view any of our actions as non-compliant, it could initiate enforcement actions, such

as a warning letter and possible imposition of penalties. In addition, ASRs that we may provide will be subject to a number of FDA requirements, including compliance with the FDA s Quality System Regulations, referred to herein as QSRs, which establish extensive requirements for quality assurance and control as well as manufacturing procedures. Failure to comply with these regulations could result in enforcement actions for us or our potential suppliers. Adverse FDA actions in any of these areas could significantly increase our expenses and limit our revenue and profitability. Although we are ISO 9001:2000

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certified with respect to the manufacturing processes used for our previous ProteinChip products, we will need to undertake additional steps to maintain our operations in line with the FDA s QSR requirements. Our suppliers manufacturing facilities will be subject to periodic regulatory inspections by the FDA and other federal and state regulatory agencies. If and when we begin commercializing and assembling our products ourselves, our facilities will be subject to the same inspections. We or our suppliers may not satisfy such regulatory requirements, and any such failure to do so would have an adverse effect on our diagnostics efforts.

Because our business is highly dependent on key executives and employees, our inability to recruit and retain these people could hinder our business plans.

We are highly dependent on our executive officers and certain key employees. Effective November 1, 2007, the Chief Financial Officer resigned from the Company for personal reasons. Upon the Chief Financial Officer s resignation, our Corporate Controller was appointed to serve as Chief Financial Officer on an interim basis while we search for a new Chief Financial Officer. As of March 31, 2008, we had 19 employees. The very lean staff and the absence of a permanent Chief Financial Officer and the loss of service of any other executive officers or certain key employees could impact operations or delay or curtail our research, development and commercialization objectives. To continue our research and product development efforts, we need people skilled in areas such as bioinformatics, biochemistry and information services. Competition for qualified employees is intense.

Our diagnostics efforts may cause us to have significant product liability exposure.

The testing, manufacturing and marketing of medical diagnostic tests entails an inherent risk of product liability claims. Potential product liability claims may exceed the amount of our insurance coverage or may be excluded from coverage under the terms of the policy. Our existing insurance will have to be increased in the future if we are successful at introducing diagnostic products and this will increase our costs. In the event that we are held liable for a claim against which we are not indemnified or for damages exceeding the limits of our insurance coverage, we may be required to make substantial payments. This may have an adverse effect on our consolidated results of operations, financial condition and cash flows, and may increase the volatility of our common stock price.

Business interruptions could limit our ability to operate our business.

Our operations as well as those of the collaborators on which we depend are vulnerable to damage or interruption from fire, natural disasters, computer viruses, human error, power shortages, telecommunication failures, international acts of terror and similar events. Our primary facility is located in Fremont, California, where we also have laboratories. Although we have certain business continuity plans in place, we have not established a formal comprehensive disaster recovery plan, and our back-up operations and business interruption insurance may not be adequate to compensate us for losses we may suffer. A significant business interruption could result in losses or damages incurred by us and require us to cease or curtail our operations.

Legislative actions resulting in higher compliance costs are likely to adversely affect our future consolidated results of operations, financial position and cash flows.

Compliance with laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new Securities and Exchange Commission, referred to herein as the SEC, regulations and NASDAQ listing requirements, are resulting in increased compliance costs. We, like all other public companies, are incurring expenses and diverting our employees time in an effort to comply with Section 404 of the Sarbanes-Oxley Act of 2002. We are a smaller reporting company, and have completed the process documentation of our systems of internal control and have evaluated our systems of internal control. We are required to assess our compliance with Section 404 of the Sarbanes-Oxley Act of 2002 for the year ending December 31, 2007. We expect

to devote the necessary resources, including additional internal and supplemental external resources, to support our assessment. In the future, if we identify one or more material weaknesses, or our independent registered public accounting firm is unable to attest that our management s report is fairly stated or to express an opinion on the effectiveness of our internal controls, this could result in a loss of investor

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confidence in our financial reports, have an adverse effect on our stock price and/or subject us to sanctions or investigation by regulatory authorities. Compliance with these evolving standards will result in increased general and administrative expenses and may cause a diversion of our management s time and attention from revenue-generating activities to compliance activities.

We are subject to environmental laws and potential exposure to environmental liabilities.

We are subject to various international, federal, state and local environmental laws and regulations that govern our operations, including the handling and disposal of nonhazardous and hazardous wastes, the recycling and treatment of electrical and electronic equipment, and emissions and discharges into the environment. Failure to comply with such laws and regulations could result in costs for corrective action, penalties or the imposition of other liabilities. We are also subject to laws and regulations that impose liability and clean-up responsibility for releases of hazardous substances into the environment. Under certain of these laws and regulations, a current or previous owner or operator of property may be liable for the costs of remediating hazardous substances or petroleum products on or from its property, without regard to whether the owner or operator knew of, or caused, the contamination, as well as incur liability to third parties affected by such contamination. The presence of, or failure to remediate properly, such substances could adversely affect the value and the ability to transfer or encumber such property. Based on currently available information, although there can be no assurance, we believe that such costs and liabilities have not had and will not have a material adverse impact on our consolidated results of operations.

Risks Related to Owning Our Stock

Our principal stockholders own a significant percentage of our outstanding common stock and are, and will continue to be, able to exercise significant influence over our affairs.

As of December 31, 2007, Quest possessed voting power over 860,595 shares, or 13.49%, and Phronesis Partners, L.P., referred to herein as Phronesis, possessed voting power over 666,568 shares, or 10.45%, of our outstanding common stock. As a result, Quest and Phronesis are able to determine a significant part of the composition of our Board of Directors, hold significant voting power with respect to matters requiring stockholder approval and to exercise significant influence over our operations. The interests of Quest and Phronesis may be different than the interests of other stockholders on these and other matters. This concentration of ownership also could have the effect of delaying or preventing a change in our control or otherwise discouraging a potential acquirer from attempting to obtain control of us, which could reduce the price of our common stock.

We currently do not meet and there is no guarantee that we will meet the standards for continued listing on the NASDAQ Capital Market and if we are delisted the value of your investment in Vermillion may substantially decrease.

On February 22, 2008, we were notified by NASDAQ Listing Qualifications that we did not comply with Marketplace Rule 4310(c)(3) for continued inclusion as a result of the market value of our common stock falling below $35,000,000 for 10 consecutive business days, and as required by Marketplace Rule 4310(c)(8)(C), we had 30 days, or until March 24, 2008, to regain compliance. We did not regain compliance by March 24, 2008, and, accordingly, on March 25, 2008, we received a Staff Determination Notice from NASDAQ Listing Qualifications notifying us that our securities would be subject to delisting as a result of the deficiency unless we request a hearing before a NASDAQ Listing Qualifications Panel. We are currently scheduled for a hearing before a NASDAQ Listing Qualifications Panel. As a result, the delisting action has been stayed and our securities will remain listed on NASDAQ at least until the NASDAQ Listing Qualifications Panel renders its decision following the hearing. It is anticipated that the NASDAQ Listing Qualifications Panel will issue its decision in May 2008. There can be no assurance that the NASDAQ Listing Qualifications Panel will grant our request for continued listing.

There is no guarantee that we will continue to meet the standards for listing in the future. Upon delisting from the NASDAQ Capital Market, our common stock would be traded over-the-counter, more commonly

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known as OTC. OTC transactions involve risks in addition to those associated with transactions in securities traded on the NASDAQ Capital Market. Many OTC stocks trade less frequently and in smaller volumes than NASDAQ-listed stocks. Accordingly, delisting from the NASDAQ Capital Market would adversely affect the trading price of our common stock, significantly limit the liquidity of our common stock and impair our ability to raise additional funds.

Anti-takeover provisions in our charter, bylaws and stockholder rights plan and under Delaware law could make a third party acquisition of us difficult.

Our certificate of incorporation, bylaws and stockholder rights plan contain provisions that could make it more difficult for a third party to acquire us, even if doing so might be deemed beneficial by our stockholders. These provisions could limit the price that investors might be willing to pay in the future for shares of our common stock. We are also subject to certain provisions of Delaware law that could delay, deter or prevent a change in control of us. The rights issued pursuant to our stockholder rights plan will become exercisable the tenth day after a person or group announces acquisition of 15% or more of our common stock or announces commencement of a tender or exchange offer the consummation of which would result in ownership by the person or group of 15% or more of our common stock. If the rights become exercisable, the holders of the rights (other than the person acquiring 15% or more of our common stock) will be entitled to acquire, in exchange for the rights exercise price, shares of our common stock or shares of any company in which we are merged, with a value equal to twice the rights exercise price.

Because we do not intend to pay dividends, our stockholders will benefit from an investment in our common stock only if it appreciates in value.

We have never declared or paid any cash dividends on our common stock. We currently intend to retain our future earnings, if any, to finance the expansion of our business and do not expect to pay any cash dividends in the foreseeable future. As a result, the success of an investment in our common stock will depend entirely upon any future appreciation. There is no guarantee that our common stock will appreciate in value or even maintain the price at which our investors purchased their shares.

Our stock price has been highly volatile, and an investment in our stock could suffer a decline in value.

The trading price of our common stock has been highly volatile and could continue to be subject to wide fluctuations in price in response to various factors, many of which are beyond our control, including:

- failure to commercialize diagnostic tests and significantly increase revenue;
- actual or anticipated period-to-period fluctuations in financial results;
- failure to achieve, or changes in, financial estimates by securities analysts;
- announcements or introductions of new products or services or technological innovations by us or our competitors;
- publicity regarding actual or potential discoveries of biomarkers by others;
- comments or opinions by securities analysts or major stockholders;
- conditions or trends in the pharmaceutical, biotechnology and life science industries;

announcements by us of significant acquisitions and divestitures, strategic partnerships, joint ventures or capital commitments;

developments regarding our patents or other intellectual property or that of our competitors;

litigation or threat of litigation;

additions or departures of key personnel;

sales of our common stock;

limited daily trading volume;

delisting from the NASDAQ Capital Market; and

economic and other external factors, disasters or crises.

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In addition, the stock market in general, and the NASDAQ Capital Market and the market for technology companies, in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, there has been significant volatility in the market prices of securities of life science companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. In the past, following periods of volatility in the market price of a company s securities, securities class action litigation has often been instituted. A securities class action suit against us could result in substantial costs, potential liabilities and the diversion of our management s attention and our resources.

We may need to sell additional shares of our common stock or other securities to meet our capital requirements. If we need to sell additional shares of our common stock or other securities to meet our capital requirements, or upon conversion of our senior convertible notes and exercises of currently outstanding options and warrants, the ownership interests of our current stockholders could be substantially diluted. The possibility of dilution posed by shares available for future sale could reduce the market price of our common stock and could make it more difficult for us to raise funds through equity offerings in the future.

As of December 31, 2007, we had 6,380,197 shares of common stock outstanding and 8,150,006 shares of common stock reserved for future issuance to employees, directors and consultants pursuant to our employee stock plans, of which 469,675 shares of common stock were subject to outstanding options. In addition, as of December 31, 2007, warrants to purchase 2,293,147 shares of common stock were outstanding at exercise prices ranging from $9.25 to $25.00 per share, with a weighted average exercise price of $10.79 per share. In addition, there are 27,208 shares of common stock reserved for issuance upon conversion of our outstanding 4.5% convertible senior notes due September 1, 2008, referred to herein as the 4.5% Notes, and 825,000 shares of common stock reserved for issuance upon conversion of our 7.0% convertible senior notes due September 1, 2011, referred to herein as the 7.0% Notes. The exercise or conversion of all or a portion of these securities would dilute the ownership interests of our stockholders. Furthermore, future sales of substantial amounts of our common stock in the public market, or the perception that such sales are likely to occur, could affect prevailing trading prices of our common stock and the value of the notes.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

We have made statements in this prospectus that are deemed forward-looking statements for purposes of the safe harbor provisions under the Private Securities Litigation Reform Act of 1995. We claim the protection of such safe harbor, and disclaim any intent or obligation to update any forward-looking statement. You can identify these statements by forward-looking words such as may , will , expect , intend , anticipate , believe , estimate , plan should and continue or similar words. These forward-looking statements may also use different phrases. We have based these forward-looking statements on our management s current expectations and projections about future events. Examples of forward-looking statements include the following statements:

- projections of our future revenue, results of operations and financial condition;
- anticipated deployment, capabilities and uses of our products and our product development activities and product innovations;
- the importance of proteomics as a major focus of biology research;
- competition and consolidation in the markets in which we compete;
- existing and future collaborations and partnerships;
- the utility of biomarker discoveries;
- our belief that biomarker discoveries may have diagnostic and/or therapeutic utility;
- our plans to develop and commercialize diagnostic tests through our strategic alliance with Quest;
- our ability to comply with applicable government regulations;
- our ability to expand and protect our intellectual property portfolio;
- our ability to decrease general and administrative costs;
- our ability to decrease sales and marketing costs;
- our ability to decrease research and development costs;
- anticipated future losses;
- expected levels of capital expenditures;
- forgiveness of the outstanding principal amounts of the secured line of credit by Quest;
- the period of time for which our existing financial resources, debt facilities and interest income will be sufficient to enable us to maintain current and planned operations; and
- the market risk of our investments.

These statements are subject to significant risks and uncertainties, including those identified in the section of this prospectus entitled Risk Factors, that could cause actual results to differ materially from those projected in such forward-looking statements due to various factors, including our ability to generate sales after completing development of new diagnostic products; managing our operating expenses and cash resources that are consistent with our plans; our ability to conduct new diagnostic product development using both our internal research and development resources, and collaboration partners within the budgets and time frames we have established; the ability of the ProteinChip technology to discover protein biomarkers that have diagnostic, theranostic and/or drug development utility; the continued emergence of proteomics as a major focus of biological research and drug discovery; and our ability to protect and promote our proprietary technologies. We believe it is important to communicate our expectations to our investors. However, there may be events in the future that we are not able to accurately predict or that we do not fully control that could cause actual results to differ materially from those expressed or implied in our forward-looking statements.

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USE OF PROCEEDS

We will receive no proceeds from the sale of the shares by the selling stockholders. However, this prospectus covers the offer of shares of common stock issuable in the future upon the exercise of (i) warrants to purchase up to an aggregate of 1,862,669 shares of common stock at an exercise price of $9.25 per share, subject to certain adjustments, which are exercisable until August 29, 2012, (ii) warrants to purchase up to an aggregate of 4,700 shares of common stock at an exercise price of $12.60 per share, subject to certain adjustments, which are exercisable until August 2, 2011 and (iii) warrants to purchase up to an aggregate of 4,300 shares of common stock at an exercise price of $12.60 per share, subject to certain adjustments, which are exercisable until November 14, 2011. If all of these warrants are exercised in full for cash, we would receive aggregate gross proceeds of approximately $17,343,000. There can be no assurance any of these warrants will be exercised by the selling stockholders or, if exercised, that we will receive any cash proceeds upon such exercises. We expect to use proceeds, if any, from exercise of these warrants for general working capital purposes. We cannot assure that any selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement of which this prospectus is a part.

We will pay certain expenses related to the registration of the shares of common stock.

DETERMINATION OF OFFERING PRICE

The selling stockholders will determine at what price they may sell the offered shares, and such sales may be made at prevailing market prices, or at privately negotiated prices.

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MARKET FOR COMMON STOCK

Our common stock is traded on the NASDAQ Capital Market under the symbol VRML . The closing price for our common stock on April 16, 2008 was $3.08. As of April 4, 2008, there were approximately 141 holders of record of our common stock, excluding shares held in book-entry form through The Depository Trust Company, and we estimate that the number of beneficial owners of shares of our common stock was approximately 3,577 as of such date.

The following sets forth the quarterly high and low trading prices as reported by the NASDAQ Capital Market for the periods indicated.

	Vermillion, Inc. Common Stock	
	High	Low
Fiscal Year 2006		
First Quarter	$ 22.50	$ 10.00
Second Quarter	$ 18.60	$ 10.00
Third Quarter	$ 17.30	$ 8.50
Fourth Quarter	$ 13.90	$ 8.20
Fiscal Year 2007		
First Quarter	$ 19.90	$ 9.20
Second Quarter	$ 15.30	$ 8.50
Third Quarter	$ 11.50	$ 5.50
Fourth Quarter	$ 10.90	$ 5.80
Fiscal Year 2008		
First Quarter	$ 8.20	$ 2.50
Second Quarter (through April 16, 2008)	$ 4.00	$ 2.11

DIVIDEND POLICY

We have never paid or declared any dividend on our common stock and we do not anticipate paying cash dividends on our common stock in the foreseeable future. If we pay a cash dividend on our common stock, we also may be required to pay the same dividend on an as-converted basis on any outstanding preferred stock, warrants, convertible notes or other securities. Moreover, any preferred stock or other senior debt or equity securities to be issued and any future credit facilities might contain restrictions on our ability to declare and pay dividends on our common stock. We intend to retain all available funds and any future earnings to fund the development and expansion of our business.

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

You should read the following discussion in conjunction with our consolidated financial statements and the accompanying notes included elsewhere in this prospectus. The following discussion includes certain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those referred to in the forward-looking statements as a result of various factors, including those discussed in Risk Factors and elsewhere in this prospectus.

Overview

We were originally incorporated in California on December 9, 1993, under the name Abiotic Systems. In March 1995, we changed our corporate name to Ciphergen Biosystems, Inc. and subsequently on June 21, 2000, we reincorporated in Delaware. Under the name Ciphergen Biosystems, Inc., we had our initial public offering on September 28, 2000. On November 13, 2006, we sold the Instrument Business to Bio-Rad in order to concentrate our resources on developing clinical protein biomarker diagnostic products and services. On August 21, 2007, we changed our corporate name to Vermillion, Inc. In conjunction with the name change, we changed our common stock ticker symbol on the NASDAQ Capital Market from CIPH to VRML .

Prior to the Instrument Business Sale, we developed, manufactured and sold ProteinChip Systems for life science research. This patented technology is recognized as SELDI. The systems consist of ProteinChip Readers, ProteinChip Software and related accessories, which were used in conjunction with consumable ProteinChip Arrays. These products were sold primarily to pharmaceutical companies, biotechnology companies, academic research laboratories and government research laboratories. We also provided research services through our Biomarker Discovery Center laboratories, and offered consulting services, customer support services and training classes to our customers and collaborators. Our sales were driven by the need for new and better tools to perform protein discovery, characterization, purification, identification and assay development. Many of the ProteinChip Systems sold to our customers also generated revenue from the sale of consumables and maintenance contracts. In addition, some of our customers would enhance their ProteinChip Systems by adding automation accessories and advanced software. Our expenses consisted primarily of materials, contracted manufacturing services, labor and overhead costs to manufacture our ProteinChip Systems and ProteinChip Arrays and to support customer services, marketing and sales activities, research and development programs, litigation and general and administrative costs associated with our operations.

Since the Instrument Business Sale, we have dedicated ourselves to the discovery, development and commercialization of novel diagnostic tests that help physicians diagnose, treat and improve outcomes for patients. We use translational proteomics for developing assays, and commercializing novel diagnostic tests. As a result of the transition from our historical roots as a proteomics research products business to a novel diagnostic tests business, we have substantially reduced the size of our staff. Currently, our expenses consist primarily of research and development costs related to our diagnostics efforts and general and administrative costs, including litigation expenses and accounting and auditing expenses.

Through collaborations with leading academic and research institutions, including Johns Hopkins, M.D. Anderson, University College London, UTMB, The Katholieke Universiteit Leuven, Ohio State University and Stanford University, we plan to develop diagnostic tests in the fields of oncology, hematology, cardiology and women s health. We will also address clinical questions related to early disease detection, treatment response, monitoring of disease progression, prognosis and others. These research collaborations have provided us with the clinical data and intellectual property portfolio that form the basis of our product pipeline. We are now engaged in product

development and commercialization of discoveries made under these collaborations.

In July 2005, we entered into a strategic alliance agreement with Quest pursuant to which the parties have agreed to develop and commercialize up to three diagnostic tests. The term of the agreement ends on the later of (i) the three-year anniversary of the agreement and (ii) the date on which Quest commercializes the three diagnostic tests. Thus, our major initiatives are currently aimed at commercializing these diagnostic tests, both within the context of our strategic alliance agreement with Quest as well as in markets in which Quest does

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not participate, to the extent permitted under the strategic alliance agreement. In May 2007, we hired Steve Lundy, Senior Vice President of Sales and Marketing, to lead our commercialization efforts. We anticipate adding additional members to our sales and marketing team to expedite these activities.

We expect to incur losses for at least the next year. Due to the Instrument Business Sale, we will have limited revenues until our diagnostic tests are developed and successfully commercialized. To become profitable, we will need to complete development of key diagnostic tests, obtain FDA approval and successfully commercialize our products. We have a limited history of operations in developing diagnostic tests, and we anticipate that our quarterly results of operations will fluctuate for the foreseeable future due to several factors, including market acceptance of current and new products, the timing and results of our research and development efforts, the introduction of new products by our competitors and possible patent or license issues. Our limited operating history as a diagnostics business makes accurate prediction of future results of operations difficult.

Recent Developments

On February 22, 2008, we were notified by NASDAQ Listing Qualifications that we did not comply with Marketplace Rule 4310(c)(3) for continued inclusion as a result of the market value of our common stock falling below $35,000,000 for 10 consecutive business days, and as required by Marketplace Rule 4310(c)(8)(C), we had 30 days, or until March 24, 2008, to regain compliance. We did not regain compliance by March 24, 2008, and, accordingly, on March 25, 2008, we received a Staff Determination Notice from NASDAQ Listing Qualifications notifying us that our securities would be subject to delisting as a result of the deficiency unless we request a hearing before a NASDAQ Listing Qualifications Panel. We are currently scheduled for a hearing before a NASDAQ Listing Qualifications Panel. As a result, the delisting action has been stayed and our securities will remain listed on NASDAQ at least until the NASDAQ Listing Qualifications Panel renders its decision following the hearing. It is anticipated that the NASDAQ Listing Qualifications Panel will issue its decision in May 2008. There can be no assurance that the NASDAQ Listing Qualifications Panel will grant our request for continued listing.

On September 6, 2007, we were notified by NASDAQ Listing Qualifications that our common stock bid price closed below the minimum $1.00 per share requirement for continued listing under Marketplace Rule 4310(c)(4) and, as required by Marketplace Rule 4310(c)(8)(D), we had 180 days, or until March 4, 2008, to regain compliance. To regain compliance, the bid price of our common stock must close at $1.00 per share or more for a minimum of 10 consecutive business days. In an effort to meet the minimum $1.00 per share requirement for continued inclusion by Marketplace Rule 4310(c)(4), we held a special meeting of our stockholders on February 14, 2008. At the special meeting, our stockholders approved the proposal to authorize the Board of Directors in their discretion, without further authorization of our stockholders, to amend our Certificate of Incorporation to effect a reverse split of our common stock by a ratio of between 1 for 6 to 1 for 10. To regain compliance with Marketplace Rule 4310(c)(4), the Board of Directors approved on February 15, 2008, a 1 for 10 reverse stock split of our common stock effective at the close of business on March 3, 2008. Cash will be paid for post-split fractional shares based on the average closing sales price for the 20 trading days immediately before the effective time. As of March 31, 2008, we had paid out $21 in cash for fractional shares. On March 4, 2008, our common stock began trading under the reverse stock split basis. Additionally, beginning on March 4, 2008, our common stock traded for a period of 20 trading days under ticker symbol VRMLD as an interim symbol to denote its new status. After this 20 trading day period, our common stock resumed trading under the ticker symbol VRML . Subsequently, on March 18, 2008, NASDAQ Listing Qualifications notified us that we had regained compliance with Marketplace Rule 4310(c)(4) with our common stock closing above $1.00 per share or greater for at least 10 consecutive business days.

In an effort to further streamline operations, we reduced our workforce by 9 employees during March 2008. As a result of the reduction in workforce, we had 19 employees as of March 31, 2008.

On January 30, 2008, we renewed our research collaboration agreement with Johns Hopkins. The agreement has an effective period from January 1, 2008 through December 31, 2010, with automatic one-year

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extensions for up to three additional years unless terminated by us or Johns Hopkins. Additionally, on February 29, 2008, we entered into an exclusive agreement with Stanford University to license a PAD assay.

On March 20, 2008, we announced our preliminary results from a clinical trial evaluating our ovarian tumor triage test. The study met its primary endpoints, demonstrating that the test successfully stratifies women with pelvic masses into high- and low-risk categories to determine whether the patient should be referred to a specialist prior to surgery. These results indicate that the use of this test could significantly increase the percentage of high-risk cases referred to the appropriate specialist for treatment, ultimately improving survival rates. Our novel ovarian biomarker panel ruled out malignancy with approximately 95% certainty or negative predictive value. Negative predictive value is the probability that the patient is free of disease based on diagnostic evaluation. The panel also showed approximately 90% sensitivity for detecting malignant ovarian tumors. The prospective clinical trial was one of the largest ever conducted and assessed more than 550 patients with a confirmed adnexal mass at 27 clinical trial sites in the United States. We plan to submit this IVD test to the FDA for clearance.

Results of Operations

Year Ended December 31, 2007, Compared to Year Ended December 31, 2006

The selected summary financial and operating data of the Company for the years ended December 31, 2007 and 2006, were as follows (dollars in thousands):

	Year Ended December 31,		Increase (Decrease)	
	2007	2006	Amount	%
Revenue:				
Products	$	$ 11,292	$ (11,292)	(100.00)
Services	44	6,923	(6,879)	(99.36)
Total revenue	44	18,215	(18,171)	(99.76)
Cost of revenue:				
Products		5,818	(5,818)	(100.00)
Services	28	3,520	(3,492)	(99.20)
Total cost of revenue	28	9,338	(9,310)	(99.70)
Gross profit	16	8,877	(8,861)	(99.82)
Operating expenses:				
Research and development	8,213	11,474	(3,261)	(28.42)
Sales and marketing	2,175	12,568	(10,393)	(82.69)
General and administrative	10,858	10,661	197	1.85
Total operating expenses	21,246	34,703	(13,457)	(38.78)
Gain on sale of Instrument Business	1,610	6,929	(5,319)	(76.76)

Loss from operations	(19,620)	(18,897)	723	3.83
Interest income	734	843	(109)	(12.93)
Interest expense	(2,302)	(2,254)	48	2.13
Loss on extinguishment of debt		(1,481)	(1,481)	(100.00)
Other income (expense), net	69	(125)	(194)	(155.20)
Loss before income taxes	(21,119)	(21,914)	(795)	(3.63)
Income tax expense	(163)	(152)	11	7.24
Net loss	$ (21,282)	$ (22,066)	$ (784)	(3.55)

Products Revenue. There was no products revenue for the year ended December 31, 2007, compared to $11,292,000 for the same period in 2006. The decrease was the result of the Instrument Business Sale.

Services Revenue. Services revenue decreased to $44,000 for the year ended December 31, 2007, from $6,923,000 for the same period in 2006. Services revenue for the year ended December 31, 2007, was from ongoing support services provided to a customer. This decrease was the result of the Instrument Business Sale.

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Cost of Products Revenue. There was no cost of products revenue for the year ended December 31, 2007, compared to $5,818,000 for the same period in 2006. This decrease was the result of the Instrument Business Sale.

Cost of Services Revenue. Cost of services revenue decreased to $28,000 for the year ended December 31, 2007, from $3,520,000 for the same period in 2006. Cost of services revenue for the year ended December 31, 2007, was from ongoing support services provided to a customer. This decrease was the result of the Instrument Business Sale.

Research and Development Expenses. Research and development expenses decreased by $3,261,000, or 28.4%, to $8,213,000 for the year ended December 31, 2007, from $11,474,000 for the same period in 2006. This decrease is primarily due to the our transition from our historical roots as a proteomics research products business to a novel diagnostic tests business following the Instrument Business Sale. Employee headcount decreased to fourteen at December 31, 2007, from nineteen just prior to the Instrument Business Sale, and, correspondingly, salaries, payroll taxes, employee benefits and stock-based compensation decreased by $2,239,000; materials and supplies used in the development of new products decreased by $190,000; equipment related expenses decreased by $418,000; occupancy costs decreased by $245,000; and other operating costs decreased by $352,000. These decreases were offset by the increased collaboration cost spending of $286,000. Stock-based compensation expense included in research and development expenses was $167,000 and $337,000 for the years ended December 31, 2007 and 2006, respectively.

Sales and Marketing Expenses. Sales and marketing expenses decreased by $10,393,000, or 82.7%, to $2,175,000 for the year ended December 31, 2007, from $12,568,000 for the same period in 2006. The decrease was largely due to the Instrument Business Sale. Correspondingly, employee headcount decreased to five at December 31, 2007, from forty-five just prior to the Instrument Business Sale, which resulted in a decline in salaries, payroll taxes, employee benefits and stock-based compensation of $6,329,000. This also resulted in reductions in travel by $1,280,000; internal consumption of ProteinChip Arrays and other consumables for customer demonstrations and support by $896,000; outside services by $434,000; sales and marketing costs of $430,000; and equipment related expenses by $1,344,000. These decreases were offset by increased other operating expenses of $550,000. Stock-based compensation expense included in sales and marketing expenses was $88,000 and $321,000 for the years ended December 31, 2007 and 2006, respectively.

General and Administrative Expenses. General and administrative expenses increased to $10,858,000 for the year ended December 31, 2007, from $10,661,000 for the same period in 2006, an increase of $197,000 or 1.9%. The increase was primarily due to the settlement of the Health Discovery Corporation, referred to herein as HDC, lawsuit of $600,000; increased professional services of $294,000 primarily from our name change and printing costs associated with the annual proxy and annual financial report; increased domestic and international accounting and audit fees of $383,000 due to the timing, additional work performed on the private placement offering and additional work performed on the response to comment letters from the SEC. These increases were offset by decreases in equipment related expense of $128,000; legal fees of $203,000; and other operating expenses of $362,000, primarily from the reduction in postage and shipping costs attributable to reduced activity resulting from the Instrument Business Sale. Additionally, salaries, payroll taxes, employee benefits and stock-based compensation decreased by $505,000, which corresponds to the decrease in employee headcount to eleven at December 31, 2007, from fourteen just prior to the Instrument Business Sale. Stock-based compensation expense included in general and administrative expenses was $623,000 and $813,000 for the year ended December 31, 2007 and 2006, respectively.

Gain on Sale of Instrument Business. Gain on the Instrument Business Sale of $1,610,000 for the year ended December 31, 2007, resulted from the receipt of $2,000,000 from Bio-Rad related to the United States Patent and Trademark Office issuance of the reexamination certificate of the United States Patent No. 6,734,022 on October 23, 2007, offset by a $390,000 post-closing adjustment related to the Instrument Business Sale. For the year ended December 31, 2006, we recognized a gain of $6,929,000 from the Instrument Business Sale.

Interest Income. Interest income was $734,000 for the year ended December 31, 2007, compared to $843,000 for the same period in 2006. Interest income decreased primarily due to the lower interest rates and

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liquidation of interest bearing cash and cash equivalents during the year ended December 31, 2007, to fund operations.

Interest Expense. Interest expense was $2,302,000 for the year ended December 31, 2007, compared to $2,254,000 for the same period in 2006. Interest expense in both periods consisted largely of interest related to our 4.5% Notes and our 7.0% Notes and borrowings from Quest. Interest expense included the amortization of the beneficial conversion feature associated with the 4.50% Notes, amounting to $239,000 and $488,000 for the years ended December 31, 2007 and 2006, respectively.

Loss on Extinguishment of Debt. The loss from extinguishment of debt for the year ended December 31, 2006, represents the expensing of $868,000 of unamortized debt discount and $613,000 of unamortized prepaid offering costs related to the exchange of $27,500,000 of the 4.50% Notes, for $16,500,000 of 7.0% Notes and $11,000,000 in cash.

Other Income/Expense, Net. Net other income was $69,000 for the year ended December 31, 2007, compared to net other expense of $125,000 for the same period in 2006. Net other income for the year ended December 31, 2007, included the net realized foreign currency exchange gain of $109,000 due to our reduction in foreign operations and foreign subsidiary balances, and increase in foreign currency exchange rates, and was offset by the offering costs amortization related to our 4.5% Notes and our 7.0% Notes of $71,000. Net other expense for the year ended December 31, 2006, included the net realized foreign currency exchange loss of $21,000 and offering costs amortization related to our 4.5% Notes and our 7.0% Notes of $332,000, and was offset by the $160,000 received in settlement of a claim against a service provider.

Income Tax Expenses. Income taxes for the year ended December 31, 2007, was an expense of $163,000 compared to an expense of $152,000 for the same period in 2006. Income tax expense was due to foreign income taxes.

We have incurred net losses since inception and consequently are not subject to corporate income taxes in the United States to the extent of our tax loss carryforwards. At December 31, 2007, we had net operating loss carryforwards of $40,332,000 for federal and $43,730,000 for state tax purposes. If not utilized, these carryforwards will begin to expire in 2009 for federal purposes and 2008 for state purposes. As of December 31, 2007, we had $2,609,000 of net operation carryforwards from our Japan operations. If not utilized, this carryforward will begin to expire in 2012. We also have research credit carryforwards of $109,000 and $4,918,000 for federal and state tax purposes, respectively. If not utilized, the federal research credit carryforwards will expire in various amounts beginning in 2017. The California research credit can be carried forward indefinitely. The utilization of net operating loss carryforwards to reduce future income taxes will depend on our ability to generate sufficient taxable income prior to the expiration of the net operating loss carryforwards. In addition, the maximum annual use of the net operating loss carryforwards may be limited in situations where changes occur in our stock ownership.

We have incurred income tax liabilities primarily in France and Japan, as well as in most of the other countries outside the United States in which we operate. We have used net operating loss carryforwards to reduce our income tax liabilities in Japan and the United Kingdom. The net loss for the years ended December 31, 2007 and 2006, can be carried forward for seven years.

Liquidity and Capital Resources

From our inception through December 31, 2007, we have financed our operations principally with $229,300,000 from the sales of products and services to customers and $182,776,000 of net proceeds from debt and equity financings. This includes net proceeds of $92,435,000 from our initial public offering on September 28, 2000; net proceeds of $26,902,000 from our Series E Preferred Stock financing in March 2000; net proceeds of $14,954,000 from the sale of 622,500 shares of our common stock and a warrant to purchase 220,000 shares of our common stock to Quest on

July 22, 2005; net proceeds of $3,000,000 from the sale of 308,642 shares of our common stock to Bio-Rad in connection with the Instrument Business Sale on November 13, 2006; and net proceeds of $18,927,000 from the sale of 2,451,309 shares of our common stock and warrants to purchase an additional 1,961,047 shares of our common stock to a group of new and existing

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investors on August 29, 2007. Additionally, in connection with the strategic alliance agreement dated July 22, 2005, with Quest, we have drawn $10,000,000 from this secured line of credit with Quest as of December 31, 2007 solely to fund certain development activities related to our strategic alliance. We also received net proceeds of $15,218,000 from the Instrument Business Sale on November 13, 2006, and an additional $2,000,000 withheld by Bio-Rad related to the United States Patent and Trademark Office issuance of the reexamination certificate of the United States Patent No. 6,734,022, referred to herein as the 022 Patent, on October 23, 2007. We also received net proceeds of $27,011,000 from the sale of our BioSepra® business on November 24, 2004, and an additional $1,021,000, including interest, held in an interest-bearing escrow account for one year after the sale on December 1, 2005.

Cash Flow from Investing Activities Correction. During the year-end close process, we became aware that we had incorrectly classified $2,500,000 of short-term investments as cash and cash equivalents on our balance sheet as of June 30, 2007, as filed in our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2007. The misclassification resulted in understating short-term investments and overstating cash and cash equivalents by $2,500,000 on the balance sheet and understating cash used in investing activities and changes in cash and cash equivalents by $2,500,000 on the statement of cash flows for the six months ended June 30, 2007. The classification error had no effect on net loss or net cash used in operating activities or net cash provided by financing activities for the period. Short-term investments were properly classified on the balance sheet in our filings for subsequent periods. The statement of cash flow for the six months ended June 30, 2007, will be corrected when we file our Quarterly Report on Form 10-Q for the quarterly period ending June 30, 2008.

Cash and cash equivalents at December 31, 2007 and 2006, were $7,617,000 and $17,711,000, respectively. Working capital at December 31, 2007 and 2006, was $8,534,000 and $12,994,000, respectively. The decrease in working capital for the year ended December 31, 2007, was principally due to funds used to finance operating losses of $21,282,000, offset by the net proceeds of $18,927,000 from the sale 2,451,309 shares of our common stock and warrants to purchase 1,961,047 shares of our common stock to a group of investors.

Net cash used in operating activities was $20,268,000 for the year ended December 31, 2007, primarily as a result of the $21,282,000 net loss reduced by $707,000 of noncash expenses that included the gain on the Instrument Business Sale of $1,610,000, and offset by depreciation and amortization of $1,181,000, stock-based compensation of $878,000 and amortization of convertible senior notes discount of $239,000. Net cash used in operating activities was also decreased by $307,000 of cash provided by changes in operating assets and liabilities.

Net cash used in investing activities was $11,684,000 for the year ended December 31, 2007, which primarily resulted from the net purchases of investments available-for-sale of $12,875,000 and the acquisition of robotics machinery and other equipment for laboratory use and service of collaboration partner instruments of $864,000, offset by the receipt of $2,000,000 from Bio-Rad related to the United States Patent and Trademark Office issuance of the reexamination certificate of the 022 Patent on October 23, 2007.

Additionally, at December 31, 2007, our investments consisted of $12,777,000 invested in auction rate securities, including $3,902,000 classified as available-for-sale long-term investments as a result of certain auction rate securities failing to settle at auctions subsequent to December 31, 2007. These auction rate securities have a rating of AAA by a major credit rating agency. As of March 31, 2008, our entire investment portfolio of $6,550,000 was invested in auction rate securities, which failed to settle at auctions from January 1, 2008, to March 31, 2008, due to the current overall credit concerns in the capital markets, and are classified as available-for-sale long-term investments. The investment portfolio at March 31, 2008, consists of $3,902,000 of auction rate securities classified as available-for-sale long-term investments at December 31, 2007, and an additional $2,550,000 of auction rate securities purchased during January and February 2008, which failed to settle at auctions during March 2008. These auction rate securities provide liquidity via an auction process that resets the applicable interest rate at predetermined calendar intervals, which is generally every 28 days. The failure of the auctions impact our ability to readily liquidate its

auction rate securities into cash until a future auction of these investments is successful or the auction rate security is refinanced by the issuer into another type of debt instrument. We continue to earn interest on the investments that failed to settle at auction, at the

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maximum contractual rate. We will continue to monitor the value of its auction rate securities each reporting period for a possible impairment if a decline in fair value occurs.

Net cash provided by financing activities was $21,910,000 for the year ended December 31, 2007, which primarily resulted from the net proceeds of $18,927,000 from the sale of 2,451,309 shares of our common stock and warrants to purchase 1,961,047 shares of our common stock to a group of investors and the receipt of $2,917,000 in proceeds from the secured line of credit with Quest.

Net cash used in operating activities was $20,439,000 for the year ended December 31, 2006, primarily as a result of the $22,066,000 net loss reduced by $1,295,000 of noncash expenses that included the gain on the Instrument Business Sale of $6,929,000, and offset by the loss on extinguishment of our 4.50% Notes of $1,481,000, depreciation and amortization of $4,082,000, stock-based compensation of $1,615,000 and amortization of convertible senior notes discount of $488,000. Net cash used in operating activities was also decreased by $332,000 of cash provided by changes in operating assets and liabilities.

Net cash provided by investing activities was $16,528,000 for the year ended December 31, 2006, which primarily resulted from proceeds received from the Instrument Business Sale of $15,218,000 and the sale of an investment available-for-sale of $2,245,000.

Net cash used in financing activities was $4,168,000 for the year ended December 31, 2006, which primarily resulted from the principal payment of the 4.50% Notes of $11,000,000, and was offset by the net proceeds of $3,000,000 from the sale of 308,642 shares of our common stock to Bio-Rad in connection with the Instrument Business Sale and the receipt of $4,583,000 in proceeds from the secured line of credit with Quest.

We have incurred significant net losses and negative cash flows from operations since inception. At December 31, 2007, we had an accumulated deficit of $239,142,000. On November 13, 2006, we completed the Instrument Business Sale, and as a result we currently concentrate our resources on developing clinical protein biomarker diagnostic products and services, and we do not have a source of revenue. Management believes that current available resources will not be sufficient to fund our obligations. Our ability to continue to meet our obligations and to achieve our business objectives is dependent upon, among other things, raising additional capital or generating sufficient revenue in excess of costs. At such time as we require additional funding, we may seek to raise such additional funding from various possible sources, including the public equity market, private financings, sales of assets, collaborative arrangements and debt. If additional capital is raised through the issuance of equity securities or securities convertible into equity, stockholders will experience dilution, and such securities may have rights, preferences or privileges senior to those of the holders of common stock or our 4.5% Notes or our 7.0% Notes. If we obtain additional funds through arrangements with collaborators or strategic partners, we may be required to relinquish our rights to certain technologies or products that we might otherwise seek to retain. There can be no assurance that we will be able to obtain such financing, or obtain it on acceptable terms. If we are unable to obtain financing on acceptable terms, we may be unable to execute our business plan, we could be required to delay or reduce the scope of our operations, and we may not be able to pay off our 4.5% Notes or our 7.0% Notes if and when they come due.

Our inability to operate profitably and to consistently generate cash flows from operations and our reliance on external funding either from loans or equity, raise substantial doubt about our ability to continue as a going concern.

Off Balance Sheet Arrangements

As of December 31, 2007, we had no off-balance sheet arrangements that are reasonably likely to have a current or future material effect on our consolidated financial condition, results of operations, liquidity, capital expenditures or capital resources.

Critical Accounting Policies and Estimates

The notes to our consolidated financial statements contain a summary of our significant accounting policies that are presented elsewhere in this prospectus. We believe that it is important to have an

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understanding of certain policies, along with the related estimates that we are required to make in recording our financial transactions, in order to have a complete picture of our financial condition. In addition, in arriving at these estimates, we are required to make complex and subjective judgments, many of which include a high degree of uncertainty. The following is a discussion of these critical accounting policies and significant estimates related to these policies. We have discussed each of these accounting policies and the related estimates with the Audit Committee of our Board of Directors.

Investments

The appropriate classification of investments in marketable securities is determined at the time of purchase, and is reassessed at each balance sheet date. Auction rate securities, which settled in its most recent auction, with auction dates within one year or less of the previous auction date that have been identified for funding operations within one year or less are classified as short-term investments. Due to the recent disruptions in the credit markets and the uncertainty surrounding our ability to the liquidate certain auction rate securities in the next twelve months if at all, auction rate securities that have failed to settle at auction subsequent to December 31, 2007, have been classified as available-for-sale long-term investments. Other marketable securities with maturities of one year or less from the date of purchase that have been identified for funding operations within one year or less are classified as available-for-sale short-term investments. All other marketable securities are classified as available-for-sale long-term investments.

These marketable securities are carried at fair value with unrealized gains or losses reported in accumulated other comprehensive loss. Fair value is generally based on quoted market price of the marketable security, and if the quoted market price is not available, the fair value is extrapolated from the quoted market prices of similar marketable securities or by discounting the future cash flows taking into consideration the interest rate probabilities that reflect the risk associated with that marketable security. Typically, the carrying value of auction rate securities approximates fair value due to the frequent resetting of the interest rates. Realized gains and losses on marketable securities are computed using the specific identification method and are reported in other income (expense), net. The amortized cost of marketable debt securities is adjusted for the amortization of premiums and accretion of discounts to maturity, which is included in interest income. Declines in value judged to be other-than-temporary is determined based on the specific identification method and are reported in other income (expense), net.

Depreciation and Amortization

Property, plant and equipment are stated at cost less accumulated depreciation and amortization. Machinery and equipment, demonstration equipment, computer equipment, computer software, development systems used for collaborations, and furniture and fixtures are depreciated using the straight-line method over the estimated useful life of the asset. Leasehold improvements are amortized using the straight-line method over the shorter of the estimated useful lives of the improvement or the original term of the underlying lease. Repair and maintenance costs are expensed as incurred. Property, plant and equipment retired or otherwise disposed of and the related accumulated depreciation are removed from the accounts and the resulting gain or loss is included in operating expenses. Property, plant and equipment are depreciated and amortized using the following estimated useful lives:

	Estimated Useful Life
Machinery and equipment	3 to 5 years
Demonstration equipment	2 years
Computer equipment	3 years
Computer software	3 years

Development systems used for collaborations	3 years
Furniture and fixtures	5 years
Leasehold improvements	2 to 8 years

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Property, plant and equipment are reviewed for impairment when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. If property, plant and equipment are considered to be impaired, an impairment loss is recognized.

Stock-Based Compensation

Prior to January 1, 2006, we accounted for employee stock-based compensation using the intrinsic value method in accordance with Accounting Principles Board, or APB, Opinion No. 25, *Accounting for Stock Issued to Employees*, as allowed by Statement of Financial Accounting Standard, or SFAS, No. 123 as amended by SFAS No. 148, *Accounting for Stock-Based Compensation Transition and Disclosure*. Under the intrinsic value method, no stock-based employee compensation cost is recorded, provided the stock options are granted with an exercise price equal to or greater than the market value of the underlying common stock on the date of grant.

Effective January 1, 2006, we adopted SFAS No. 123(R), *Share-Based Payment*. Under SFAS No. 123(R), the total fair value of the stock options awards is expensed ratably over the service period of the employees receiving the awards. In adopting SFAS No. 123(R), we used the modified prospective method of adoption. Under this adoption method, compensation expense recognized subsequent to adoption includes: (a) compensation costs for all share-based awards granted prior to but not yet vested as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions of SFAS No. 123 and (b) compensation costs for all share-based awards granted subsequent to January 1, 2006, based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123(R).

In estimating the fair value of each stock option award on their respective grant dates and stock purchased under the 2000 Employee Stock Purchase Plan, referred to herein as the ESPP, we use the Black-Scholes pricing model. The Black-Scholes pricing model requires us to make assumptions with regard to the options granted and stock purchased under ESPP during a reporting period namely, expected life, stock price volatility, expected dividend yield and risk-free interest rate.

The expected life of options is based on historical data of our actual experience with the options we have granted and represents the period of time that the options granted are expected to be outstanding. This data includes employees expected exercise and post-vesting employment termination behaviors. The expected stock price volatility is estimated using the historical volatility of our common stock for the year ended December 31, 2007. The historical volatility covers a period that corresponds to the expected life of the options. For the year ended December 31, 2006, we used a combination of historical and peer group volatility for a blended volatility in deriving our expected volatility assumption as allowed under SFAS No. 123(R) and the SEC s Staff Accounting Bulletin, or SAB, No. 107. At that point in time, we made an assessment that blended volatility is more representative of future stock price trends than just using historical or peer group volatility. The expected dividend yield is based on the estimated annual dividends that we expect to pay over the expected life of the options as a percentage of the market value of our common stock as of the grant date. The risk-free interest rate for the expected life of the options granted is based on the United States Treasury yield curve in effect as of the grant date.

The expected life of shares purchased under ESPP is six months, which corresponds to the offering period. The expected stock price volatility is estimated using a six month historical volatility of our common stock, which corresponds to the offering period. The expected dividend yield is based on the estimated annual dividends that we expect to pay over the expected life of shares purchased under ESPP as a percentage of the market value of our common stock as of the grant date. The risk-free interest rate for the expected life of the shares purchased under ESPP is based on the United States Treasury yield curve in effect as of the beginning of the offering period.

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The average assumptions used to calculate the fair value of options granted and shares purchasable under ESPP that were incorporated in the Black-Scholes pricing model for the years ended December 31, 2007 and 2006 were as follows:

	2000 Stock Plan		Employee Stock Purchase Plan	
	2007	2006	2007	2006
Dividend yield	%	%	%	%
Volatility	81.46%	86.23%	83.30%	84.55%
Risk-free interest rate	4.81%	4.80%	4.78%	4.96%
Expected lives (years)	5.20	6.07	0.50	0.50

Contingencies

We have been, and may in the future become, subject to legal proceedings related to intellectual property licensing matters. Based on the information available at the balance sheet dates and through consultation with our legal counsel, we assess the likelihood of any adverse judgments or outcomes for these matters, as well as potential ranges of probable loss. If losses are probable and reasonably estimable, we will record a reserve in accordance with SFAS No. 5, *Accounting for Contingencies*. Currently we have no such reserves recorded. Any reserves recorded in the future may change due to new developments in each matter.

Income Taxes

On January 1, 2007, we adopted Financial Accounting Standards Board, or FASB, Interpretation No., or FIN, 48, *Accounting for Uncertainty in Income Taxes an Interpretation of FASB Statement No. 109*, which clarifies the accounting for income tax uncertainties that have been recognized in an enterprise s financial statements in accordance with SFAS No. 109, *Accounting for Income Taxes*. The results of the Internal Revenue Code 382 study conducted during the year ended December 31, 2007, led to a reduction of our gross net operating loss deferred tax asset. As of December 31, 2007, we had not recorded any liability related to FIN 48. Since we have incurred net losses since inception and all deferred tax assets have been fully reserved, FIN 48 had no impact to our effective tax rate or retained earnings. Additionally, we have not recorded any interest or penalties related to FIN 48.

The provision for income taxes is based on income reported for financial statement purposes and differs from the amount of taxes currently payable, because certain income and expense items are reported for financial statement purposes in different periods than those for tax reporting purposes.

We account for income taxes using the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and the tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. A valuation allowance is established when necessary to reduce deferred tax assets to the amounts expected to be realized. Interest and penalties related to income taxes are recorded to interest and other expense of the consolidated statement of operations.

As part of the computation of the income tax provision, estimates and assumptions must be made regarding the deductibility of certain expenses and the treatment of tax contingencies. There is a possibility that these estimates and assumptions may be disallowed as part of an audit by the various taxing authorities that we are subject to. Any

differences between items taken as deductions in our tax provision computations and those allowed by the taxing authorities could result in additional income tax expense in future periods.

Recent Accounting Pronouncements

Accounting for Business Combinations

In December 2007, the FASB issued SFAS No. 141(R), *Business Combinations, which replaces SFAS No. 141, Business Combinations*. SFAS No. 141(R) retains the fundamental requirements that the acquisition method of accounting, which was called the purchase method under SFAS No. 141, be used for all

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business combinations and for an acquirer to be identified for each business combination. SFAS No. 141(R) requires an acquirer to measure the assets acquired, the liabilities assumed and any noncontrolling interest in the acquiree at their fair values at the acquisition date, with limited exceptions. This replaces the cost-allocation process under SFAS No. 141, which required the cost of an acquisition to be allocated to the individual assets acquired and liabilities assumed based on their estimated fair values. SFAS No. 141(R) also requires the acquirer in a business combination achieved in stages, which is sometimes referred to as a step acquisition, to recognize the identifiable assets and liabilities, as well as the noncontrolling interest in the acquiree, at the full amounts of their fair values or other amounts determined in accordance with SFAS No. 141(R). SFAS No. 141(R) applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. An entity may not apply it before that date. We are currently evaluating the impact from adopting SFAS No. 141(R) will have on our consolidated financial statements.

Accounting for Nonrefundable Advance Payments for Goods or Services to be Used in Future Research and Development Activities

In June 2007, the Emerging Issues Task Force, or EITF, reached a consensus on EITF Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to be Used in Future Research and Development Activities*. EITF Issue No. 07-3 requires companies to defer and capitalize prepaid, nonrefundable research and development payments to third parties over the period that the research and development activities are performed or the services are provided, subject to an assessment of recoverability. EITF Issue No. 07-3 is effective for new contracts entered into in fiscal years beginning after December 15, 2007, including interim periods within those fiscal years. Our adoption of EITF Issue No. 07-3 is not expected to have a material impact on our consolidated financial statements.

Fair Value Option for Financial Assets and Financial Liabilities

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities Including an Amendment of FASB Statement No. 115*. SFAS No. 159 provides entities with an option to report selected financial assets and liabilities at fair value. Unrealized gains and losses on items for which the fair value option has been elected are reported in earnings. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007. Our adoption of SFAS No. 159 is not expected to have a material impact on our consolidated financial statements.

Fair Value Measurements

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements* SFAS No. 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. SFAS No. 157 clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. Under the standard, fair value measurements would be separately disclosed by level within the fair value hierarchy. The provisions of SFAS No. 157 are effective for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years, with early adoption permitted. Our adoption of SFAS No. 157 is not expected to have a material impact on our consolidated financial statements.

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BUSINESS

Company Background

We are dedicated to the discovery, development and commercialization of novel high-value diagnostic tests that help physicians diagnose, treat and improve outcomes for patients. We use translational proteomics for developing assays and commercializing novel diagnostic tests.

Our management plans to concentrate our development of novel diagnostic tests in the fields of oncology, hematology, cardiology and women s health with the initial focus on ovarian cancer. We will also address clinical questions related to early disease detection, treatment response, monitoring of disease progression, prognosis and others through collaborations with leading academic and research institutions in addition to the three-year strategic alliance agreement with Quest. Current and former academic and research institutions that we have collaborations with include Johns Hopkins; M.D. Anderson; University College London; UTMB; The Katholieke Universiteit Leuven; Clinic of Gynecology and Clinic of Oncology, Rigshospitalet, Copenhagen University Hospital; Ohio State University; and Stanford University.

Prior to the Instrument Business Sale, we developed, manufactured and sold ProteinChip Systems for life sciences research. This patented technology is recognized as SELDI. The systems consist of ProteinChip Readers, ProteinChip Software and related accessories, which were used in conjunction with consumable ProteinChip Arrays. These products were sold primarily to pharmaceutical companies, biotechnology companies, academic research laboratories and government research laboratories. We also provided research services through our Biomarker Discovery Center laboratories, and offered consulting services, customer support services and training classes to our customers and collaborators.

Financing and Organization

We were originally incorporated in California on December 9, 1993, under the name Abiotic Systems. In March 1995, we changed our corporate name to Ciphergen Biosystems, Inc. and subsequently on June 21, 2000, we reincorporated in Delaware. Under the name Ciphergen Biosystems, Inc., we had our initial public offering on September 28, 2000, and began trading on the NASDAQ National Market under the ticker symbol CIPH .

On August 22, 2003, we closed the sale of $30,000,000 in aggregate principal of the 4.5% Notes. On November 15, 2006, certain holders of the 4.5% Notes agreed to exchange and redeem $27,500,000 in aggregate principal for $16,500,000 in aggregate principal of the 7.0% Notes, and $11,000,000 in cash in addition to the accrued and unpaid interest on our 4.5% Notes of $254,000. The remaining $2,500,000 in aggregate principal of the 4.5% Notes and the $16,500,000 in aggregate principal of the 7.0% Notes are convertible into 27,208 and 825,000 shares of our common stock, respectively.

On July 22, 2005, we entered into a three-year strategic alliance agreement with Quest to develop and commercialize up to three diagnostic tests. In connection with this strategic alliance, we sold 622,500 shares of our common stock and a warrant to purchase 220,000 shares of our common stock at $35.00 per share to Quest for $14,954,000 in net proceeds. In addition, Quest agreed to provide us with a $10,000,000 secured line of credit to pay certain costs and expenses related to this strategic alliance. This secured line of credit is forgivable based upon the achievement of certain milestones related to the development, regulatory approval and commercialization of certain diagnostic tests. If we fail to achieve these milestones, the outstanding balance of this secured line of credit will become due and payable on July 22, 2010.

On November 13, 2006, we completed the Instrument Business Sale, which allowed us to concentrate our resources on developing clinical protein biomarker diagnostic products and services. The net proceeds from the Instrument Business Sale and sale of 308,642 shares of our common stock to Bio-Rad amounted to $18,218,000. In connection with the Instrument Business Sale, $2,000,000 is being held in escrow until November 13, 2009, to serve as security for our fulfilment of certain obligations, and $2,000,000 was withheld by Bio-Rad from the sales proceeds until the issuance of a reexamination certificate confirming the 022 Patent. On October 23, 2007, the United States Patent and Trademark Office issued a reexamination certificate

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of the 022 Patent, and on November 9, 2007, we received $2,000,000 from Bio-Rad that was withheld from the proceeds of the Instrument Business Sale.

On June 29, 2007, our stockholders approved amendments to the Certificate of Incorporation to increase the number of authorized shares of common stock from 80,000,000 to 150,000,000 and to change the name of the company from Ciphergen Biosystems, Inc. to Vermillion, Inc. On July 13, 2007, we amended and restated our Certificate of Incorporation with the State of Delaware for the increased authorized shares and on August 21, 2007, we amended our Certificate of Incorporation to reflect the name change, which reflects the transition of the Company from its historic roots as a proteomics research products business to a novel diagnostic testing business. In conjunction with the name change, we changed our common stock ticker symbol on the NASDAQ Capital Market from CIPH to VRML .

On August 29, 2007, we completed a private placement sale of 2,451,309 shares of our common stock and warrants to purchase up to an additional 1,961,047 shares of our common stock with an exercise price of $9.25 per share and an expiration date of August 29, 2012, to a group of new and existing investors for $20,591,000 in gross proceeds. In this private placement sale, Quest acquired 238,095 shares of our common stock and warrants to purchase 190,476 shares of our common stock at $9.25 per share for $2,000,000.

On August 15, 2007, we were notified by NASDAQ Listing Qualifications that we did not comply with Marketplace Rule 4310(c)(3) for continued inclusion, and as required by Marketplace Rule 4310(c)(8)(C), We had 30 days, or until September 14, 2007, to regain compliance. Marketplace Rule 4310(c)(3) requires us to (A) have minimum stockholders equity of $2,500,000, (B) have a minimum common stock market value of $35,000,000 or (C) have net income from continuing operations of $500,000 in the most recently completed fiscal year or in two of the last three most recently completed fiscal years. On September 14, 2007, NASDAQ Listing Qualifications notified us that we had regained compliance with Marketplace Rule 4310(c)(3) as a result of the market value of our common stock exceeding $35,000,000 for 10 consecutive business days. Subsequently, on February 22, 2008, we were notified by NASDAQ Listing Qualifications that we did not comply with Marketplace Rule 4310(c)(3) for continued inclusion as a result of the market value of our common stock falling below $35,000,000 for 10 consecutive business days, and as required by Marketplace Rule 4310(c)(8)(C), we had 30 days, or until March 24, 2008, to regain compliance. We did not regain compliance by March 24, 2008, and, accordingly, on March 25, 2008, we received a Staff Determination Notice from NASDAQ Listing Qualifications notifying us that our securities would be subject to delisting as a result of the deficiency unless we request a hearing before a NASDAQ Listing Qualifications Panel. We are currently scheduled for a hearing before a NASDAQ Listing Qualifications Panel. As a result, the delisting action has been stayed and our securities will remain listed on the NASDAQ Capital Market at least until the NASDAQ Listing Qualifications Panel renders its decision following the hearing. It is anticipated that the NASDAQ Listing Qualifications Panel will issue its decision in May 2008. There can be no assurance that the NASDAQ Listing Qualifications Panel will grant our request for continued listing.

Additionally, on September 6, 2007, we were notified by NASDAQ Listing Qualifications that our common stock bid price closed below the minimum $1.00 per share requirement for continued inclusion by Marketplace Rule 4310(c)(4), and as required by Marketplace Rule 4310(c)(8)(D), we had 180 days, or until March 4, 2008, to regain compliance. To regain compliance, the bid price of our common stock must close at $1.00 per share or more for a minimum of 10 consecutive business days. In an effort to meet the minimum $1.00 per share requirement for continued inclusion by Marketplace Rule 4310(c)(4), we held a special meeting of stockholders on February 14, 2008. At the special meeting, our stockholders approved the proposal to authorize the Board of Directors in their discretion, without further authorization of our stockholders, to amend our Certificate of Incorporation to effect a reverse split of our common stock by a ratio of between 1 for 6 to 1 for 10. To regain compliance with Marketplace Rule 4310(c)(4), the Board of Directors approved on February 15, 2008, a 1 for 10 reverse stock split of our common stock effective at the close of business on March 3, 2008. Cash will be paid for post-split fractional shares based on the average closing sales price for the 20 trading days immediately before the effective time of the reverse stock split. As of March 31, 2008, we had

paid out $21 in cash for fractional shares. On March 4, 2008, our common stock began trading under the reverse stock split basis. Additionally, beginning on March 4, 2008, our common stock traded for a period of 20 trading days under ticker symbol VRMLD as an interim symbol to denote its new status. After this 20

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trading day period, our common stock resumed trading under the ticker symbol VRML . Subsequently, on March 18, 2008, NASDAQ Listing Qualifications notified us that we had regained compliance with Marketplace Rule 4310(c)(4) with our common stock closing above $1.00 per share or greater for at least 10 consecutive business days.

In an effort to further streamline operations, we reduced our workforce by 9 employees during March 2008. As a result of the reduction in workforce, we had 19 employees as of March 31, 2008.

Subsidiaries

We have eight wholly owned subsidiaries of which one subsidiary, Ciphergen Biosystems International, Inc. referred to herein as CBII, has three wholly owned subsidiaries. Eight of the eleven wholly owned subsidiaries are incorporated in Europe and Asia. The eight foreign wholly owned subsidiaries and CBII were established for the purpose of providing sales, marketing and technical support to the Instrument Business. As part of our future sales and marketing strategy, we are in the process of legally dissolving seven of the foreign wholly owned subsidiaries and only the subsidiary in Japan will remain. The other two subsidiaries are inactive.

Segment and Geographical Information

We currently operate one reportable segment, novel diagnostic tests. Prior to the Instrument Business Sale, we operated one reportable segment, which was the protein research products and collaborative services business. See Note 19, to our audited consolidated financial statements for the Company s geographical information.

The Diagnostics Market

The economics of healthcare demand improved allocation of resources. Improved allocation of resources can be derived through disease prevention, early detection of disease leading to early intervention and diagnostic tools that can triage patients to more appropriate therapy and intervention. According to the February 2007 Jain PharmaBiotech report, the worldwide market for IVD in 2006 was approximately $49.2 billion.

We have chosen to concentrate primarily in the areas of oncology, hematology, cardiology, and women s health. Demographic trends suggest that, as the population ages, the burden from these diseases will increase and the demand for quality diagnostic, prognostic, and predictive tests will increase. In addition, these areas generally lack quality diagnostic tests and, therefore, we believe patient outcomes can be significantly improved by the development of novel diagnostic tests.

Our focus on translational proteomics enables us to address the market for novel diagnostic tests that simultaneously measure multiple protein biomarkers. A protein biomarker is a protein or protein variant that is present at greater or lesser concentrations in a disease state versus a normal condition. Conventional protein tests measure a single protein biomarker whereas most diseases are complex. We believe that efforts to diagnose cancer and other complex diseases have failed in large part because the disease is heterogeneous at the causative level (i.e., most diseases can be traced to multiple potential etiologies) and at the human response level (i.e., each individual afflicted with a given disease can respond to that ailment in a specific manner). Consequently, measuring a single protein biomarker when multiple protein biomarkers may be altered in a complex disease is unlikely to provide meaningful information about the disease state. We believe that our approach of monitoring and combining multiple protein biomarkers using a variety of analytical techniques including mass spectrometry, will allow us to create diagnostic tests with sufficient sensitivity and specificity about the disease state to aid the physician considering treatment options for patients with complex diseases.

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Competition

The diagnostics industry in which we operate is competitive and evolving. There is intense competition among healthcare, biotechnology, and diagnostics companies attempting to discover candidates for potential new diagnostic products. These companies may:

develop new diagnostic products in advance of us or our collaborators;

develop diagnostic products that are more effective or cost-effective than those developed by us or our collaborators;

obtain regulatory clearance or approval of their diagnostic products more rapidly than us or our collaborators; or

obtain patent protection or other intellectual property rights that would limit our the ability to develop and commercialize, or a customer s ability to use, our or our collaborators diagnostic products.

We compete with companies in the United States and abroad that are engaged in the development and commercialization of novel biomarkers that may form the basis of novel diagnostic tests. These companies may develop products that are competitive with and/or perform the same or similar to the products offered by us or our collaborators, such as biomarker specific reagents or diagnostic test kits. Also, clinical laboratories may offer testing services that are competitive with the products sold by us or our collaborators. For example, a clinical laboratory can either use reagents purchased from manufacturers other than us, or use its own internally developed reagents, to make diagnostic tests. If clinical laboratories make tests in this manner for a particular disease, they could offer testing services for that disease as an alternative to products sold by us used to test for the same disease. The testing services offered by clinical laboratories may be easier to develop and market than test kits developed by us or our collaborators because the testing services are not subject to the same clinical validation requirements that are applicable to FDA-cleared or approved diagnostic test kits.

Scientific Background

Genes are the hereditary coding system of living organisms. Genes encode proteins that are responsible for cellular functions. The study of genes and their functions has led to the discovery of new targets for drug development. Industry sources estimate that within the human genome there are approximately 30,000 genes. The initial structure of a protein is determined by a single gene. The final structure of a protein is frequently altered by interactions with additional genes or proteins. These subsequent modifications result in hundreds of thousands of different proteins. In addition, proteins may interact with one another to form complex structures that are ultimately responsible for cellular functions.

Genomics allows researchers to establish the relationship between gene activity and disease. However, many diseases are manifested not at the genetic level, but at the protein level. The complete structure of modified proteins cannot be determined by reference to the encoding gene alone. Thus, while genomics provides some information about diseases, it does not provide a full understanding of disease processes. We are focused on converting recent advances in proteomics into clinically useful diagnostic tests.

Relationship between proteins and diseases

The entire genetic content of any organism, known as its genome, is encoded in strands of deoxyribonucleic acid, or DNA. Cells perform their normal biological functions through the genetic instructions encoded in their DNA, which results in the production of proteins. The process of producing proteins from DNA is known as gene expression or protein expression. Differences in living organisms result from variability in their genomes, which can affect the types of genes expressed and the levels of gene expression. Each cell of an organism expresses only approximately 10% to 20% of the genome. The type of cell determines which genes are expressed and the amount of a particular protein produced. For example, liver cells produce different proteins from those produced by cells found in the heart, lungs, skin, etc. Proteins play a crucial role in virtually all biological processes, including transportation and storage of energy, immune protection, generation and transmission of nerve impulses and control of growth. Diseases may be caused by a mutation of a gene

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that alters a protein directly or indirectly, or alters the level of protein expression. These alterations interrupt the normal balance of proteins and create disease symptoms. A protein biomarker is a protein or protein variant that is present in a greater or lesser amount in a disease state versus a normal condition. By studying changes in protein biomarkers, researchers may identify diseases prior to the appearance of physical symptoms. Historically, researchers discovered protein biomarkers as a byproduct of basic biological disease research, which resulted in the validation by researchers of approximately 200 protein biomarkers that are being used in commercially available clinical diagnostic products.

Limitations of existing diagnostic approaches

The IVD industry manufactures and distributes products that are used to detect thousands of individual components present in human derived specimens. However, the vast majority of these assays are used specifically to identify single protein biomarkers. The development of new diagnostic products has been limited by the complexity of disease states, which may be caused or characterized by several or many proteins or post-translationally modified protein variants. Diagnostic assays that are limited to the detection of a single protein often have limitations in clinical specificity (true negatives) and sensitivity (true positives) due to the complex nature of many diseases and the inherent biological diversity among populations of people. Diagnostic products that are limited to the detection of a single protein may lack the ability to detect more complex diseases, and thus produce results that are unacceptable for practical use. The heterogeneity of disease and of the human response to disease often underlies the shortcoming of single biomarkers to diagnose and predict many diseases accurately.

Our solution

Our studies, particularly in ovarian cancer, have given us a better understanding of both the disease pathophysiology and the host response. By using multiple biomarkers, we are able to better encompass the disease and host response heterogeneity. In addition, by examining specific biomarkers with greater resolution, for example, post-translational modifications, we believe we can improve the specificity of our diagnostic biomarkers because these modifications reflect both the pathophysiology and host response. This is accomplished using an advanced protein separation system (integrated equipment, reagents and software) to identify combinations of specific biomarkers leading to commercialization of disease specific assays.

We are applying translational proteomics research and development tools and methods to analyze biological information in an attempt to discover associations between proteins, protein variants, protein-protein interaction and diseases. We intend to develop new diagnostic tests based on known and newly-identified protein markers to help physicians predict an individual s predisposition for a disease in order to better characterize, monitor progression of, and select appropriate therapies for such disease. Our goals are to:

- Develop novel diagnostic tests that address unmet medical needs, particularly in stratifying patients according to the risk of developing a disease, having a disease, or failing a specific therapy for a disease;
- Facilitate more efficient clinical trials of new therapeutics by providing biomarkers that stratify patients according to likelihood of response; and
- Identify biomarkers that can form the basis of molecular imaging targets.

Issue	Solution
Heterogeneity of disease	Emphasis on multi-biomarker panels

Poorly validated biomarkers	Expertise in study design incorporating internal and external validation
	Large multi-site studies
Protein post-translational modifications that reduce specificity of assays	Mass spectrometry based assays to quantitate disease-specific forms

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Addressing the heterogeneity of disease

Our strategy is to create a diagnostics paradigm that is based on risk stratification, multiple-biomarker testing, and information integration. This strategy is based on the belief that any specific disease is heterogeneous and, therefore, relying on a single disease marker to provide a simple yes-no answer is likely to fail. We believe that efforts to diagnose cancer and other complex diseases have failed in large part because the disease is heterogeneous at the causative level, meaning that most diseases can be traced to multiple potential etiologies, and at the human response level, meaning that each individual afflicted with a given disease can respond to that ailment in a specific manner. Consequently, diagnosis, disease monitoring and treatment decisions can be challenging. This heterogeneity of disease and difference in human response to disease and/or treatment underlies the shortcomings of single biomarkers to predict and identify many diseases. A better understanding of heterogeneity of disease and human response is necessary for improved diagnosis and treatment of many diseases.

Validation of biomarkers through proper study design

Analysis of peer-reviewed publications reveals almost daily reports of novel biomarkers or biomarker combinations associated with specific diseases. Few of these are used clinically. As with drug discovery, preliminary research results fail to canvass sufficient variation in study populations or laboratory practices and, therefore, the vast majority of candidate biomarkers fail to be substantiated in subsequent studies. Recognizing that validation is the point at which most biomarkers fail, our strategy is to reduce the attrition rate between discovery and clinical implementation by building validation into the discovery process. Biomarkers fail to validate for a number of reasons, which can be broadly classified into pre-analytical and analytical factors. Pre-analytical factors include study design that does not mimic actual clinical practice, inclusion of the wrong types of control individuals, and demographic bias (usually seen in studies in which samples are collected from a single institution). Analytical factors include poor control over laboratory protocols, inadequate randomization of study samples, and instrumentation biases (for example, higher signal early in the experimental run compared to later in the experimental run). Finally, the manner in which the data are analyzed can have a profound impact on the reliability of the statistical conclusions.

When designing clinical studies, we begin with the clinical question, since this drives the downstream clinical utility of the biomarkers. With the starting point of building validation into the discovery process, we design our studies to include the appropriate cases and control groups. We further incorporate an initial validation component even within the discovery component. We place an emphasis on multi-institutional studies, inclusion of clinically relevant controls, using qualified and trained operators to run assays and collect data. For example, in an August 2004 cancer research paper, which describes the first three biomarkers in the ovarian cancer panel, there were more than 600 specimen samples taken from five hospitals that were analyzed. To date, we have analyzed more than 2,500 samples from five additional medical centers. Additionally, to date, we have examined over 300 samples in our breast cancer program, over 400 samples in our prostate cancer program and over 600 samples in our PAD program. In analyzing the complex proteomics data, we take a skeptical view of statistical methodologies, choosing to use a variety of approaches and looking for concordance between approaches, taking the view that biomarkers deemed significant by multiple statistical algorithms are more likely to reflect biological conditions than mathematical artifacts.

Exploiting the power of mass spectrometry to improve assay specificity

The functional activity of proteins is often modulated by changes in its structure. Conventional approaches to assay proteins vary in their ability to detect these changes, and may depend on the specificity of the antibody to the original or altered forms of the proteins. Additionally, a conventional assay may inadvertently measure only one form of a protein while many other forms of this protein exist. Our use of mass spectrometry has advantages over traditional assay approaches due to its ability to distinguish two or more highly related protein species based on molecular mass, or in combination with chromatographic separation tools, such as with ProteinChip arrays, based on biochemical

properties. Because most traditional assay approaches rely strictly on using antibodies to capture the intended biomarker, protein forms with a common epitope are not readily distinguished. For example, we are specifically addressing thrombotic

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thrombocy topenic purpura, or TTP, a hematologic disease that affects mostly women and is a result of a deficiency in the A disintegrin and metalloproteinase with a thrombospondin type 1 motif, member 13, or ADAMTS13, enzyme. Current assays rely on unwieldy western blots or alternately, immunoblot, which are both low throughput and poorly quantitative. Our assay measures the product of the enzymatic reaction for ADAMTS13 enzyme directly, and provides the quantitation necessary to distinguish TTP from other thrombocytopenic diseases, evaluate patient responses to therapy and monitor patients during clinical remission to prevent recurrences of the disease.

Creating and maintaining a multi-disease product pipeline

We plan to develop potential diagnostic tests based on biomarkers discovered in our sponsored programs with academic collaborators, and through the in-license of biomarkers and assays from an installed base of hundreds of academic SELDI customers. Our past strategy of selling our SELDI systems to researchers in academic institutions, pharmaceutical companies and biotechnology companies has provided us with access to biomarkers that may potentially lead to additional diagnostic tests. Going forward, we and Bio-Rad have agreed to continue to identify SELDI users who may provide additional biomarker discoveries for our diagnostics test pipeline. Additionally, we have the opportunity to identify biomarkers discovered on other proteomic platforms that will complement our existing product pipeline.

We have entered into collaboration, research, and material transfer agreements with over 16 academic institutions and companies to support our large-scale clinical studies, which include ongoing clinical studies as well as future clinical studies. Some of our major collaborations in the areas of oncology, hematology, cardiology and women s health are described below.

The Johns Hopkins University School of Medicine: Led by Dr. Daniel W. Chan, Director of the Clinical Chemical Division, this collaboration focuses on oncology (in particular, breast, prostate, and ovarian cancer). Under our collaboration agreement with Johns Hopkins, we provide research funding, ProteinChip Systems and ProteinChip Arrays. Johns Hopkins provides laboratory space and equipment, clinical samples and scientists to perform the research. Johns Hopkins has granted us an option to take a royalty-bearing exclusive worldwide license to commercialize any inventions resulting from the research. Our royalty obligations include minimum annual royalties, as well as running royalties on sales of products and services. On January 30, 2008, we renewed our research collaboration agreement with John Hopkins. The agreement has an effective period from January 1, 2008, through December 31, 2010, with automatic one-year extensions for up to three additional years unless terminated by us or Johns Hopkins.

The University of Texas M.D. Anderson Cancer Center: Led by Dr. Robert C. Bast, Jr., who discovered the tumor biomarker or biomarker cancer antigen 125, or CA125, this collaboration focuses on ovarian cancer. CA125 found in women is most often associated with cancers of the reproductive tract including the uterus, fallopian tubes and ovaries. Under our research and license agreement with M.D. Anderson, we provide research funding, ProteinChip Arrays and other consumables. M.D. Anderson provides clinical samples for research purposes. Both we and M.D. Anderson perform designated portions of the research. M.D. Anderson has granted us an option to negotiate and acquire a royalty-bearing, exclusive, worldwide license to commercialize any inventions resulting from the research. We are currently in the process of negotiating license terms with M.D. Anderson with respect to certain patent applications covering biomarkers discovered under the collaboration.

Stanford University: Led by Dr. John Cooke, this collaboration is directed at discovery, validation, and characterization of novel biomarkers related to cardiovascular diseases, most notably PAD. Both we and Stanford University perform designated portions of the research. On February 29, 2008, we entered into an exclusive agreement with Stanford University to license the PAD assay.

The Katholieke Universiteit Leuven, Belgium: Led by Dr. Ignace Vergote, this collaboration is directed at discovery, validation, and characterization of novel biomarkers related to gynecological diseases. Under the terms of the research and license agreement, we will have exclusive rights to license discoveries made during the course of this collaboration. We will provide funding for sample collection from patients undergoing evaluation of a persistent mass and who will undergo surgical intervention. Each party will fund designated portions of the research.

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The Ohio State University Research Foundation: Led by Dr. Haifeng Wu, this collaboration is directed at discovery, validation, and characterization of novel biomarkers related to TTP and production of associated technology. TTP is a blood disorder characterized by low platelets, low red blood cell count (caused by premature breakdown of the cells), abnormalities in kidney function, and nervous system abnormalities. It is usually caused by a decrease in the function of the ADAMTS13 enzyme. We will fund a portion of the costs incurred by Ohio State University. Additionally, we have exclusive commercial licensing rights to the TTP assay and the option to exercise the rights for an exclusive commercial license of the discoveries made during the course of this collaboration. On November 6, 2007, we granted to Ohio State University a limited, non-exclusive, non-transferable sublicense to purchase reagents from us for performing laboratory-developed test only.

The University of Texas Medical Branch: Led by Dr. John Petersen, this collaboration is focused on the discovery and development of new products for personalized, or targeted medicine, particularly in the field of liver disease. Under our research and license agreement with UTMB, UTMB provides clinical samples for research purposes. Both we and UTMB perform designated portions of the research. UTMB has granted us an option to negotiate and acquire a royalty-bearing, exclusive worldwide license to commercialize any inventions resulting from the research subject to the terms of a license agreement to be negotiated by the parties.

Together with our collaborators, we are currently conducting large-scale protein biomarker studies in the following areas: oncology, hematology, cardiology and women s health. Most of these studies involve the analysis of large numbers of samples from healthy and diseased individuals, or comparing patients with the disease of interest to those with related diseases for which clinical distinction is necessary. The goal of most of these studies is to identify sets of proteins that serve as biomarkers for a specific disease.

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The following table is a summary of disease field and the related status of our product development stage:

Disease Field	2005 Estimated Treatment Decisions in the United States	Specific Clinical Question	Product Development Stage
Ovarian cancer	5,000,000	Screening and risk stratification of women with a suspicious pelvic mass	Final clinical evaluation(1)
	65,000	Prediction of recurrence/response to chemotherapy	Initial clinical evaluation(2)
	10,000,000	Surveillance of high-risk women	Initial discovery(3)
Breast cancer	54,000,000(4)	Triage to imaging modality	Initial clinical evaluation
	100,000	Enhanced response to chemotherapy	Initial discovery
Prostate cancer	30,000,000(5)	Screening and detection in conjunction with prostate specific antigen	Initial clinical evaluation
	230,000	Risk of recurrence	Initial clinical evaluation
Peripheral arterial disease	>12,000,000	Determination of risk of PAD	Final clinical evaluation
		Determination of risk of major adverse cardiovascular events in PAD	
Thrombotic thrombocytopenic Purpura	100,000	Diagnosis	Commercially available(6)
Assisted reproductive technology	90,000	Prediction of likelihood of successful implantation	Initial clinical evaluation

(1) *Final clinical evaluation* means that a specific biomarker set has undergone a multi-site evaluation and assay development, and is undergoing final clinical evaluation tests prior to product launch.

(2) *Initial clinical evaluation* means that a specific biomarker set is being evaluated in independent sample sets, generally from multiple medical centers. In some instances, candidate markers have been discovered and are undergoing clinical evaluation experiments while additional markers are being sought to improve the clinical performance.

(3) *Initial discovery* means that studies, generally retrospective case control, are being conducted to discover and identify biomarkers. These studies are usually relatively small (<200) and examine samples from 1-2 medical centers, and a specific set of markers for commercialization has not yet been determined.

(4) Number of women aged 40-70, according to United States Census Bureau estimates.

(5) Number of men aged 50-75, according to United States Census Bureau estimates.

(6) *Commercially available* means the test is being offered through one or more venues.

Further details regarding important developments in several of our large-scale studies are set forth below.

Ovarian cancer. Commonly known as the silent killer, ovarian cancer leads to approximately 15,000 deaths each year in the United States. Approximately 20,000 new ovarian cancer cases are diagnosed

each year, with the majority of the patients in late stages of the disease in which the cancer has spread beyond the ovary. Unfortunately, ovarian cancer patients in the late stages of the disease have a poor prognosis, which leads to the high mortality rates. According to the American Cancer Society, when ovarian cancer is diagnosed at its earliest stages, the patient has a 5-year survival rate of 93%. Ovarian cancer patients have up to a 90% cure rate following surgery and/or chemotherapy if detected in stage 1. However, only 19% of ovarian cancer patients are diagnosed before the tumor has spread outside the ovary. For ovarian cancer patients diagnosed in the late-stages of the disease, the 5-year survival rate falls to 18%.

While the diagnosis of ovarian cancer in its earliest stages greatly increases the likelihood of survival from the disease, another factor that predicts survival from ovarian cancer is the specialized training of the surgeon who operates on the ovarian cancer patient. Ovarian cancer patients who are treated by the gynecologic oncologist have better outcomes than those patients treated by the general surgeon. Accordingly, an unmet clinical need is a diagnostic test that can provide adequate predictive value to stratify patients with a pelvic mass into high risk of invasive ovarian cancer versus those with a low risk of ovarian cancer, as well as a screening test for the diagnosis of early-stage ovarian cancer, which is essential for improving overall survival in patients.

Currently, no blood test exists to predict and stratify patients with a pelvic mass into high risk of invasive ovarian cancer versus those with a low risk of ovarian cancer, although a CA125 blood test is commonly used. The CA125 blood test, which is cleared by the FDA only for monitoring for recurrence of ovarian cancer, is absent in up to 50% of early stage ovarian cancer cases. Moreover, CA125 can be elevated in diseases other than ovarian cancer, including benign ovarian tumors and endometriosis. These shortcomings limit the CA125 blood test s utility in distinguishing benign from malignant ovarian tumors or for use in detection of early stage ovarian cancer. Transvaginal ultrasound is another diagnostic modality used with patients with ovarian tumors. Attempts at defining specific morphological criteria that can aid in a benign versus malignant diagnosis have led to the morphology index and the risk of malignancy index, with reports of 40-70% predictive value. However, ultrasound interpretation can be variable and dependent on the experience of the operator.

In August 2004, we, along with collaborators at Johns Hopkins, and M.D. Anderson, reported in a cancer research paper the discovery of three biomarkers that, when combined, provided higher diagnostic accuracy for early stage ovarian cancer than other biomarkers, such as CA125. The three biomarkers that we reported in the August 2004 research paper form the basis of an expanded panel of biomarkers that together have demonstrated risk stratification value in a series of studies involving over 2,500 clinical samples from more than five clinical sites. Data presented at the June 2006 Annual Meeting of the American Society of Clinical Oncology demonstrated the portability of this biomarker panel among different clinical groups, indicating its potential validity across various testing populations. The most recent data presented at the March 2007 Annual Meeting of the Society of Gynecologic Oncology described results from a cohort study. We were able to demonstrate, in 525 consecutively sampled women, a significant increase in the positive predictive value using our biomarker panel over the baseline level. This translates into the potential to enrich the concentration of ovarian cancer cases referred to the gynecologic oncologist by more than twofold.

We have multiple ovarian cancer diagnostic tests in development. The most established of our programs is the ovarian tumor triage test, which utilizes a panel of biomarkers to help identify women with ovarian cancer so they can be referred directly to a gynecologic oncologist for their initial surgery, thus improving survival rates and potentially reducing the number of second surgeries performed. We intend to submit in the coming months the clinical trial data on the ovarian tumor triage test to the FDA for clearance as an IVD test. Additionally, we have studies underway to detect early stage ovarian cancer, predict prognosis and recurrence, and identify women considered at high-risk for ovarian cancer.

Peripheral arterial disease. This disease affects over 12 million Americans, which often goes undiagnosed and untreated. The number of people diagnosed with PAD is expected to increase concurrently with the rising number of

people diagnosed with diabetes. The absence of a good blood test contributes to PAD going undiagnosed. In collaboration with Stanford University, we have performed both an initial discovery study and

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a first validation study that has resulted in the identification of two blood markers that could assist in the diagnosis of PAD. These findings form the basis of a novel blood diagnostic test for PAD.

The two blood markers are currently undergoing validation. The results of these studies, including the publication of two newly discovered blood markers for PAD, were published in the August 2007 on-line peer-reviewed journal *Circulation*, which is published by the American Heart Association. Ongoing efforts are aimed at further validating these biomarkers in combination with additional cardiovascular biomarkers. Quest has accepted the PAD test as a development program under the terms of the strategic alliance agreement.

Thrombotic thrombocytopenic purpura. This disease affects approximately 1,000 Americans annually and is life threatening in the absence of appropriate treatment, which is usually plasmaphoresis. Undertreatment can lead to increased mortality from the disease while overtreatment wastes precious resources. In addition, patients with TTP need to be monitored for clinical response to therapy. TTP is a result of absent or reduced levels, also known as a defect in the activity, of the ADAMTS13 enzyme. Mass spectrometry was used as a logical approach to develop an accurate and quantitative assay to measure this enzymatic activity. We completed the development of the TTP assay, which has been validated at the Ohio State University Reference Laboratory. Ohio State University is now offering the diagnostic test for clinical use and is purchasing reagents from us. In the first quarter of 2008, the Company generated revenues of $4,845 from the sale of TTP assays to Ohio State University.

Prostate cancer. Each year, approximately 250,000 men are diagnosed with prostate cancer in the United States, approximately 195,000 of whom will need to make a critical decision on whether or not to undergo local therapy, such as surgery or radiation treatment, and on whether or not to have additional treatment after local therapy. There is also a need for a reliable test to determine the likelihood of progression and the likelihood of recurrence after local treatment.

In May 2006, we and Johns Hopkins reported the discovery of two biomarkers that, when combined with prostate specific antigen, or PSA, were highly predictive of likelihood of recurrence of prostate cancer. These findings resulted from two studies, one examining over 400 men with prostate cancer, and the other examining 50 pairs of men followed for 5 years with prostate cancer matched for age, cancer stage and other clinical parameters. These results suggest the potential of a test to aid in the stratification of risk of highly aggressive prostate cancer independent of other clinical variables, reduce over treatment of prostate cancer cases not likely to be lethal, and shift treatment to those cases that are particularly likely to be lethal.

Breast cancer. Detection of early stage breast cancer holds the potential to improve outcomes for women with this disease. No blood markers currently exist that can accurately detect ductal carcinoma in situ, or DCIS, which is one of the earliest stages of breast cancer, and it is likely that imaging modalities such as mammography, ultrasound, and magnetic resonance imaging will improve detection accuracy when combined with blood markers or molecular imaging targets. In collaboration with Johns Hopkins, we have performed two independent studies to identify blood markers for DCIS and stage I breast cancer. The first study examined 169 women who were healthy, in benign disease and in varying stages of breast cancer. The second study examined 176 women from a different medical center as independent validation. We are currently performing a 350 woman multi-center validation study to confirm the two biomarkers identified in the previous studies.

Liver cancer. Individuals infected with the hepatitis virus are at increased risk of developing hepatic fibrosis that progresses to cirrhosis and eventually to hepatocellular carcinoma, or HCC. Alpha fetoprotein, or AFP, is a biomarker for HCC with limited sensitivity and specificity. In collaboration with UTMB, we are evaluating a multi-biomarker panel that may identify individuals at increased risk of HCC.

Commercialization

If we are successful at discovering biomarkers and panels of biomarkers that have diagnostic utility, our commercialization strategy focuses on partnering with other parties to assist in the development and commercialization of our initial tests. On July 22, 2005, we entered into a strategic alliance agreement with Quest to develop and commercialize up to three diagnostic tests.

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We expect to commercialize and sell diagnostic tests in one or both of two phases. The first phase, referred to as the ASR phase, will involve the sale of ASRs to certain customers coupled with the grant to such customer of a sublicense to perform the ASR laboratory test using the methodology covered by the relevant license obtained from our collaborators, such as a test for ovarian cancer covered by licenses from Johns Hopkins and M.D. Anderson. ASRs are the raw materials we will resell or make ourselves and are utilized by clinical laboratories to develop and perform home brew laboratory tests in laboratories federally regulated under the Clinical Laboratory Improvement Amendments of 1988, or CLIA. During the second phase, or IVD phase, we plan to assemble and sell IVD test kits, which have been cleared by the FDA, to customers together with SELDI instruments.

Under our strategic alliance agreement, Quest has the exclusive right to perform up to three ASR laboratory tests. Upon obtaining FDA clearance, we will begin manufacturing IVD test kits that Quest will purchase. Quest will have the exclusive right for up to five years, following commercialization of each respective diagnostic test kit, referred to herein as the exclusive period, to perform such ASR laboratory tests and market IVD test kits purchased from us in the United States, Mexico, the United Kingdom and other countries where Quest operates a clinical laboratory and non-exclusive rights to commercialize these diagnostic test kits in the rest of the world, subject to a royalty payable to us.

During the ASR phase for a given ASR laboratory test, and as long as the exclusive period continues, we will sell ASRs and grant rights to perform such ASR laboratory tests to Quest and other reference laboratories, hospitals and medical clinics in countries where Quest does not operate a clinical laboratory. Once the IVD phase begins for a given ASR laboratory test in the exclusive period, we will sell IVD test kits and SELDI instruments to Quest. At the end of the exclusive period with respect to any IVD test kit, Quest s exclusive right to perform ASR laboratory tests using such diagnostic test kits will become non-exclusive. In addition to continuing to sell IVD test kits to Quest, we will also sell IVD test kits to commercial clinical laboratories in the United States, Mexico, the United Kingdom and other countries which were exclusive to Quest during the exclusive period. In addition to working through Quest, we intend to seek partnerships for commercialization purposes with traditional IVD companies and/or with clinical reference labs in territories where Quest does not have exclusive rights.

Customers

We believe a substantial portion of all sales of diagnostic products are made to a small number of clinical reference laboratories such as Quest and Laboratory Corporation of America. Accordingly, we expect Quest, other reference laboratories, future commercialization partners, hospitals and medical clinics that perform diagnostic testing will provide a substantial portion of the Company s revenue.

Research and Development

Our research and development efforts towards developing novel diagnostic tests focus on two synergistic activities: (1) developing new approaches to investigate the human proteome and (2) utilizing new technologies to discover biomarkers that can address unmet clinical needs. A major area of our research and development activities centers on efforts to discover and validate biomarkers and patterns of biomarkers that can be developed into diagnostic assays. We do this both through in-house programs and through collaborations we have established with Johns Hopkins, M.D. Anderson and Stanford University, among others.

In applied research, we are developing new applications and reagents for quantitative differential protein expression analysis, protein interaction assays and protein characterization. Our efforts are particularly focused on discovery and quantitative analysis of low-abundance proteins present in complex samples such as plasma, serum and urine. We have demonstrated that the surface chemistries immobilized on ProteinChip Arrays have similar protein selectivity to

those chemistries immobilized on higher capacity bead formats, facilitating the transition from discovery on arrays to small scale purification on beads as well as orthogonal purification. Using these approaches, we seek to improve the speed and efficiency of designing protein separation strategies at any scale based on the predictive information obtained using ProteinChip Systems. We believe these methods will accelerate the identification of discovered biomarkers.

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Our activities in research and development will focus on protein separation technologies, particularly on the development of clinical assays (i.e., taking research tools and developing them into practical, usable tools for biomarker discovery and assay). Research will initially focus on three major tasks:

Provide methodologies for making bead technologies based on combinatorial ligand libraries for low abundance protein enrichment practical for biomarker discovery;

Provide methodologies for making othorgonal chromatographic separation of proteomes in a simplified serial workflow practical for biomarker discovery; and

Develop clinical assays using novel proteomics technologies.

The achievement of these objectives will help us gain a competitive edge in biomarker discovery, enhance our ability to improve current diagnostic tests under development as well as to develop a pipeline of diagnostic tests. Our new proteomic analysis tools are intended to provide us with an important advantage in the race to discover novel biomarkers. The complexity of the human proteome has hindered efforts to develop a comprehensive database of expressed proteins and their post-translational modifications. We have focused on developing solutions to the problem of separating proteins to increase the number of proteins that can be detected and characterized while maintaining the throughput necessary to run sufficient clinical samples to achieve statistical significance. These novel solutions are embodied in our proprietary technology such as equalizer beads and multi-select and mini-select technologies. These tools are being applied to clinical assay development in oncology, hematology cardiology and women s health. Our research and development expenses were $8,213,000 and $11,474,000 for the years ended December 31, 2007 and 2006, respectively.

Properties

Our principal facility is located in Fremont, California. The location, size and designated use of each facility that we lease as of December 31, 2007, are as follows:

Location	Approximate Square Feet	Primary Functions	Lease Expiration Date
Fremont, California	61,000 sq. ft(1)	Research and development laboratories, marketing, sales and administrative offices	July 31, 2008
Galveston, Texas	500 sq. ft.	Diagnostic test development laboratory	August 31, 2009

(1) Approximately 29,000 square feet of this space has been subleased to Bio-Rad for the remaining lease term.

We are actively reviewing all of our space needs with intentions to reduce our overall facilities expenses. Actions we may take include not renewing certain leases upon their expiration as well as seeking to sublease space to others.

Intellectual Property

Our intellectual property includes a portfolio of owned, co-owned or licensed patents and patent applications. As of December 31, 2007, our patent portfolio included 53 issued United States patents, 94 pending United States patent applications and numerous pending patent applications and issued patents outside the United States. These patents and patent applications are directed to several areas of technology important to our business, including SELDI technology, diagnostic applications, protein biochips, instrumentation, software and biomarkers. The issued patents covering the SELDI and mass spectrometry technologies expire at various times from 2012 to 2025. Pursuant to the Instrument Business Sale, we entered into a cross license agreement with Bio-Rad pursuant to which we retained the right to commercially exploit those proprietary rights, including SELDI technology, in the clinical diagnostics market. The clinical diagnostics market includes laboratories engaged in the research and development and/or manufacture of diagnostic tests using biomarkers, commercial clinical laboratories, hospitals and medical clinics that perform diagnostic tests. We have been

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granted exclusive rights to commercialize the proprietary rights in the clinical diagnostics market during a five-year exclusivity period that ends on November 13, 2011. After the end of the five-year period, we and Bio-Rad will share exclusive rights. We and Bio-Rad each have the right to engage in negotiations with the other party for a license to any improvements in the proprietary rights created by the other party.

We own, license or hold options to license the patents related to biomarkers developed using SELDI technology. As of December 31, 2007, 33 of our patent applications are directed to biomarker inventions and 6 are dedicated to other diagnostic applications. These include applications in the areas of cancer, cardiovascular disease, infectious disease, neurodegenerative disease and women s health. We have negotiated an extension of the term of our collaboration agreement with Johns Hopkins, which ends on December 31, 2010, with automatic one-year extensions for up to three additional years unless terminated by us or Johns Hopkins, to patent applications directed to biomarkers for ovarian cancer that we intend to commercialize as an ovarian cancer diagnostic test. Other institutions and companies from which we hold options to license intellectual property related to biomarkers include University College London (England), M.D. Anderson, University of Kentucky, Ohio State University, McGill University (Canada), Eastern Virginia Medical School, Aaron Diamond AIDS Research Center, UTMB, Goteborg University (Sweden), University of Kuopio (Finland) and The Katholieke Universiteit Leuven (Belgium).

The rights to the SELDI technology are derived through royalty-bearing sublicenses from MAS. MAS holds an exclusive license to patents directed to the SELDI technology from the owner, Baylor College of Medicine. MAS granted certain rights under these patents to our wholly owned subsidiaries, IllumeSys Pacific, Inc. and Ciphergen Technologies, Inc. in 1997. We obtained further rights under the patents in 2003 through sublicenses and assignments executed as part of the settlement of a lawsuit between us, MAS, LumiCyte and T. William Hutchens. Together, the sublicenses and assignments provide all rights to develop, make and have made, use, sell, import, market and otherwise exploit products and services covered by the patents throughout the world in all fields and applications, both commercial and non-commercial. The sublicenses carry the obligation to pay MAS a royalty equal to 2% of revenues recognized between February 21, 2003 and the earlier of (i) February 21, 2013, or (ii) the date on which the cumulative payments to MAS have reached $10,000,000, referred to in this section as the Sublicenses. As of December 31, 2007, we had paid $2,597,000 in royalties to MAS under the Sublicenses. In connection with the Instrument Business Sale, we sublicensed to Bio-Rad certain rights to the Sublicenses for use outside of the clinical diagnostics field. We retained exclusive rights to the Sublicense rights for use in the field of clinical diagnostics for a five-year period, after which we will retain non-exclusive rights in that field. Bio-Rad agreed to pay the royalties directly to MAS under the Sublicense rights.

On July 10, 2007, we entered into a license and settlement agreement with HDC pursuant to which we licensed more than 25 patents covering HDC s support vector machine technology for use with SELDI technology. Under the terms of our license and settlement with HDC dated July 10, 2007, referred to herein as the HDC Agreement, we receive a worldwide, royalty-free, non-exclusive license for life sciences and diagnostic applications of the technology and have access to any future patents resulting from the underlying intellectual property in conjunction with use of SELDI systems. Pursuant to the HDC Agreement, we paid $200,000 to HDC upon entry into the agreement on July 10, 2007 and $100,000 three months following the date of the agreement on October 10, 2007. The remaining $300,000 under the HDC Agreement is payable as follows: $150,000 twelve months following the date of the agreement and $150,000 twenty-four months following the date of the agreement. The HDC Agreement settled all disputes between us and HDC.

Manufacturing

As a result of the Instrument Business Sale, we rely on Bio-Rad to manufacture and supply ProteinChip Systems and ProteinChip Arrays, collectively referred to herein as the Research Tools Products, which were previously manufactured by us. Under the manufacture and supply agreement, Bio-Rad has agreed to manufacture and supply us

with Research Tools Products. If Bio-Rad develops new products using SELDI technology, Bio-Rad has agreed to supply those products to us for resale to our customers. We can also request that Bio-Rad develop and manufacture new products to written specifications and will negotiate the terms in good faith to purchase such products. Additionally, under the manufacture and supply agreement, we have

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agreed to purchase from Bio-Rad the Research Tools Products required to support our diagnostics efforts. We have a commitment to purchase 10 systems and 30,000 arrays in the first year, 13 systems and 30,000 arrays in the second year, and 20 systems and 30,000 arrays in the third year in order to support our collaboration agreements with Quest and other collaborators, which may be used as inventory for resale, fixed assets for collaboration purposes or supplies for research and development. We have estimated the cost to be $70,000 per system and $40 per array. If Bio-Rad fails to supply any Research Tools Products to us, including any new products using SELDI technology developed by Bio-Rad or any new products we have requested Bio-Rad to make and sell to us, under certain conditions we have the right to manufacture or have a third party manufacture these products for our own use and sale to our customers and collaborators in the clinical diagnostics market. The sale of these products manufactured by us or a third party is subject to a royalty to Bio-Rad. Additionally, we are responsible for assuring, through our incoming quality control process, that the Research Tools Products purchased from Bio-Rad comply with applicable government regulations. We made total purchases of $1,032,000 and $38,000 under this agreement for the years ended December 31, 2007 and 2006, respectively. As of December 31, 2007, we had a total remaining first year obligation to purchase 4 systems and 13,098 arrays, or $804,000 based the on estimated costs of $70,000 per system and $40 per array. As of December 31, 2007, we owed Bio-Rad $246,000 for Research Tools Products.

Environmental Matters

Medical Waste

We are subject to licensing and regulation under federal, state and local laws relating to the handling and disposal of medical specimens and hazardous waste as well as to the safety and health of laboratory employees. Our laboratory facility in Fremont, California is operated in material compliance with applicable federal and state laws and regulations relating to disposal of all laboratory specimens. We utilize outside vendors for disposal of specimens. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of these materials. We could be subject to damages in the event of an improper or unauthorized release of, or exposure of individuals to, hazardous materials.

Occupational Safety

In addition to its comprehensive regulation of safety in the workplace, the Federal Occupational Safety and Health Administration has established extensive requirements relating to workplace safety for healthcare employers, including clinical laboratories, whose workers may be exposed to blood-borne pathogens such as HIV and the hepatitis virus. These regulations, among other things, require work practice controls, protective clothing and equipment, training, medical follow-up, vaccinations and other measures designed to minimize exposure to chemicals and transmission of the blood-borne and airborne pathogens.

Specimen Transportation

Regulations of the Department of Transportation, the International Air Transportation Agency, the Public Health Service and the Postal Service apply to the surface and air transportation of clinical laboratory specimens.

Legal Proceedings

On June 26, 2006, HDC filed a lawsuit against us in the United States District Court for the Eastern District of Texas, Marshall Division, claiming that software used in certain of our ProteinChip Systems infringes on three of its United States patents. HDC sought injunctive relief as well as unspecified compensatory and enhanced damages, reasonable attorney s fees, prejudgment interest and other costs. On August 1, 2006, we filed an unopposed motion with the Court to extend the deadline for us to answer or otherwise respond until September 2, 2006. We filed our answer and

counterclaim to the complaint with the Court on September 1, 2006. Concurrent with our answer and counterclaims, we filed a motion to transfer the case to the Northern District of California. On January 10, 2007, the Court granted our motion to transfer the case to the Northern District of California. The parties met for a scheduled mediation on May 7, 2007. On

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July 10, 2007, we entered into a license and settlement agreement with HDC , pursuant to which we licensed more than 25 patents covering HDC s support vector machine technology for use with SELDI technology. Under the terms of the HDC Agreement, we receive a worldwide, royalty-free, non-exclusive license for life sciences and diagnostic applications of the technology and have access to any future patents resulting from the underlying intellectual property in conjunction with use of SELDI systems. Pursuant to the HDC Agreement, we paid $200,000 to HDC upon entry into the agreement in July 2007 and $100,000 three months following the date of the agreement on October 10, 2007. The remaining $300,000 payable under the HDC Agreement is payable as follows: $150,000 twelve months following the date of the agreement and $150,000 twenty-four months following the date of the agreement. The HDC Agreement settled all disputes between us and HDC .

On September 17, 2007, MAS filed a lawsuit in the Superior Court of California for the County of Santa Clara naming us and Bio-Rad as defendants and MAS as plaintiff. Under the lawsuit, MAS seeks an unspecified amount of damages and alleges, among other things, that we are in breach of our license agreement with MAS relating to SELDI technology as a result of our entry into a sublicense agreement with Bio-Rad. In connection with the Instrument Business Sale, we sublicensed to Bio-Rad certain rights to the SELDI technology that we obtained under the MAS license for use outside of the clinical diagnostics field. We retained exclusive rights to the technology for use in the field of clinical diagnostics for a five-year period, after which we will retain nonexclusive rights in that field. We filed our general denial and affirmative defense on April 1, 2008. We intend to vigorously defend this action. Given the early stage of this action, we cannot predict the ultimate outcome of this matter at this time.

In addition, from time to time, we are involved in legal proceedings and regulatory proceedings arising out of our operations. Other than as disclosed above, we are not currently a party to any proceeding, the adverse outcome of which would have a material adverse effect on the Company s financial position or results of operations.

Government Regulation

General

Our activities related to diagnostic products are, or have the potential to be, subject to regulatory oversight by the FDA under provisions of the Federal Food, Drug and Cosmetic Act and regulations there-under, including regulations governing the development, marketing, labeling, promotion, manufacturing and export of our products. Failure to comply with applicable requirements can lead to sanctions, including withdrawal of products from the market, recalls, refusal to authorize government contracts, product seizures, civil money penalties, injunctions and criminal prosecution.

Generally, certain categories of medical devices, including a category that may be deemed to include potential future products based upon the ProteinChip platform, may require FDA 510(k) clearance, or 510(k) de novo clearance or pre-market approval, referred to herein as a PMA. Although the FDA believes it has jurisdiction to regulate in-house laboratory tests, or home brews, that have been developed and validated by the laboratory providing the tests, the FDA has not, to date, actively regulated those tests. ASRs that are sold to laboratories for use in tests developed in house by clinical laboratories generally do not require FDA approval or clearance. Most ASRs are Class I devices subject to general controls under Section 513(a)(1)(A) of the Federal Food, Drug and Cosmetic Act, but exempt from pre-market notification. ASRs may be (1) sold to clinical laboratories regulated under CLIA, as qualified to perform high complexity testing or clinical laboratories regulated under Veterans Health Administration Directive 1106, (2) manufactured in compliance with the FDA s QSRs, and (3) labeled in accordance with FDA requirements under Title 21 of the Code of Federal Regulations Part 820.30, including a statement that their analytical and performance characteristics have not been established. A similar statement would also be required on all advertising and promotional materials relating to ASRs, such as those used in certain of our proposed future tests. However, the regulatory environment surrounding IVDMIAs is changing. IVDMIA devices, such as our ovarian cancer test, employ

not only the data generated by ordinary ASRs but also an algorithm used to generate a result that is used in the prevention or treatment of disease. The FDA issued draft guidance in September 2006, which states that it will regulate IVDMIAs as class II or III devices, depending on the risk they present. Class II devices are subject to

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510(k) notification and class III devices require clinical testing and a PMA. However, FDA draft guidance is not the law and does not operate to bind either the FDA or the public. Guidances reflect the FDA s current thinking about a subject and the position it will take when dealing with that subject. Accordingly, the current regulatory environment with regard to regulation of ASRs, and IVDMIAs in particular, is very unclear. It is possible that the FDA s current policy or future revisions to FDA policies may have the effect of increasing the regulatory burden on manufacturers of these devices.

Regardless of whether a medical device requires FDA approval or clearance, a number of other FDA requirements apply to the manufacturer of such a device and to those who distribute it. Device manufacturers must be registered and their products listed with the FDA, and certain adverse events, corrections and removals must be reported to the FDA. The FDA also regulates the product labeling, promotion and, in some cases, advertising of medical devices. Manufacturers must comply with the FDA s QSRs, which establish extensive requirements for design, quality control, validation and manufacturing. Thus, manufacturers and distributors must continue to spend time, money and effort to maintain compliance, and failure to comply can lead to enforcement action. The FDA periodically inspects facilities to ascertain compliance with these and other requirements.

Diagnostic Test Kits

The Food, Drug and Cosmetic Act requires that medical devices introduced to the U.S. market, unless exempted by regulation, be the subject of either a premarket notification clearance, known as a 510(k) clearance or 510(k) de novo clearance, or a FDA PMA. Some of our potential future clinical products may require a 510(k) or 510(k) de novo clearance, while others may require a PMA. With respect to devices reviewed through the 510(k) process, we may not market a device until an order is issued by the FDA finding our product to be substantially equivalent to a legally marketed device known as a predicate device. A 510(k) submission may involve the presentation of a substantial volume of data, including clinical data. The FDA may agree that the product is substantially equivalent to a predicate device and allow the product to be marketed in the United States. On the other hand, the FDA may determine that the device is not substantially equivalent and require a PMA, or require further information, such as additional test data, including data from clinical studies, before it is able to make a determination regarding substantial equivalence. By requesting additional information, the FDA can delay market introduction of our products.

If the FDA indicates that a PMA is required for any of our potential future clinical products, the application will require extensive clinical studies, manufacturing information and likely review by a panel of experts outside the FDA. Clinical studies to support either a 510(k) submission or a PMA application would need to be conducted in accordance with FDA requirements. Failure to comply with FDA requirements could result in the FDA s refusal to accept the data or the imposition of regulatory sanctions.

Once granted, a 510(k) clearance or PMA approval may place substantial restrictions on how our device is marketed or to whom it may be sold. Even in the case of devices like ASRs, which may be exempt from 510(k) clearance or PMA approval requirements, the FDA may impose restrictions on marketing. Our potential future ASR products may be sold only to clinical laboratories certified under CLIA to perform high complexity testing. In addition to requiring approval or clearance for new products, the FDA may require approval or clearance prior to marketing products that are modifications of existing products or the intended uses of these products. We cannot assure that any necessary 510(k) clearance or PMA approval will be granted on a timely basis, or at all. Delays in receipt of or failure to receive any necessary 510(k) clearance or PMA approval, or the imposition of stringent restrictions on the labeling and sales of our products, could have a material adverse effect on us. As a medical device manufacturer, we are also required to register and list our products with the FDA. In addition, we are required to comply with the FDA s QSRs, which require that our devices be manufactured and records be maintained in a prescribed manner with respect to manufacturing, testing and control activities. Further, we are required to comply with FDA requirements for labeling and promotion. For example, the FDA prohibits cleared or approved devices from being promoted for uncleared or

unapproved uses. In addition, the medical device reporting regulation requires that we provide information to the FDA whenever evidence reasonably suggests that one of our devices may have caused or contributed to a

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death or serious injury, or where a malfunction has occurred that would be likely to cause or contribute to a death or serious injury if the malfunction were to recur.

Our suppliers manufacturing facilities are, and, if and when we begin commercializing and manufacturing our products ourselves, our manufacturing facilities will be, subject to periodic and unannounced inspections by the FDA and state agencies for compliance with QSRs. Additionally, the FDA will generally conduct a preapproval inspection for PMA devices. Although we believe our suppliers and we will be able to operate in compliance with the FDA s QSRs for ASRs, neither we nor our suppliers have ever been subject to a FDA inspection and cannot assure that we will be able to maintain compliance in the future. If the FDA believes that our suppliers or we are not in compliance with applicable laws or regulations, the FDA can issue a Form 483 List of Observations, warning letter, detain or seize our products, issue a recall notice, enjoin future violations and assess civil and criminal penalties against us. In addition, approvals or clearances could be withdrawn under certain circumstances.

Any customers using our products for clinical use in the United States may be regulated under CLIA. CLIA is intended to ensure the quality and reliability of clinical laboratories in the United States by mandating specific standards in the areas of personnel qualifications, administration, participation in proficiency testing, patient test management, quality control, quality assurance and inspections. The regulations promulgated under CLIA establish three levels of diagnostic tests namely, waived, moderately complex and highly complex and the standards applicable to a clinical laboratory depend on the level of the tests it performs. Medical device laws and regulations are also in effect in many of the countries in which we may do business outside the United States. These range from comprehensive device approval requirements for some or all of our potential future medical device products, to requests for product data or certifications. The number and scope of these requirements are increasing. In addition, certain of our products which have not yet been cleared or approved for domestic commercial distribution may be subject to the FDA Export Reform and Enhancement Act of 1996, or the FDERA.

Employees

As of December 31, 2007, we had 30 full-time employees worldwide, including 5 in sales and marketing, 14 in research and development and 11 in general and administrative departments. We also had an additional 13 individuals engaged as independent contractors. None of our employees are covered by a collective bargaining agreement. We believe that our relations with our employees are good. Our success will depend in large part on our ability to attract and retain skilled and experienced employees. In an effort to further streamline operations, we reduced our workforce by 9 employees during March 2008. As a result of the reduction in workforce, we had 19 employees as of March 31, 2008.

Code of Ethics for Executive Officers

We have adopted a Code of Ethics for Executive Officers. We publicize the Code of Ethics for Executive Officers by posting the policy on our website, www.vermillion.com. We will disclose on our website any waivers of, or amendments to, our Code of Ethics for Executive Officers.

Information About Vermillion

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC s Public Reference Rooms in Washington, D.C., New York, New York and Chicago, Illinois. The Public Reference Room in Washington, D.C. is located at 450 Fifth Street, N.W. Please call the SEC at 1-800-SEC-0330 for further information on the public conference rooms. Our SEC filings are also available to the public from the SEC s web site at www.sec.gov.

In addition, we make available free of charge the Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports as soon as reasonably practicable after the reports have been electronically filed with or furnished to the SEC pursuant to the Section 13(a) or 15(d) of the Securities Exchange Act of 1934 through our website, www.vermillion.com, under Investor Relations. Paper copies of these documents may also be obtained free of charge by writing to Vermillion, Inc., Investor Relations, 6611 Dumbarton Circle, Fremont, CA 94555. The information contained on our website is not incorporated by reference in this prospectus and should not be considered a part of this prospectus.

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MANAGEMENT

Directors and Executive Officers

Our Board of Directors currently consists of eight members. Except for our Chief Executive Officer, none of our executive officers are employed pursuant to employment agreements and thus, serve at the discretion of our Board of Directors.

The following table sets forth the names, ages and positions of the current directors and executive officers of the Company as of April 15, 2008:

Name	Age	Position
Gail S. Page	52	Director, President and Chief Executive Officer
Eric T. Fung, M.D., Ph.D.	38	Vice President and Chief Scientific Officer
Qun Zhou	40	Controller and Interim Chief Financial Officer
Simon C. Shorter	46	Vice President, Corporate Business Development
Stephen T. Lundy	46	Senior Vice President of Sales and Marketing
James L. Rathmann	56	Executive Chairman of the Board of Directors
James S. Burns	61	Director
Rajen K. Dalal	54	Director
John A. Young	76	Director
John Hamilton	63	Director
Michael J. Callaghan	55	Director
Kenneth J. Conway	59	Director

Set forth below is a brief description of the business experience of the directors and executive officers of the Company.

Gail S. Page has been President and Chief Executive Officer and a Director since December 2005. She joined us in January 2004 as President of Vermillion s Diagnostics Division and an Executive Vice President of Vermillion, Inc., and was promoted to President and Chief Operating Officer of Vermillion, Inc. in August 2005. From October 2000 to January 2003, she was Executive Vice President and Chief Operating Officer of Luminex Corporation. From 1988 to 2000, she held various senior level management positions with Laboratory Corporation of America, referred to herein as LabCorp. In 1993, she was named Senior Vice President, Office of Science and Technology at LabCorp, responsible for the management of scientific affairs in addition to the diagnostics business segment. Additionally, from 1995 to 1997, she headed the Cytology and Pathology Services business unit for LabCorp. From 1988 to 2000, she was a member of the Scientific Advisory Board and chaired the committee from 1993 to 1997. Prior to her years at LabCorp and its predecessor, Roche Biomedical, she worked in various functions in the academic field and the diagnostics industry. Ms. Page received her medical technology degree in 1976 from the University of Florida in combination with an A.S. in cardiopulmonary technology.

Eric T. Fung, M.D., Ph.D. joined us in May 2000 as a lead scientist in the newly formed Biomarker Discovery Centers. He was promoted to Vice President and Chief Scientific Officer in June 2006. Prior to joining Vermillion, Dr. Fung was a Howard Hughes sponsored researcher at Stanford University. Dr. Fung has anatomic pathology training from Stanford Medical School and obtained his M.D. and Ph.D. degrees from the Johns Hopkins University

School of Medicine. He graduated with a B.S. with honors from the California Institute of Technology. Dr. Fung also currently holds an Adjunct Assistant Professor position in the Department of Pathology at the Johns Hopkins University School of Medicine.

Qun Zhou has served as Corporate Controller for the Company since February 2007 and was appointed as Interim Chief Financial Officer in November 2007. Prior to joining the Company, Ms. Zhou served as Controller for ViOptix, Inc., a developer and manufacturer of oxygen measuring devices in the biotechnology industry, from May 2005 through February 2007. From April 2000 through May 2005, Ms. Zhou served in several capacities, including Business Unit Controller, with Philips Medical Systems, a global leader in the

medical device and diagnostics industry. Ms. Zhou has over ten years of accounting and corporate finance experience and holds an M.B.A. from Boston College.

Simon C. Shorter, Ph.D. joined us in September 2004 as Vice President of Business Development, Diagnostics Division. Prior to joining the Company, Dr. Shorter held a series of management positions in Research & Development, Sales & Marketing and Business Development at Adeza Biomedical Corporation. Over a 12-year period, Dr. Shorter has developed an in-depth, practical understanding of the clinical laboratory and IVD market segments. He received his Bachelor of Science degree from The King s College, University of London, UK in Biological Sciences, subsequently attending University College London, UK where he completed a master s degree in applied molecular biology and biotechnology. At the University of Oxford, he earned his Ph.D. in cellular biology and immunology of human development followed by a post doctoral research fellowship at the University of California, San Francisco in the immunological basis for the survival of fetus during human placental development.

Stephen T. Lundy joined the Company in May 2007 and serves as Senior Vice President of Sales and Marketing. Mr. Lundy joined Vermillion from GeneOhm, a division of Becton, Dickinson and Company Diagnostics, where he served as Vice President of Sales and Marketing since 2003. At GeneOhm, Mr. Lundy successfully led the commercial launch of several novel molecular diagnostic assays including the first molecular test for Methicillin Resistant Staphylococcus Aureus. From 2002 to 2003, Mr. Lundy served as Vice President of Marketing for Esoterix, Inc., which was acquired by Laboratory Corporation of America, and led the commercial integration and re-branding of the numerous reference labs acquired by Esoterix. Prior to Esoterix, he served as Marketing Director for Molecular Diagnostics and Critical Care Testing at Bayer Diagnostics Corporation.

James L. Rathmann has been President of Falcon Technology Management Corporation and a general partner of Falcon Technology Partners, L.P. since its founding in 1993. Mr. Rathmann has been one of our directors since our inception and became our Executive Chairman in December 2005. Mr. Rathmann serves as a director of several private companies. Prior to joining Falcon Technology in 1993, he was Senior Vice President of Operations at Soft-Switch, Inc. from 1984 to 1993. He received a B.A. in Mathematics from the University of Colorado and an M.S. in Computer Science from the University of Wisconsin.

James S. Burns has been President and Chief Executive Officer of EntreMed, Inc. since June 2004 and a director since September 2004. Mr. Burns became one of our directors in 2005. Mr. Burns was a co-founder and, from 2001 to 2003, served as President and as Executive Vice President of MedPointe, Inc., a specialty pharmaceutical company that develops, markets and sells branded prescription pharmaceuticals. From 2000 to 2001, he served as a founder and Managing Director of MedPointe Capital Partners, a private equity firm that led a leveraged buyout to form MedPointe Pharmaceuticals. Previously, Mr. Burns was a founder, Chairman, President and Chief Executive Officer of Osiris Therapeutics, Inc., a biotech company developing therapeutic stem cell products for the regeneration of damaged or diseased tissue. He has also been Vice Chairman of HealthCare Investment Corporation and a founding General Partner of Healthcare Ventures L.P., a venture capital partnership specializing in forming companies build around new pharmaceutical and biotechnology products; Group President at Becton Dickinson and Company, a multidivisional biomedical products company; and Vice President and Partner at Booz Allen & Hamilton, Inc., a multinational consulting firm. Mr. Burns is Chairman of the Executive Committee of the American Type Culture Collection (ATCC) and serves as a director of Symmetry Medical, Inc. He earned his B.S. and M.S. degrees in biological sciences from the University of Illinois and an M.B.A. from DePaul University.

Rajen K. Dalal is an industry consultant and became one of our directors in 2003. From October 2006, he has served as Chief Executive Officer of Aviir, Inc., a molecular diagnostics company. From 2002 to 2005, he was the President and Chief Executive Officer of Guava Technologies, Inc., a biotechnology company based on mammalian cell profiling and analysis. Prior to joining Guava Technologies, Mr. Dalal was at Chiron Corporation where he was most recently President of its Blood Testing Division. Prior to joining Chiron in 1991, Mr. Dalal was a leader of

McKinsey & Company s pharmaceuticals and technology management groups. Mr. Dalal received a bachelor s degree in Chemistry from St. Xavier s College, the University of Bombay; a

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master s degree in biochemical engineering from the Massachusetts Institute of Technology; and an M.B.A. from the University of Chicago.

John A. Young has been one of our directors since the Company s inception, was our Chairman from 1995 to December 2005 and became our Lead Outside Director in December 2005. Mr. Young was President and Chief Executive Officer of Hewlett-Packard Company from 1978 until his retirement in 1992. He serves as a director of another public life science company, Affymetrix, Inc., and also serves as a director of several private companies. He received a B.S.E.E. from Oregon State University and an M.B.A. from the Stanford Graduate School of Business.

John Hamilton was appointed to our Board of Directors on April 9, 2008. From 1997 until his retirement in 2007, Mr. Hamilton served as Vice President and Chief Financial Offier of Depomed, Inc. Mr. Hamilton began his career in the banking industry, and went on to hold senior financial positions at several biopharmaceutical companies including Glyko, Inc. now BioMarin Pharmaceuticals and Chiron Corporation. He sits on the regional board of directors of the Association of Bioscience Financial Officers, and is past-president of the Treasurers Club of San Francisco. Mr. Hamilton received his M.B.A. from the University of Chicago and his B.A. in International Relations from the University of Pennsylvania.

Michael J. Callaghan was an employee of MDS Capital Corp. from 1992 through 2006 and most recently served as a Managing Director. Mr. Callaghan became one of our directors in 1998. Prior to joining MDS Capital Corp. in 1992, he was active in several general management positions. Mr. Callaghan began his career with Ernst & Young, where he became a Chartered Accountant. Mr. Callaghan is on the board of directors of SXC Health Solutions, Corp. and serves on the audit and compensation committees thereof. Mr. Callaghan received a B. Comm. from McGill University and a M.B.A. from York University.

Kenneth J. Conway has been President of Starfire Ventures, a private biotech venture capital firm, since 2003. He became one of our directors in April 2006. He also serves as a director of several private companies. From 2000 to 2003, he served as Chief Executive Officer at Vitivity, Inc., a wholly-owned subsidiary of Millennium Pharmaceuticals focused on predictive medicine. Prior to founding Vitivity, he was President and Founder of Millennium Predictive Medicine, Inc. from 1997 to 2000. He spent more than 26 years with Chiron Diagnostics Corporation (formerly Ciba Corning), most recently serving as President of the U.S. Group and member of the Office of the President. Mr. Conway has also been the Senior Vice President and General Manager of Immuno Diagnostics, where he led the development and commercialization of the ACS.180, a world-leading system in automated immunodiagnostic testing, and Vice President of several business units at Chiron (Ciba Corning), as well as being Vice President of manufacturing at Corning Medical Division. He received a B.S. in ceramic engineering from Rutgers University and attended the Dartmouth Institute Executive Program at Dartmouth College s Tuck School of Business Administration.

Board of Directors

Classes

The Board of Directors has eight members and is divided into three classes serving staggered terms until 2010.

Class I directors serving until the annual meeting in 2010 are James L. Rathmann, Michael J. Callaghan and Kenneth J. Conway.

Class II directors serving until the annual meeting in 2008 are James S. Burns, Rajen K. Dalal and John A. Young.

Class III directors serving until the annual meeting in 2009 are John Hamilton and Gail S. Page.

Committees

The Board of Directors has the following three committees:

audit;

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compensation; and

nominating and governance.

The Board of Directors has adopted a written charter for each of these committees which are available in the Corporate Governance section on the Company s website, www.vermillion.com.

Audit Committee. The Audit Committee is chaired by John Hamilton and also includes James S. Burns and Michael J. Callaghan each of whom is an independent director as that term is defined under Rule 10A-3(b)(1) of the Exchange Act and as defined under Rule 4200(a)(15) of the NASDAQ Stock Market listing standards. Until she resigned from the Board of Directors on April 8, 2008, Judy Bruner served as the chair of the Audit Committee. The Board of Directors has determined that Mr. Hamilton qualifies as, and during her term as chair of the Audit Committee, Ms. Bruner qualified as, an audit committee financial expert as defined under Item 407(d)(5)(ii) of Regulation S-K. The Audit Committee is responsible for assuring the integrity of our financial controls, audit and reporting functions. It reviews with our management and our independent registered public accounting firm the effectiveness of our financial controls, accounting and reporting practices and procedures. In addition, the Audit Committee reviews the qualifications of our independent registered public accounting firm, makes recommendations to the Board of Directors regarding the selection of our independent registered public accounting firm, and reviews the scope, fees and results of activities related to audit and non-audit services. The Audit Committee held eight meetings during fiscal 2007, all of which had representatives of the independent registered public accounting firm in attendance.

Compensation Committee. The Compensation Committee is chaired by Kenneth J. Conway and also includes Michael J. Callaghan and John A. Young, each of whom is an independent director as defined under Rule 4200(a)(15) of the NASDAQ Stock Market listing standards. The principal responsibility of the Compensation Committee is to administer our stock plans and to set the salaries and incentive compensation, including stock option grants, for our President and Chief Executive Officer and senior executive officers. The Compensation Committee held three meetings during fiscal 2007.

Nominating and Governance Committee. The Nominating and Governance Committee is chaired by Rajen K. Dalal and also includes John A. Young and James L. Rathmann, each of whom is an independent director as defined under Rule 4200(a)(15) of the NASDAQ Stock Market listing standards. The responsibilities of the Nominating and Governance Committee include developing a Board of Directors capable of advising the Company s management in fields related to current or future business directions of the Company, and regularly reviewing issues and developments relating to corporate governance issues and formulating and recommending corporate governance standards to the Board of Directors. The Nominating and Governance Committee held three meetings during fiscal 2007.

The Nominating and Governance Committee assists the Board of Directors in identifying qualified persons to serve as directors, evaluates incumbent directors before recommending re-nomination, and recommends all approved candidates to the Board of Directors for appointment or nomination, including the slate of director nominees to be proposed by the Board of Directors to our stockholders for election or any director nominees to be elected or appointed by the Board of Directors to fill interim director vacancies on the Board of Directors. The Nominating and Governance Committee selects as candidates for appointment or nomination individuals of high personal and professional integrity and ability who can contribute to the Board of Directors effectiveness in serving the interests of our stockholders. In addition, the Nominating and Governance Committee appoints directors to committees of the Board of Directors and suggests rotation for chairpersons of committees of the Board of Directors as it deems desirable from time to time.

The Nominating and Governance Committee also evaluates and recommends to the Board of Directors the termination of membership of individual directors in accordance with the Board of Directors corporate governance principles, for cause or other appropriate reasons (including, without limitation, as a result of changes in directors employment or employment status). We have in the past used, and the Nominating and Governance Committee intends in the future to use, an executive recruiting firm to assist in the identification and evaluation of qualified candidates to join the Board of Directors; for these services, the executive recruiting firm is paid a fee. Director nominees are expected to have considerable management experience that

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would be relevant to our current and expected future business directions, a track record of accomplishment and a commitment to ethical business practices.

The Board of Directors believes that the Nominating and Governance Committee can identify appropriate candidates to our Board of Directors. Stockholders may nominate candidates for director in accordance with the advance notice and other procedures contained in our Bylaws.

Board Meetings

The Board of Directors held a total of six meetings during the fiscal year ended December 31, 2007. Throughout fiscal year 2007, each director attended at least 75% of the aggregate of all meetings of the Board of Directors and the committees of the Board of Directors upon which such director served.

We encourage each of our directors to attend each annual meeting of the Company s stockholders whenever attendance does not unreasonably conflict with the director s other business and personal commitments. Four directors attended the 2007 annual meeting of stockholders.

Stockholders Communications

Stockholders of the Company may communicate directly with the Board of Directors in writing, addressed to:

Board of Directors
c/o Corporate Secretary
Vermillion, Inc.
6611 Dumbarton Circle
Fremont, California 94555 U.S.A.

The Corporate Secretary will review each stockholder communication. The Corporate Secretary will forward to the entire Board of Directors (or to members of a committee thereof, if the communication relates to a subject matter clearly within that committee s area of responsibility) each communication that (a) relates to the Company s business or governance, (b) is not offensive and is legible in form and reasonably understandable in content, and (c) does not merely relate to a personal grievance against the Company or a team member or to further a personal interest not shared by the other stockholders generally.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves as a member of the board of directors or compensation committee of any entity that has one or more of its executive officers serving as a member of our Board of Directors or Compensation Committee.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our executive officers and directors, and persons who own more than 10% of a registered class of our equity securities, to file reports of ownership and changes in ownership with the SEC and the National Association of Securities Dealers, Inc. Executive officers, directors and such stockholders are required by SEC regulation to furnish us with copies of all Section 16(a) forms they file. As a practical matter, we assist our directors and officers by completing and filing Section 16 reports on their behalf. One transaction not timely reported in 2006 involving Eric Fung was filed on July 27, 2007. With respect to each of the following executives and directors, one transaction was not timely reported in 2007: Gail Page, William Sullivan, Debra Young, Steve Lundy,

Judy Bruner, James Burns, Michael Callaghan, Kenneth Conway, Rajen Dalal, James Rathmann and John Young.

Executive Compensation

This section describes the compensation program for our named executive officers, referred to herein as NEOs. In particular, this section focuses on our 2007 compensation program and related decisions.

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Compensation Committee Report

Vermillion s executive compensation program for our NEOs is administered by the Compensation Committee of the Board of Directors. The Committee has reviewed the Compensation Discussion and Analysis and discussed that analysis with management. Based on its review and discussions with management, the Committee recommended to the Board that the Compensation Discussion and Analysis be included in this prospectus.

This report is provided by the following independent directors, who comprise the Committee:

Kenneth J. Conway, Chairman
Michael J. Callaghan
John A. Young

Executive Officers in 2007

All of the executive officers named in the management table above served in such capacities during 2007. In addition, William C. Sullivan served as Vice President, Corporate Operations until his resignation in November 2007 and Debra A. Young served as Vice President of Finance and Chief Financial Officer until her resignation in November 2007. Set forth below are brief descriptions of Mr. Sullivan s and Ms. Young s respective business experience.

William C. Sullivan, age 60, joined us in February 2004, as Vice President, Diagnostics Operations and in January 2006 he assumed the position of Vice President, Corporate Operations. Mr. Sullivan has spent over 25 years in the diagnostics industry, covering all aspects of clinical laboratory operations and diagnostic manufacturing, including quality systems, product development, technical transfer, customer support and operations management. From 2001 until February 2004, Mr. Sullivan was a medical device consultant. From 1999 to 2001, he was Vice President, Diagnostic Manufacturing at Visible Genetics, Inc. and from 1998 to 1999 he was Vice President, Operations at Nichols Institute Diagnostics (a subsidiary of Quest). Prior to joining Nichols, Mr. Sullivan was Vice President, Operations at Dianet Med from 1997 to 1998. From 1989 to 1997, he served at Laboratory Corporation of America (or its predecessor Roche Biomedical) in a succession of positions covering manufacturing operations. Mr. Sullivan received a B.A. degree from the College of the Holy Cross and subsequently attended graduate school at the University of Pennsylvania. He is certified as a Specialist in Immunology by the American Society for Clinical Pathology. Mr. Sullivan resigned from the Company on November 2, 2007.

Debra A. Young, age 42, joined the Company as its Chief Financial Officer on November 2, 2006 from ViOptix, Inc., where she served as CFO since 2004. Prior to her service at ViOptix, Ms. Young was Chief Financial Officer of the Nuclear Medicine Division of Philips Electronics, a $500 million business. Before her promotion to Chief Financial Officer, she served as Vice President Controller for the Nuclear Medicine Division of Philips Electronics, formerly ADAC Laboratories, Inc. Ms. Young has also held positions at Somnus Medical Technologies, Inc. and Ernst & Young LLP. On November 1, 2007, Ms. Young resigned from the Company.

Compensation Philosophy and Objectives

The goal of the Company s compensation program for our NEOs is the same for the overall Company to foster compensation policies and practices that attract, engage and motivate high caliber talent by offering a competitive pay and benefits program. The Company is committed to a total compensation philosophy and structure that provides flexibility in responding to market factors, that rewards and recognizes superior performance, that attracts highly skilled, experienced and capable employees, and that is fair and fiscally responsible.

The Committee has designed and implemented compensation programs for our NEOs to reward them for their leadership excellence, for sustaining our financial and operating performance, to align their interests with those of our stockholders and to encourage them to remain with the Company for long and productive careers.

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Most of our compensation elements simultaneously fulfill one or more performance, alignment or retention objectives.

Method for Determining Amounts

The Compensation Committee annually reviews and approves for the NEOs their (1) annual base salaries, (2) annual incentive bonuses, including specific goals and percentages, (3) equity compensation and (4) employee benefit programs.

In making compensation decisions, the Committee considers the following:

Company Performance. The Committee reviews the Company s operational performance and the achievement of its pre-established goals for the fiscal year.

Executives Performance. The Committee evaluates an executive s performance during the year including leadership qualities, responsibilities, and contribution to the Company s performance. The relative importance of each factor varies among our NEOs depending on their positions and the particular operations or functions for which they are responsible.

Compensation Consultant and Survey. During 2007, the Committee relied on general executive compensation information received from our Human Resources Consultant. The Committee uses formal and informal compensation surveys to benchmark the compensation of our NEOs against the compensation levels for executive officers of companies of similar size and market segments.

Recommendations of the CEO. The Committee considers the recommendations of our CEO, who assesses the performance of the other NEOs and adjustments to their base salary and other elements of compensation.

Elements of Compensation

The compensation of each NEO consists primarily of four major components:

- base salary;
- annual bonus;
- equity incentive awards; and
- employee benefits programs:
  - severance and change in control benefits, and
  - perquisites and other benefits.

Base salaries and annual bonuses are designed to reward annual achievements and be commensurate with the executives scope of responsibilities, demonstrated leadership abilities and management experience and effectiveness. Other elements of compensation focus on motivating and challenging the executives to achieve superior, longer-term, sustained results.

Base Salaries. Overall average base salaries are targeted at the 50th percentile of the companies with which we compete for labor talent. The Committee normally adjusts the base salaries for the NEOs in April of each calendar

year.

The Company entered into an employment agreement with our CEO, Ms. Page, on December 31, 2005, the date Ms. Page became the Company s President and CEO. The agreement sets forth the terms and conditions of her employment with, and the compensation she is entitled to receive from, the Company in connection with her service as President and CEO. Under her employment agreement, Ms. Page is paid a starting annual base salary of $350,000, as adjusted by the Committee from time to time.

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Each year, the Committee meets and discusses salary increases. Salary increases are generally effective in April of each year. In April 2007, the Committee decided to increase annual base salaries for our NEOs in accordance with the table below:

Annual Base Salaries
(effective April of each year)

Executive	2007	2006
Gail S. Page President and Chief Executive Officer	$ 364,000	$ 350,000
Eric T. Fung Vice President, Chief Scientific Officer	$ 220,000	$ 200,000
Simon C. Shorter Vice President, Corporate Business Development	$ 204,000	$ 200,000
William C. Sullivan Former Vice President, Corporate Operations	$ 224,500	$ 218,000
Debra A. Young Former Vice President, Chief Financial Officer	$ 225,500	$ 220,000

Annual Bonuses. Consistent with our objective to tie a significant portion of the NEOs total compensation to the Company s performance, the Compensation Committee approves specific corporate goals for incentive bonuses. The bonus plan is generally structured as follows, with changes made from year to year to reflect changing business needs and competitive circumstances:

At the beginning of each fiscal year, the Committee establishes performance measures and goals, which typically include milestones and targets. The Committee typically assigns a weight value based upon the overall goals in order to ensure a balanced approach to the various factors applied to determining bonus amounts.

Also at the beginning of each fiscal year, the Committee establishes payout targets for each NEO. The Committee generally establishes the individual payout targets for each NEO based on the executive s position, level of responsibility and a review of the compensation information of other companies. Under the terms of our CEO s employment agreement, Ms. Page is eligible for a discretionary bonus of up to 50% of her annual base salary, based on meeting objectives to be established by the Committee.

After the close of each fiscal year, the Committee assesses the performance of each NEO against the pre-established metrics for the Company. Each NEO receives a bonus based on his or her individual payout target and the Company s performance relative to the specific performance goal.

The Company s incentive bonuses are measured against corporate goals which generally include Company targets, product development and management team building. For fiscal year 2007, the Company s incentive bonuses were measured against the following goals: (1) financial targets, (2) submissions of FDA applications, (3) product launch into the marketplace, (4) management team building and (5) satisfaction of Medicare and other reimbursement standards.

The actual bonus payments are reported in the Non-Equity Incentive Plan Compensation column of the Summary Compensation Table below.

Equity Incentive Compensation. The equity component of our executive compensation program is designed to fulfill our performance alignment and retention objectives. The Company maintains the 2000 Employee Stock Purchase Plan. Options granted under this plan provide participants with the right to purchase shares of our common stock at a predetermined exercise price. The Committee may grant options that are intended to qualify as incentive stock options or nonqualified stock options. The NEOs receive incentive stock option grants at the time of hire; annually thereafter, they receive non-qualified stock options, as recommended by the Committee.

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Stock option grants are based on individual performance and contributions toward the achievement of our business objectives, as well as overall Company performance. The number of underlying shares that may be purchased pursuant to the stock options granted to each NEO varies based on the executive s position and responsibilities. Since the CEO has a greater ability to affect strategy and performance, Ms. Page is provided with greater equity incentive compensation. In addition, amounts are determined by comparing the level of equity-based compensation that is awarded to executives of competing companies.

The Company generally grants stock options to our NEOs each year. On April 26, 2007, we granted stock options to our NEOs, which vest ratably on a monthly basis over a four-year period commencing on the date of grant and expiring ten years from the date of grant, or, in the case of incentive stock options, such shorter term as may be provided in the applicable option agreement. The stock options are granted with an exercise price equal to the closing price of our common stock on the date of the grant. Accordingly, the NEOs received options to purchase shares in the following amounts: 36,000 shares for Ms. Page, 24,000 for Dr. Fung and 4,500 for Dr. Shorter.

Employee Benefits Programs

Our employee benefits program primarily consists of two components: (1) severance and change in control arrangements and (2) perquisites and other benefits.

Severance and Change in Control Arrangements.

Chief Executive Officer. Ms. Page may terminate her employment at any time by resigning. The Company may also terminate Ms. Page s employment for cause (as defined in the employment agreement). If Ms. Page resigns or the Company terminates her employment for cause, she will be entitled to her accrued compensation and benefits only. If the Company terminates Ms. Page s employment without cause, subject to her executing a release of claims in favor of the company, Ms. Page will be entitled to receive continuing severance payments at a rate equal to her base salary for a period of 12 months, immediate 24-month accelerated vesting of her stock options and continued Company-paid health and dental benefits until the earlier of 12 months following the date of termination or resignation or the date Ms. Page obtains employment with comparable benefits. Ms. Page s employment agreement also provides for 12 months of non-competition and 12 months of non-solicitation of Company employees in the event that her employment is terminated other than for cause by the Company. Furthermore, if Ms. Page is terminated for reasons other than for cause within 12 months of a change of control then, in addition to the severance payments described above, Ms. Page will receive immediate accelerated vesting of all of her outstanding stock options.

Other Named Executive Officers. Other than the CEO and Ms. Young, all NEOs are employees at will, without a written employment agreement or severance arrangements. Accordingly, upon a termination for cause, without cause, in connection with a change in control or any other reason, the other NEOs will receive their accrued salary, earned bonus, unreimbursed expenses and other entitlements to the date of termination, unless the Committee decides at that time to provide additional severance payments.

We entered into an employment agreement, dated November 6, 2006, with Debra A. Young, Vice President and Chief Financial Officer. Effective November 1, 2007, Ms. Young resigned as our Vice President and Chief Financial Officer. Pursuant to the terms of her employment agreement, Ms. Young will receive severance payments in an amount equal to $112,750, to be paid in semi-monthly installments of $9,400 over a six-month period, and Company-paid COBRA coverage.

Effective November 2, 2007, Mr. Sullivan resigned as our Vice President, Corporate Operations. As approved by our President and CEO and in accordance with Company policy, Mr. Sullivan received a lump sum severance payment of

$37,417 on November 2, 2007 and Company-paid COBRA coverage.

Perquisites and Other Benefits. Our NEOs participate in the Company s standard employee benefits programs including medical, dental, life, short and long-term disability insurance and flexible spending accounts. In addition, we offer a health expense reimbursement program to our NEOs and our CEO receives a monthly cash car allowance.

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Interrelationship of Elements

The Compensation Committee does not adhere to rigid formulas when determining the amount and mix of compensation elements. Compensation elements for each executive are reviewed in a manner that optimizes the executive s contribution to the Company and reflects an evaluation of the compensation paid by our competitors. The Committee reviews both current pay and the opportunity for future compensation to achieve an appropriate mix between equity incentive awards and cash payments in order to meet our objectives. However, prior stock compensation gains are not considered in setting future compensation levels. The mix of compensation elements is designed to reward recent results and motivate long-term performance through a combination of cash and equity incentive awards.

Impact of Tax and Accounting

Section 162(m) of the Internal Revenue Code, referred to herein as the Code, generally prohibits any publicly-held company from taking a federal income tax deduction for compensation paid in excess of $1,000,000 in any taxable year to the CEO and the next four highest compensated officers. Exceptions are made for qualified performance-based compensation. It is the Committee s policy to maximize the effectiveness of our executive compensation in this regard.

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

Summary Compensation Table

The information included in the Summary Compensation Table below reflects the compensation earned by our NEOs in 2007.

e and Principal Position (a)	Year (b)	Salary ($) (c)	Bonus ($) (d)	Stock Awards ($) (e)	Option Awards ($)(5) (f)	Non-Equity Incentive Plan Compensation (g)	Change in Pension Value and Non-qualified Deferred Compensation Earnings(6) ($) (h)	All Other Compensation ($) (i)	Total ($) (j)
S. Page	2007	360,958			309,009	108,150		30,508(1)	808,625

dent, CEO & Director	2006	350,000	50,000	311,724	140,000	27,113	878,837
T. Fung	2007	215,458		76,005	38,700	5,273(2)	335,436
& CSO	2006	197,583	50,000	49,990	32,000		329,573
on C. Shorter	2007	203,458		63,526	30,450	2,229(2)	299,663
Corporate Business elopment	2006	194,387	50,000	76,534	32,000		352,921
iam C. Sullivan	2007	187,549		29,793	33,431	83,837(3)	334,610
ner VP, Corporate Operations	2006	214,600	50,000	21,622	34,880		321,122
ra A. Young	2007	186,919		30,198		128,835(4)	345,952
ner CFO & VP of Finance	2006	35,833		5,843	7,300		49,009

(1) Ms. Page s car allowance.

(2) Health expense reimbursement program.

(3) Mr. Sullivan Total includes paid time off payout of $31,083, severance of $37,417 and COBRA of $12,000; and $3,337 under the Company s health expense reimbursement program.

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(4) Ms. Young Total includes paid time off payout of $8,240, severance of $112,750, to be paid $9,400 semi-monthly until April 2008 and COBRA of $7,800.

(5) The amounts under Option Awards reflect the dollar amount recognized for financial statement reporting purposes for the fiscal year ended December 31, 2007, in accordance with FAS 123(R) of awards and includes amounts from awards granted in and prior to 2006. The assumptions and method for valuing stock options are set forth in the footnotes to the December 31, 2007 Form 10-K.

(6) During 2006, the Company made performance-based awards to the NEOs that were previously reported under the bonus column and are currently disclosed in the non-equity incentive plan compensation column.

Outstanding Equity Awards at December 31, 2007

The following table provides information with respect to the outstanding stock options held by each NEO as of December 31, 2007.

Name (a)	Number of Securities Underlying Unexercised Options (#) Exercisable (b)	Number of Securities Underlying Unexercised Options (#) Unexerciseable (c)	Option Exercise Price ($) (d)	Option Expiration Date(1) (e)
Gail S. Page	6,000	30,000	14.70	4/25/2017
	9,375	15,625	12.00	6/6/2016
	20,000	20,000	9.00	12/19/2015
	12,500		21.90	8/4/2015
	10,000		29.60	2/8/2015
	25,000		92.70	1/7/2014
Eric T. Fung	4,000	20,000	14.70	4/25/2017
	2,812	4,688	12.00	6/6/2016
	1,000		9.00	12/19/2015
	2,000		21.90	8/4/2015
	1,600	1,400	18.00	4/5/2015
	650	350	37.00	9/15/2014
	2,500		74.70	6/2/2014
	2,000		86.40	3/31/2014
	1,000		96.00	6/4/2013
	1,500		43.50	2/12/2013
	500		45.30	6/5/2012
	500		56.00	11/7/2011
	600		63.80	6/6/2011
	430		34.88	5/2/2010
Simon C. Shorter	750	3,750	14.70	4/25/2017
	2,812	4,688	12.00	6/6/2016
	1,000		9.00	12/19/2015

1,500		21.90	8/4/2015
800	700	18.00	4/5/2015
4,875	2,625	36.80	9/19/2014

(1) Options vest ratably on a monthly basis over a 48-month period, commencing on the date of the grant. Each option expires 10 years after the date of the grant or, in the case of an incentive stock option, such shorter term as may be provided in the applicable option agreement.

Stock Option Exercises

During 2007, the NEOs did not exercise any stock options.

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Director Compensation

The Compensation Committee annually reviews and recommends to the Board for its approval the compensation, including cash, equity or other compensation, for members of the Board for their service as (1) a member of the Board, (2) a member of any committee of the Board, (3) a chair of any committee of the Board and (4) the Executive Chairman of the Board. Pursuant to our compensation program for outside directors (i.e., non-employee directors), each new outside director shall be granted, on the date of the first meeting of the Board he or she attends, an option to purchase 2,500 shares of common stock, vesting monthly over a 24-month period. Each continuing outside director shall be granted an annual option, on the date of each annual meeting of stockholders, to purchase 1,250 shares of our common stock, vesting monthly over a 12-month period. In addition, each outside director also receives, at the outside director s choice, either: (1) payment in the amount of $5,000 paid quarterly as long as such person continues to act as a director or (2) an additional option to purchase a number of additional whole shares of common stock, which are determined by the Company to have a Black-Scholes valuation on the date of grant equal to approximately $20,000. Also, on the date of each annual meeting of stockholders, the Executive Chairman of the Board will receive an annual grant of an option to purchase 1,000 shares of our common stock, vesting monthly over a 12-month period.

During fiscal 2005, the Board also created a new director position entitled Executive Chairman in order to assist in the transition of our management team. James L. Rathmann was appointed to serve in this position and received a one-time stock option grant for 15,000 shares, which vests monthly over 24 months. The Chairman of the Audit Committee receives an additional option to purchase 500 shares of our common stock, vesting monthly over a 12-month period, and the Chairmen of the Compensation Committee and the Nominating and Governance Committee, if different from the Executive Chairman of the Board, each receive an additional option to purchase 250 shares of our common stock, vesting monthly over a 12-month period.

The Company reimburses its directors who are not officers or employees for expenses incurred in attending any Board or committee meeting. Directors who are also the Company s officers or employees are not compensated for attending Board or committee meetings.

Employee directors who meet the eligibility requirements may participate in the Company s 2000 Employee Stock Purchase Plan.

2007 Director Compensation Table

The information included in the Director Compensation Table below reflects the compensation earned by our directors in 2007.

Name	Fees Earned or Paid in Cash ($)(1)	Stock Awards	Option Awards(2)	Non-Equity Incentive Plan Compensation ($)	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation ($)	Total ($)

Judy Bruner	$ 15,000	$ 27,806	$ 42,806
John A. Young	$ 15,000	$ 15,801	$ 30,801
Michael J. Callaghan	$ 15,000	$ 12,054	$ 27,054
Rajen K. Dalal	$ 15,000	$ 13,640	$ 28,640
James S. Burns	$ 15,000	$ 16,588	$ 31,588
James L. Rathmann	$ 15,000	$ 56,436	$ 71,436
Kenneth L. Conway	$ 15,000	$ 30,843	$ 45,843

(1) Fees were paid for only three quarters in 2007 pursuant to a Board resolution. All directors except for Judy Bruner elected to receive their fees in 2007 in the form of options rather than cash.

(2) The amounts under Option Awards reflect the dollar amount recognized for financial statement reporting purposes for the fiscal year ended December 31, 2007, in accordance with FAS 123(R) of awards and include amounts from awards granted in and prior to 2006. The assumptions and method for valuing stock options are set forth in the footnotes to the financial statements in our Annual Report of Form 10-K for the year ended December 31, 2007. The aggregate number of options held by each director as of December 31, 2007 is as follows: Judy Bruner, 16,100; John A. Young, 29,960; Michael J. Callaghan, 16,470; Rajen K. Dalal, 14,700; James S. Burns, 6,600; James L. Rathmann, 36,830; and Kenneth J. Conway, 8,850.

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SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information known to the Company regarding beneficial ownership of its common stock on a post reverse split basis as of March 31, 2008, by (i) each person known by the Company to be the beneficial owner of five percent or more of the outstanding shares of the common stock, (ii) each director of the Company, (iii) each Named Executive Officer in 2007 that is still employed by the Company and (iv) all executive officers and directors of the Company as a group. All shares are subject to the named person s sole voting and investment power except where otherwise indicated.

Beneficial ownership is determined in accordance with the rules of the SEC. Shares of common stock, which are issued and outstanding, are deemed to be beneficially owned by any person who has or shares voting or investment power with respect to such shares. Shares of common stock which are issuable upon exercise of options or warrants are deemed to be issued and outstanding and beneficially owned by any person who has or shares voting or investment power over such shares only if the options or warrants in question are exercisable within 60 days of March 31, 2008, and, in any event, solely for purposes of calculating that person s percentage ownership of the Company s common stock (and not for purposes of calculating the percentage ownership of any other person).

The number of shares of common stock deemed outstanding and used in the denominator for determining percentage ownership for each person equals (i) 6,380,166 shares of common stock outstanding as of March 31, 2008, plus (ii) such number of shares of common stock as are issuable pursuant to options, warrants or convertible securities held by that person (and excluding options held by other persons) which may be exercised within 60 days of March 31, 2008.

Name and Address of Beneficial Owner	Number of Common Stock Shares Beneficially Owned	Percentage of Outstanding Shares Beneficially Owned
Beneficial Owners 5% or more:		
Falcon Technology Partners, L.P.(1)(2) 102 Atlee Circle Berwyn, PA 19312	402,144	6.30%
Highbridge International LLC(1)(3) c/o Highbridge Capital Management LLC 9 West 57th Street, 27th Floor New York, NY 10019	547,619	8.58%
Ironwood Investment Management(1) 21 Custom House Street, Suite 240 Boston, MA 02110	685,881	10.75%
OppenheimerFunds, Inc.(1)(4) 6803 South Tucson Way Centennial, CO 80112	621,082	9.73%
Phronesis Partners, L.P.(1)(5)	1,052,029	15.54%

180 E. Broad Street #1704 Columbus, OH 43215		
Quest Diagnostics Incorporated(1)(6) 1290 Wall Street West Lyndhurst, NJ 07071	1,271,071	18.72%

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Name and Address of Beneficial Owner	Number of Common Stock Shares Beneficially Owned	Percentage of Outstanding Shares Beneficially Owned
Directors and Named Executive Officers:		
James S. Burns(7) Entremed, Inc. 9640 Medical Center Drive Rockville, MD 20850	9,391	*
Michael J. Callaghan(8) 1770 Green Street, Apt. 502 San Francisco, CA 94123	17,661	*
Kenneth J. Conway(9) Starfire Venture 15 Eagles Nest Scituate, MA 02066	8,500	*
Rajen K. Dalal(10) Avir, Inc. 2463 Faber Place Palo Alto, CA 94303	14,150	*
John Hamilton(11) 540 Liberty Street San Francisco, CA 94114		*
James L. Rathmann(1)(12) Falcon Technology Partners 102 Atlee Circle Berwyn, PA 19312	475,342	7.41%
John A. Young(13) Page Mill Investors 167 S. San Antonio Road, Suite 7 Los Altos, CA 94022-3055	43,395	*
Eric T. Fung, M.D., Ph.D.(14)	26,459	*
Stephen T. Lundy(15)	9,999	*
Gail S. Page(16)	96,271	1.49%
Simon C. Shorter(17)	14,484	*
Qun Zhou(18)	2,023	*
All Directors and Named Executive Officers as a Group (12 persons)	717,675	10.81%

* Less than 1%.

(1) Based on filings by such owner with the SEC and/or a selling stockholder questionnaire delivered to us by such owner on or about August 29, 2007.

(2) Excludes 142,857 shares issuable upon the exercise of warrants which are not exercisable within 60 days of March 31, 2008 because conversion is not permitted if the holder and its affiliates would beneficially own in

aggregate more than 4.99% of our outstanding common stock following such conversion. James L. Rathmann, the Executive Chairman of our Board of Directors, is the general partner of Falcon Technology Partners, L.P. and has sole voting and investment power over the shares and warrants held by Falcon Technology Partners, L.P.

(3) Excludes 438,095 shares issuable upon the exercise of warrants and 555,000 shares issuable upon conversion of 7.0% Notes which are not exercisable within 60 days of March 31, 2008 because, in each case, conversion is not permitted if the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion. Highbridge Capital Management, LLC is the trading manager of Highbridge International LLC and has voting control and investment discretion over the securities held by Highbridge International LLC. Glenn Dubin and Henry Swieca control Highbridge Capital Management, LLC and have voting control and investment discretion over the securities held by ighbridge International LLC. Each of Highbridge Capital Management, LLC, Glenn Dubin and Henry Swieca disclaims beneficial ownership of the securities held by Highbridge International LLC.

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(4) Includes (i) 990 shares owned by Baring Global Opportunities Fund, (ii) 4,090 shares owned by OFI Institutional Global Opportunities Fund, (iii) 566,552 shares owned by Oppenheimer Global Opportunities Fund, (iv) 3,270 shares owned by Russell Alpha Global Opportunities Fund and (v) 46,180 shares owned by Russell Global Opportunities Fund. Excludes (i) 632 shares issuable upon the exercise of warrants owned by Baring Global Opportunity Fund, (ii) 2,504 shares issuable upon the exercise of warrants owned by OFI Institutional Global Opportunities Fund, (iii) 347,480 shares issuable upon the exercise of warrants owned by Oppenheimer Global Opportunities Fund, (iv) 2,008 shares issuable upon the exercise of warrants owned by Russell Alpha Global Opportunities Fund and (v) 28,328 shares issuable upon the exercise of warrants owned by Russell Global Opportunities Fund, in each case, which are not exercisable within 60 days of March 31, 2008 because conversion is not permitted if the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion. OppenheimerFunds, Inc. is the investment advisor to Baring Global Opportunities Fund, OFI Institutional Global Opportunities Fund and Oppenheimer Global Opportunities Fund and sub-advisor to Russell Alpha Global Opportunities Fund and Russell Global Opportunities Fund (these five funds collectively referred to herein as the Oppenheimer Funds). Frank Jennings, Senior Vice President of Investments of OppenheimerFunds, Inc., exercises voting and investment authority over the shares and warrants owned by the Oppenheimer Funds. Mr. Jennings disclaims beneficial ownership of such shares and warrants.

(5) Includes 389,542 shares issuable upon the exercise of warrants which are exercisable within 60 days of March 31, 2008. James E. Wiggins is the general partner of Phronesis Partners, L.P. and exercises sole voting and investment control over the shares and warrants owned by Phronesis Partners, L.P.

(6) Includes 410,476 shares issuable pursuant to warrants exercisable within 60 days of March 31, 2008. Quest Diagnostics Incorporated is a publicly-held company. Quest Diagnostics Incorporated s executive officers are responsible for running the business of the company and thus, exercise voting and investment control over the shares and warrants owned by Quest Diagnostics Incorporated.

(7) Includes 9,391 shares issuable upon exercise of options exercisable within 60 days of March 31, 2008.

(8) Includes 15,961 shares issuable upon exercise of options exercisable within 60 days of March 31, 2008. Until January 2007, Mr. Callaghan was a Managing Director of MDS Capital Corp. Mr. Callaghan is party to a Declaration of Trust Agreement with MDS Capital Corp. pursuant to which he agreed that he has no rights or entitlements with respect to any shares of our common stock or options exercisable for shares of our common stock which were granted to him while he was employed by MDS Capital Corp. Mr. Callaghan disclaims beneficial ownership of all shares and options.

(9) Includes 8,300 shares issuable upon exercise of options exercisable within 60 days of March 31, 2008.

(10) Includes 14,150 shares issuable upon exercise of options exercisable within 60 days of March 31, 2008.

(11) Excludes 2,500 shares issuable upon exercise of options not exercisable within 60 days of March 31, 2008. Mr. Hamilton was appointed to the Board of Directors on April 9, 2008.

(12) Includes (i) 36,155 shares issuable upon exercise of options exercisable within 60 days of March 31, 2008 and (ii) 402,144 shares owned by Falcon Technology Partners, L.P. Excludes 142,857 shares owned by Falcon Technology Partners issuable upon the exercise of warrants which are not exercisable within 60 days of March 31, 2008 because conversion is not permitted if the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion. James L. Rathmann

is the general partner of Falcon Technology Partners, L.P. and has sole voting and investment power over the shares and warrants.

(13) Includes 13,944 shares held in family trusts and 29,541 shares issuable upon exercise of options exercisable within 60 days of March 31, 2008. Mr. Young and his spouse are joint trustees of the family trusts and share voting and investment control over the shares held in such trusts.

(14) Includes 24,699 shares issuable upon exercise of options exercisable within 60 days of March 31, 2008.

(15) Includes 9,999 shares issuable upon exercise of options exercisable within 60 days of March 31, 2008.

(16) Includes 93,389 shares issuable upon exercise of options exercisable within 60 days of March 31, 2008.

(17) Includes 13,734 shares issuable upon exercise of options exercisable within 60 days of March 31, 2008.

(18) Includes 1,773 shares issuable upon exercise of options exercisable within 60 days of March 31, 2008.

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SELLING STOCKHOLDERS

We are registering for resale certain shares of our common stock. The term selling stockholder includes the stockholders listed below and their transferees, pledgees, donees or other successors. Information concerning the selling stockholders may change after the date of this prospectus and changed information will be presented in a supplement to this prospectus if and when required.

The table below shows the number of shares owned by the selling stockholders as of March 31, 2008 based upon information they have provided to us on or about August 29, 2007 or April 14, 2008, and any subsequent updates of such information, as well as public filings. Beneficial ownership is determined in accordance with the rules of the SEC. Shares of common stock, which are issued and outstanding, are deemed to be beneficially owned by any person who has or shares voting or investment power with respect to such shares. Shares of common stock which are issuable upon exercise of options or warrants are deemed to be issued and outstanding and beneficially owned by any person who has or shares voting or investment power over such shares only if the options or warrants in question are exercisable within 60 days of March 31, 2008, and, in any event, solely for purposes of calculating that person s percentage ownership of the Company s common stock (and not for purposes of calculating the percentage ownership of any other person).

We cannot estimate the number of shares the selling stockholders will hold after completion of this offering because they may sell all or a portion of the shares and there are currently no agreements, arrangements or understandings with respect to the number of shares to be sold by them. We have assumed for purposes of this table that none of the shares offered by this prospectus will be held by the selling stockholders after the completion of this offering. This information is based solely on information provided by or on behalf of the selling stockholders set forth below, and we have not independently verified the information. We may amend or supplement this prospectus from time to time to update the disclosure set forth in it.

Except as disclosed below and under Certain Relationships and Related Transactions included elsewhere in this prospectus, to our knowledge, none of the selling stockholders has held any position or office or had any other material relationship with us or any of our predecessors or affiliates within the past three years other than as a result of the ownership of our securities.

Certain of the selling stockholders listed in the table below acquired the shares of our common stock and the warrants to which this prospectus relates in a private placement which closed on August 29, 2007. In the private placement, we issued 2,451,309 shares of our common stock and warrants to purchase an additional 1,961,047 shares of our common stock. We also issued 92,100 warrants to purchase shares of our common stock to Oppenheimer & Co. Inc. as partial payment for its services in the private placement pursuant to a placement agent agreement dated March 28, 2007. Pursuant to such agreement, Oppenheimer & Co. Inc. also received a fee of $1,200,000 for its services as placement agent. In connection with our issuance of the 7.0% Notes, Oppenheimer & Co. Inc. received $275,000 in financial advisory fees and two warrants to purchase 10,000 shares of our common stock each (one warrant was issued in August 2006 and one warrant was issued in November 2006) pursuant to a letter agreement with the Company dated August 3, 2006. In addition, pursuant to an engagement letter dated August 3, 2006, Oppenheimer & Co. Inc. rendered a fairness opinion in connection with the Instrument Business Sale in November 2006 and received $250,000 as compensation for such services. Subsequently, Oppenheimer & Co. Inc. transferred 11,000 of the warrants it received in August 2006 and November 2006 and 53,405 of the warrants it received in connection with the private placement in August 2007 to certain of its employees. Jeffrey Cohen, Frank Kee Colen, Christopher Hagar, Chris Hieb, James Irvine, Jason Janosz, Andrew Kaminsky, Steven Krasner, Edward Newman, Michael O Hare, Serena Puerta, Stanley Stern, Henry Williams, Rida Wong and Sun Yung, each of whom is a selling stockholder, are current or former

employees of Oppenheimer & Co. Inc. James L. Rathmann, the Executive Chairman of the Board of Directors, is the general partner of Falcon Technology Partners, L.P., a selling stockholder.

As part of the private placement, we entered into a securities purchase agreement with the purchasers pursuant to which we granted the purchasers registration rights with respect to the shares of common stock issued in the private placement and the shares of our common stock underlying the warrants issued in the private placement. Pursuant to such registration rights, the shares of common stock issued in the private

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placement and the shares of our common stock underlying the warrants issued in the private placement are being registered hereunder except for (i) 238,095 shares and 190,476 shares underlying the warrants issued to Quest in such private placement, (ii) 15,345 shares underlying warrants held by certain employees of Oppenheimer & Co. Inc. who are not exercising their registration rights with respect to such shares and (iii) 138,843, 9,005 and 6,940 shares of our common stock which were purchased in the private placement by Fort Mason Master, L.P., Fort Mason Partners, L.P. and Rockmore Investment Master Fund Ltd., respectively, and subsequently sold by such entities under the initial registration statement that was declared effective on December 13, 2007 prior to the post-effective amendment to such registration statement of which this prospectus is a part.

We are also registering up to 317,642 shares of our common stock, including 9,000 shares of our common stock issuable upon the exercise of warrants, all of which are being offered for resale for the accounts of the selling stockholders. Some of these shares are being registered pursuant to piggy back registration rights that we granted to certain of the selling stockholders. The shares being registered, which were acquired from us in various transactions, are comprised of the following:

Warrants to purchase 9,000 shares of our common stock issued to Oppenheimer & Co. Inc. as partial payment for their services in connection with our issuance of the 7.0% Notes in November 2006.

308,642 shares of common stock issued to Bio-Rad in connection with the Instrument Business Sale in November 2006.

Name and Address of Beneficial Owner	Total Shares Beneficially Owned Before Offering	Percentage Beneficially Owned Before Offering(1)	Number of Shares Offered (Excluding Shares Issuable Upon Exercise of Warrants)	Number of Shares Offered that are Issuable Upon Exercise of Warrants(2)	Total Number of Shares Beneficially Owned After Offering(3)	Percentage Beneficially Owned After Offering(1)(3)
Baring Global Opportunities Fund(4) 6803 South Tucson Way Centennial, CO 80112	990	*	790	632	200	*
Bio-Rad Laboratories, Inc.(5) 1000 Alfred Nobel Drive Hercules, CA 94547	308,642	4.84%	308,642			
Jeffrey Cohen(6) 133 Magnolia Lane East Hills, NY 11577	760	*		600	160	*
Frank Kee Colen(7) 50 Riverside Drive New York, NY 10024	42,550	*	12,000	27,850	2,700	*

Falcon Technology Partners, L.P.(8) 102 Atlee Circle Berwyn, PA 19312	402,114	6.30%	178,571	142,857	223,543	3.43%
Fort Mason Master, L.P.(9) 580 California Street, Suite 1925 San Francisco, CA 94104	263,628	4.02%	84,752	178,876		
Fort Mason Partners, L.P.(10) 580 California Street, Suite 1925 San Francisco, CA 94104	17,095	*	5,495	11,600		
Christopher Hagar(11) 135 East 57th Street, 24th Floor New York, NY 10022	610	*		450	160	*
Chris Hieb(12) 845 Montgomery Street, #G San Francisco, CA 94133	300	*		300		

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Name and Address of Beneficial Owner	Total Shares Beneficially Owned Before Offering	Percentage Beneficially Owned Before Offering(1)	Number of Shares Offered (Excluding Shares Issuable Upon Exercise of Warrants)	Number of Shares Offered that are Issuable Upon Exercise of Warrants(2)	Total Number of Shares Beneficially Owned After Offering(3)	Percentage Beneficially Owned After Offering(1)(3)
Highbridge International LLC(13) c/o Highbridge Capital Management LLC 9 West 57th Street 27th Floor New York, NY 10019	547,619	8.58%	547,619	438,095	358,101	4.99%
Iroquois Master Fund Ltd.(14) 641 Lexington Avenue New York, NY 10022	214,285	3.31%	119,047	95,238		
James Irvine(15) 14 Blossom Road Rumson, NJ 07760	2,750	*		2,750		
Jason Janosz(16) 325 Old North Woodward, Suite 370 Birmingham, MI 48009	660	*		500	160	*
Andrew Kaminsky(17) 4 Edgewood Drive Rye Brook, NY 10573	1,160	*		1,000	160	*
Steven Krasner(18) 400 East 57th Street, #3N New York, NY 10022	350	*		350		
Edward B. Newman(19) 11 Upper Prospect Road Atlantic Highlands, NY 07716	2,750	*		2,750		
Michael O Hare(20) 418 East 59th Street, #17B New York, NY 10022	400	*		400		
OFI Institutional Global Opportunities Fund(21) 6803 South Tucson Way Centennial, CO 80112	4,090	*	3,130	2,504	960	*
Oppenheimer Global Opportunities Fund(22)	566,552	8.88%	434,350	347,480	132,202	1.97%

6803 South Tucson Way Centennial, CO 80112						
Oppenheimer & Co. Inc.(23) 125 Broad Street New York, NY 10004	47,785	*		47,695	90	*
Phronesis Partners, L.P.(24) 180 East Broad Street, #1704 Columbus, OH 43215	1,052,029	15.54%	486,928	389,542	175,559	2.59%
Serena Puerta(25) 146 West 83rd Street, #23 New York, NY 10024	1,000	*		1,000		

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Name and Address of Beneficial Owner	Total Shares Beneficially Owned Before Offering	Percentage Beneficially Owned Before Offering(1)	Number of Shares Offered (Excluding Shares Issuable Upon Exercise of Warrants)	Number of Shares Offered that are Issuable Upon Exercise of Warrants(2)	Total Number of Shares Beneficially Owned After Offering(3)	Percentage Beneficially Owned After Offering(1)(3)
Rockmore Investment Master Fund Ltd.(26) c/o Rockmore Capital, LLC 150 East 58th Street New York, NY 10155	207,345	3.20%	112,107	95,238		
Russell Alpha Global Opportunities Fund(27) 6803 South Tucson Way Centennial, CO 80112	3,270	*	2,510	2,008	760	*
Russell Global Opportunities Fund(28) 6803 South Tucson Way Centennial, CO 80112	46,180	*	35,410	28,328	10,770	*
Stanley Stern(29) 480 Ocean Avenue Lawrence, NJ 11559	5,335	*		4,535	800	*
David I. J. Wang(30) 7575 Pelican Bay Boulevard Suite 1902 Naples, FL 34108	134,285	2.10%	35,714	28,571	70,000	1.09%
Henry Williams(31) 47 Duck Pond Road Glen Cove, NY 11542	7,025	*		4,325	2,700	*
Rida Wong(32) 300 Madison Avenue, 4th Floor New York, NY 10017	420	*		350	70	*
Sun Yung(33) 1 North Street Greenwich, CT 06830	660	*		500	160	*

* Represents beneficial ownership of less than 1%.

(1) Based on 6,380,166 shares of our common stock outstanding as of March 31, 2008.

(2) Assumes conversion of all outstanding warrants. Because conversion of certain of the warrants is not permitted if the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion, a holder must, prior to the conversion of such warrants, sell such number of shares that, after the conversion of such warrants and such sale of shares, the holder and its affiliates would not beneficially own in aggregate more than 4.99% of our outstanding common stock.

(3) Assumes all shares of common stock and shares of common stock issuable upon exercise of warrants that are offered by the selling stockholders are sold in this offering. See footnote (2) for information regarding restrictions on the conversion of certain of the warrants.

(4) Total shares beneficially owned before offering excludes 632 shares issuable upon the exercise of warrants which are not exercisable within 60 days of March 31, 2008 because conversion is not permitted if the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion. OppenheimerFunds, Inc. is the investment advisor to Baring Global Opportunities Fund. Frank Jennings, Senior Vice President of Investments of OppenheimerFunds, Inc., exercises voting authority over the shares and warrants owned by Baring Global Opportunities Fund. Mr. Jennings disclaims beneficial ownership over the shares and warrants held by Baring Global Opportunities

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Fund. Baring Global Opportunities Fund is an affiliate of OppenheimerFunds Distributor, Inc. which is a limited purpose registered broker dealer. Baring Global Opportunities Fund acquired its shares and warrants in the ordinary course of business and did not, at the time it acquired such shares and warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such shares or warrants.

(5) Bio-Rad is a publicly-held company. Bio-Rad s executive officers are responsible for running the business of the company and thus, exercise voting and investment control over the shares owned by Bio-Rad.

(6) Total shares beneficially owned before offering includes 760 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Total shares beneficially owned after offering includes 160 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Jeffrey Cohen is a managing director of Oppenheimer & Co. Inc. which is a broker dealer. Mr. Cohen acquired the warrants in the ordinary course of business and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(7) Total shares beneficially owned before offering includes 30,550 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Total shares beneficially owned after offering includes 2,700 shares issuable upon conversion of warrants which are exercisable within 60 days of March 31, 2008. Mr. Colen is a managing director of Oppenheimer & Co. Inc. which is a broker dealer. Mr. Colen acquired the shares and warrants in the ordinary course of business and did not, at the time he acquired such shares and warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such shares or warrants.

(8) Total shares beneficially owned before offering excludes 142,857 shares issuable upon the exercise of warrants which are not exercisable within 60 days of March 31, 2008 because conversion is not permitted if the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion. James L. Rathmann, the Executive Chairman of our Board of Directors, is the general partner of Falcon Technology Partners, L.P. and has sole voting and investment power over the shares and warrants held by Falcon Technology Partners, L.P.

(9) Total shares beneficially owned before offering includes 178,876 shares issuable upon the exercise of warrants which are exercisable within 60 days of March 31, 2008. Fort Mason Capital LLC, serves as the general partner of Fort Mason Master, L.P. and, in such capacity, exercises sole voting and investment authority over such shares and warrants. Mr. Daniel German serves as the sole managing member of Fort Mason Capital, LLC. Fort Mason Capital, LLC and Mr. German each disclaim beneficial ownership of such shares and warrants, except to the extent of its or his pecuniary interest therein.

(10) Total shares beneficially owned before offering includes 11,600 shares issuable upon the exercise of warrants which are exercisable within 60 days of March 31, 2008. Fort Mason Capital LLC, serves as the general partner of Fort Mason Partners, L.P. and, in such capacity, exercises sole voting and investment authority over such shares and warrants. Mr. Daniel German serves as the sole managing member of Fort Mason Capital, LLC. Fort Mason Capital, LLC and Mr. German each disclaim beneficial ownership of such shares and warrants, except to the extent of its or his pecuniary interest therein.

(11) Total shares beneficially owned before offering includes 610 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Total shares beneficially owned after offering includes 160 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Christopher Hagar is an employee of Merriman Curhan Ford & Co. Inc. which is a broker dealer. Christopher Hagar acquired the warrants in the ordinary course of business when he was employed by Oppenheimer & Co. Inc.

and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(12) Total shares beneficially owned before offering includes 300 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Chris Hieb is an employee of Pacific Crest Securities LLC which is a broker dealer. Mr. Hieb acquired the warrants in the ordinary course of business when he was an employee of Oppenheimer & Co. Inc. and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(13) Total shares beneficially owned before offering excludes 438,095 shares issuable upon the exercise of warrants and 555,000 shares issuable upon conversion of 7.0% Notes which are not exercisable within

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60 days of March 31, 2008 because, in each case, conversion is not permitted if the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion. Total shares beneficially owned after offering includes 358,101 shares issuable upon conversion of 7.0% Notes which are exercisable within 60 days of March 31, 2008. Total shares beneficially owned after offering excludes 196,899 shares issuable upon conversion of 7.0% Notes which are not exercisable within 60 days of March 31, 2008 because conversion is not permitted if the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion. Highbridge Capital Management, LLC is the trading manager of Highbridge International LLC and has voting control and investment discretion over the securities held by Highbridge International LLC. Glenn Dubin and Henry Swieca control Highbridge Capital Management, LLC and have voting control and investment discretion over the securities held by Highbridge International LLC. Each of Highbridge Capital Management, LLC, Glenn Dubin and Henry Swieca disclaims beneficial ownership of the securities held by Highbridge International LLC.

(14) Total shares beneficially owned before offering includes 95,238 shares issuable upon exercise of warrants exercisable within 60 days of March 31, 2008. Joshua Silverman has sole voting and investment control over the shares and warrants owned by Iroquois Master Fund Ltd. Mr. Silverman disclaims beneficial ownership of these shares and warrants.

(15) Total shares beneficially owned before offering includes 2,750 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. James Irvine is a managing director of Oppenheimer & Co. Inc. which is a broker dealer. Mr. Irvine acquired the warrants in the ordinary course of business and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(16) Total shares beneficially owned before offering includes 660 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Total shares beneficially owned after offering includes 160 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Jason Janosz is a managing director of Oppenheimer & Co. Inc. which is a broker dealer. Mr. Janosz acquired the warrants in the ordinary course of business and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(17) Total shares beneficially owned before offering includes 1,160 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Total shares beneficially owned after offering includes 160 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Andrew Kaminsky is a managing director of Oppenheimer & Co. Inc. which is a broker dealer. Mr. Kaminsky acquired the warrants in the ordinary course of business and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(18) Total shares beneficially owned before offering includes 350 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Steven Krasner is a Senior Vice President of Oppenheimer & Co. Inc. which is a broker dealer. Mr. Krasner acquired the warrants in the ordinary course of business and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(19) Total shares beneficially owned before offering includes 2,750 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Edward Newman is a managing director of Oppenheimer & Co. Inc. which is a broker dealer. Mr. Newman acquired the warrants in the ordinary course of business and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with

any person to distribute such warrants.

(20) Total shares beneficially owned before offering includes 400 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Michael O Hare is an employee of Pacific Crest Securities LLC which is a broker dealer. Mr. O Hare acquired the warrants in the ordinary course of business when he was an employee of Oppenheimer & Co. Inc. and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(21) Total shares beneficially owned before offering excludes 2,504 shares issuable upon the exercise of warrants which are not exercisable within 60 days of March 31, 2008 because conversion is not permitted if

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the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion. OppenheimerFunds, Inc. is the investment advisor to OFI Institutional Global Opportunities Fund. Frank Jennings, Senior Vice President of Investments of OppenheimerFunds, Inc., exercises voting authority over the shares and warrants owned by OFI Institutional Global Opportunities Fund. Mr. Jennings disclaims beneficial ownership over the shares and warrants held by OFI Institutional Global Opportunities Fund. OFI Institutional Global Opportunities Fund is an affiliate of OppenheimerFunds Distributor, Inc. which is a limited purpose registered broker dealer. OFI Institutional Global Opportunities Fund acquired its shares and warrants in the ordinary course of business and did not, at the time it acquired such shares and warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such shares or warrants.

(22) Total shares beneficially owned before offering excludes 347,480 shares issuable upon the exercise of warrants which are not exercisable within 60 days of March 31, 2008 because conversion is not permitted if the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion. OppenheimerFunds, Inc. is the investment advisor to Oppenheimer Global Opportunities Fund. Frank Jennings, Senior Vice President of Investments of OppenheimerFunds, Inc., exercises voting authority over the shares and warrants owned by Oppenheimer Global Opportunities Fund. Mr. Jennings disclaims beneficial ownership over the shares and warrants held by Oppenheimer Global Opportunities Fund. Oppenheimer Global Opportunities Fund is an affiliate of OppenheimerFunds Distributor, Inc. which is a limited purpose registered broker dealer. Oppenheimer Global Opportunities Fund acquired its shares and warrants in the ordinary course of business and did not, at the time it acquired such shares and warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such shares or warrants.

(23) Total shares beneficially owned before offering includes 47,785 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008, 90 of which are held by Oppenheimer & Co. Inc. Pool. Total shares beneficially owned after offering includes 90 shares issuable upon the exercise of warrants held by Oppenheimer & Co. Inc. Pool which are exercisable within 60 days of March 31, 2008. Albert G. Lowenthal and Dennis McNamara exercise shared voting and investment power over the warrants held by Oppenheimer & Co. Inc. and the Oppenheimer & Co. Inc. Pool. Oppenheimer & Co. Inc. received warrants to purchase 92,100 shares of our common stock as partial payment for its services as placement agent in connection with our private placement which closed on August 29, 2007 and subsequently transferred 53,405 of such warrants to certain of its employees. Oppenheimer & Co. Inc. is a broker dealer. Oppenheimer & Co. Inc. acquired the warrants in the ordinary course of business and did not, at the time it acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(24) Total shares beneficially owned before offering includes 389,542 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. James E. Wiggins is the general partner of Phronesis Partners, L.P. and exercises sole voting and investment control over the shares and warrants owned by Phronesis Partners, L.P.

(25) Total shares beneficially owned before offering includes 1,000 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Serena Puerta is a former employee of Oppenheimer & Co. Inc.

(26) Total shares beneficially owned before offering includes 95,238 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Rockmore Capital, LLC, referred to herein as Rockmore Capital, and Rockmore Partners, LLC, referred to herein as Rockmore Partners, each a limited liability company formed under the laws of the State of Delaware, serve as the investment manager and general partner, respectively, to Rockmore Investments (US) LP, a Delaware limited partnership, which invests all of its assets

through Rockmore Investment Master Fund Ltd., an exempted company formed under the laws of Bermuda, referred to herein as Rockmore Master Fund. By reason of such relationships, Rockmore Capital and Rockmore Partners may be deemed to share dispositive power over the shares and warrants owned by Rockmore Master Fund. Rockmore Capital and Rockmore Partners disclaim beneficial ownership of such shares and warrants. Rockmore Partners has delegated authority to Rockmore Capital regarding the portfolio management decisions with respect to the shares and warrants

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owned by Rockmore Master Fund and, as of March 31, 2008, Mr. Bruce T. Bernstein and Mr. Brian Daly, as officers of Rockmore Capital, are responsible for the portfolio management decisions of the shares and warrants owned by Rockmore Master Fund. By reason of such authority, Messrs. Bernstein and Daly may be deemed to share dispositive power over the shares and warrants owned by Rockmore Master Fund. Messrs. Bernstein and Daly disclaim beneficial ownership of such shares and warrants and neither of such persons has any legal right to maintain such authority. No other person has sole or shared voting or dispositive power with respect to the shares and warrants as those terms are used for purposes under Regulation 13D-G of the Exchange Act. No person or group (as that term is used in Section 13(d) of the Exchange Act or the Regulation 13D-G) controls Rockmore Master Fund.

(27) Total shares beneficially owned before offering excludes 2,008 shares issuable upon the exercise of warrants which are not exercisable within 60 days of March 31, 2008 because conversion is not permitted if the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion. OppenheimerFunds, Inc. is the sub-advisor to Russell Alpha Global Opportunities Fund. Frank Jennings, Senior Vice President of Investments of OppenheimerFunds, Inc., exercises voting authority over the shares and warrants owned by Russell Alpha Global Opportunities Fund. Mr. Jennings disclaims beneficial ownership over the shares and warrants held by Russell Alpha Global Opportunities Fund.

(28) Total shares beneficially owned before offering excludes 28,328 shares issuable upon the exercise of warrants which are not exercisable within 60 days of March 31, 2008 because conversion is not permitted if the holder and its affiliates would beneficially own in aggregate more than 4.99% of our outstanding common stock following such conversion. OppenheimerFunds, Inc. is the sub-advisor to Russell Global Opportunities Fund. Frank Jennings, Senior Vice President of Investments of OppenheimerFunds, Inc., exercises voting authority over the shares and warrants owned by Russell Global Opportunities Fund. Mr. Jennings disclaims beneficial ownership over the shares and warrants held by Russell Global Opportunities Fund.

(29) Total shares beneficially owned before offering includes 5,335 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Total shares beneficially owned after offering includes 800 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Stanley Stern is a managing director of Oppenheimer & Co. Inc. which is a broker dealer. Mr. Stern acquired the warrants in the ordinary course of business and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(30) Total shares beneficially owned before offering includes 28,571 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008.

(31) Total shares beneficially owned before offering includes 7,025 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Total shares beneficially owned after offering includes 2,700 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Henry Williams is a managing director of Oppenheimer & Co. Inc. which is a broker dealer. Mr. Williams acquired the warrants in the ordinary course of business and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(32) Total shares beneficially owned before offering includes 420 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Total shares beneficially owned after offering includes 70 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Rida Wong is a vice president of Oppenheimer & Co. Inc. which is a broker dealer. Ms. Wong acquired the warrants in the ordinary course of business and did not, at the time she acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

(33) Total shares beneficially owned before offering includes 660 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Total shares beneficially owned after offering includes 160 shares issuable upon the exercise of warrants exercisable within 60 days of March 31, 2008. Sun Yung is a managing director of Oppenheimer & Co. Inc. which is a broker dealer. Mr. Yung acquired the warrants in the ordinary course of business and did not, at the time he acquired such warrants, have any agreement or understanding, directly or indirectly, with any person to distribute such warrants.

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PLAN OF DISTRIBUTION

We are registering the shares offered by this prospectus on behalf of the selling stockholders. The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. To the extent any of the selling stockholders gift, pledge or otherwise transfer the shares offered hereby, such transferees may offer and sell the shares from time to time under this prospectus, provided that this prospectus has been amended under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, as amended, referred to herein as the Securities Act, to include the name of such transferee in the list of selling stockholders under this prospectus.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

short and long sales;

through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;

broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

a combination of any such methods of sale; and

any other method permitted pursuant to applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

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The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the warrants by payment of cash, however, we will receive the exercise price of the warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule.

The selling shareholders might be, and any broker-dealers that act in connection with the sale of securities will be, deemed to be underwriters within the meaning of Section 2(11) of the Securities Act, and any commissions received by such broker-dealers and any profit on the resale of the securities sold by them while acting as principals will be deemed to be underwriting discounts or commissions under the Securities Act. Any broker-dealer and any selling stockholders that may be deemed to be an underwriter within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act. We will make copies of this prospectus available to the selling stockholders and have informed them of their obligation to deliver copies of this prospectus to purchasers at or before the time of any sale of shares covered by this prospectus. Such requirement may be satisfied by delivery through the facilities of the NASDAQ Stock Market pursuant to Rule 153 under the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

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CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

During the previous part of this year and the years ended December 31, 2007 and 2006, we did not engage in, nor do we currently propose to engage in, any transaction or series of similar transactions to which the Company was, or is to be, a party in which the amount involved exceeds $120,000 and in which any director, executive officer, holder of more than 5% of our common stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest other than (1) compensation agreements and other arrangements, which are described where required in Management Executive Compensation Employment and Severance Agreements and (2) the transactions described below. The material agreements relating to the transactions summarized below have been filed as exhibits to the registration statement of which this prospectus forms a part and the following summaries are qualified in their entirety by reference to the full text of such agreements.

Relationship with Bio-Rad

Asset Purchase Agreement

Bio-Rad is a significant stockholder of the Company. On November 13, 2006, we completed the Instrument Business Sale to Bio-Rad, which includes our SELDI technology, ProteinChip arrays and accompanying software. Pursuant to the terms of the asset purchase agreement entered into with Bio-Rad on August 14, 2006, the total sales price was $20,000,000 of which $16,000,000 was paid by Bio-Rad to us at the closing of the transaction on November 13, 2006, and a total of $4,000,000 was held back from the sales proceeds contingent upon us meeting certain obligations. From the amounts held back, $2,000,000, subject to certain adjustments, is being held in escrow until November 13, 2009, to serve as security for us to fulfill certain obligations. The other $2,000,000 was withheld by Bio-Rad from the sales proceeds until the issuance of a reexamination certificate confirming the 022 Patent. On October 23, 2007, the United States Patent and Trademark Office issued a reexamination certificate of the 022 Patent and on November 9, 2007, we received $2,000,000 from Bio-Rad that was withheld from the proceeds of the Instrument Business Sale. We also entered into a number of ancillary agreements, as set forth in greater detail below.

Subsequent to the Instrument Business Sale, both the Company and Bio-Rad recognized business activities on behalf of each other. As of December 31, 2007, we owed Bio-Rad $50,000, which consisted of $42,000 for accounts receivable we collected on behalf of Bio-Rad and $8,000 for invoices paid by us that were reimbursed twice by Bio-Rad. Similarly, Bio-Rad owed us $33,000, which consisted of $15,000 of invoices paid by us on behalf of Bio-Rad and $18,000 for Bio-Rad s portion of expenses related to facilities shared with us. As of December 31, 2006, we owed Bio-Rad $1,571,000, which consisted of $1,511,000 for accounts receivable we collected on behalf of Bio-Rad, $8,000 for invoices processed by Bio-Rad on our behalf and $52,000 for services Bio-Rad provided to us. Similarly, Bio-Rad owed us $619,000, which consisted of $174,000 for invoices we processed on behalf of Bio-Rad, $200,000 for sales taxes on the sale of assets and $245,000 for unbilled receivables from Bio-Rad. Additionally, for the year ended December 31, 2007, we recorded a charge of $390,000 related to a post closing adjustment resulting from the Instrument Business Sale.

Sublicense Agreement

In connection with the Instrument Business Sale, we sublicensed to Bio-Rad certain rights to the core SELDI technology for use outside of the clinical diagnostics field. We retained exclusive rights to the license rights for use in the field of clinical diagnostics for a five-year period, after which the license will be co-exclusive in this field. The rights to the SELDI technology are derived through royalty-bearing sublicenses from MAS. MAS holds an exclusive license to patents directed to the SELDI technology from the owner, Baylor College of Medicine. In 1997, MAS

granted certain rights under these patents to our wholly owned subsidiaries, IllumeSys Pacific, Inc. and Ciphergen Technologies, Inc. We obtained further rights under the patents in 2003 through sublicenses and assignments executed as part of the settlement of a lawsuit between us, MAS, LumiCyte and T. William Hutchens. Together, the sublicenses and assignments provide all rights to develop, make and have made, use, sell, import, market and otherwise exploit products and services covered

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by the patents throughout the world in all fields and applications, both commercial and non-commercial. The sublicenses carry the obligation to pay MAS a royalty equal to 2% of revenues recognized between February 21, 2003 and the earlier of (i) February 21, 2013, or (ii) the date on which the cumulative payments to MAS have reached $10,000,000. As of December 31, 2007, we had paid $2,597,000 in royalties to MAS under the sublicenses. Under our sublicense agreement with Bio-Rad, Bio-Rad agreed to pay the royalties directly to MAS under the license rights.

Cross-License Agreement

In connection with the Instrument Business Sale, we also entered into a cross-license agreement with Bio-Rad whereby we retained the royalty-free, exclusive right to commercially exploit existing technology, including SELDI technology, in the clinical diagnostics market for a period of five years after the effective date of the agreement, referred to herein as the exclusivity period, after which the rights become co-exclusive with Bio-Rad. Bio-Rad has the royalty-free, non-exclusive right under our retained intellectual property in existence as of the effective date of the agreement to commercially exploit the products, processes and services of the Instrument Business outside of the clinical diagnostics market. We and Bio-Rad have also granted each other the first right to negotiate in good faith to obtain a non-exclusive, worldwide license on commercially reasonable terms for any improvements created or developed and owned by such party during the exclusivity period for commercialization in the clinical diagnostics market, in our case, and outside the clinical diagnostics market, in the case of Bio-Rad. Bio-Rad also agreed (1) during the exclusivity period, not to sell products or services in the clinical diagnostics market that utilize the SELDI technology or enter into any agreement with any third party to sell any such products or services and (2) not to sell products or services in the clinical diagnostics market that utilize any mass spectrometry technology, or to enter into any agreement with any third party to sell any such products or services for a specified period after the effective date of the agreement.

Manufacture and Supply Agreement

Since the Instrument Business Sale, Bio-Rad has taken over our manufacturing operations. In connection with the Instrument Business Sale, we entered into a manufacture and supply agreement with Bio-Rad on November 13, 2006, whereby we agreed to purchase from Bio-Rad the Research Tools Products necessary to support our diagnostics efforts.

Under this agreement, we must provide Bio-Rad quarterly, non-binding, twelve-month rolling forecasts setting forth our anticipated needs for Research Tools Products over the forecast period. We may provide revised forecasts as necessary to reflect changes in demand for the products, and Bio-Rad is required to use commercially reasonable efforts to supply amounts in excess of the applicable forecast. Under the terms of the manufacture and supply agreement, we have a commitment to purchase 10 systems and 30,000 arrays in the first year, 13 systems and 30,000 arrays in the second year and 20 systems and 30,000 arrays for the third year in order to support our collaboration agreements with Quest, which may be used as inventory for resale, fixed assets for collaboration purposes or supplies for research and development. We have estimated the cost to be $70,000 per system and $40 per array for a total estimated obligation of $6,610,000. If Bio-Rad fails to supply any Research Tools Products to us, including any new Research Tools Products developed by Bio-Rad for sale to its customers or any new Research Tools Products we have requested Bio-Rad to make and sell to us, under certain conditions we have the right to manufacture or have such Research Tools Products manufactured by a third party for our own use and sale to our customers and collaborators in the clinical diagnostics market, subject to payment of a reasonable royalty to Bio-Rad on sales of such Research Tools Products. We will be responsible for assuring through our incoming quality control process that the Research Tools Products we purchase from Bio-Rad will comply with applicable government regulations.

The term of this agreement expires on November 12, 2011, but may be renewed for two successive two-year periods at our option. Either party may terminate the agreement for convenience upon 180 days prior written notice, or upon

default if the other party fails to cure such default within 30 days after notice thereof. We made total purchases of $1,032,000 and $38,000 under this agreement during the years ended December 31, 2007 and 2006, respectively. As of December 31, 2007, we had a total remaining first year obligation to

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purchase 4 systems and 13,098 arrays, or $804,000 based on the estimated costs of $70,000 per system and $40 per array. As of December 31, 2007, we owed Bio-Rad $246,000 for Research Tools Products.

Transition Services Agreement

In order to allocate support services between Bio-Rad and our remaining business following the Instrument Business Sale, we entered into a transition services agreement with Bio-Rad. Under this agreement, Bio-Rad and the Company agreed to provide each other with certain administrative and operational support and related services and share the use of certain equipment. The term of the agreement was generally six months from the closing of the asset sale but could be extended or shortened with respect to certain items upon mutual agreement by the parties. The agreement was amended in May and June 2007 to extend the term during which the parties would provide certain consulting services to each other until December 31, 2007. Either party may terminate one, some or all of the remaining services of which it is the recipient at any time upon 60 days advance notice. The parties pay each other a fee for the provision of the consulting services based on an hourly rate tied to the salary of the employee or consultant who is providing such services. For the years ended December 31, 2007 and 2006, services provided by us to Bio-Rad under the transition services agreement amounted to $115,000 and $66,000, respectively. For the years ended December 31, 2007 and 2006, services provided by Bio-Rad to us under the transition services agreement amounted to $74,000 and $52,000, respectively.

Sublease

In connection with the Instrument Business Sale, we entered into a sublease agreement with Bio-Rad, pursuant to which we sublease approximately 29,000 square feet of our Fremont, California facility. Bio-Rad may use the sublet premises only for general office, laboratory, research and development, and other uses necessary to conduct their business, and may not sublet the premises without our consent. The sublease expires on July 31, 2008 unless terminated earlier in accordance with the terms of the sublease or master lease. Bio-Rad may terminate the sublease at any time upon six months written notice. Rent under the sublease is payable monthly and consists of base rent plus a proportionate share of certain other expenses including property taxes, management fees, insurance, maintenance and utilities. Rent and certain other facility related expenses are paid directly to us and, in accordance with the terms of the master lease, all payments received by us from Bio-Rad under the sublease are paid to the landlord. Under the sublease agreement, we recognized $204,000 in base rent and $25,000 in other rental expenses for the year ended December 31, 2006, and $1,549,000 in base rent and $53,000 in other rental expenses for the year ended December 31, 2007.

Stock Purchase Agreement

In connection with the Instrument Business Sale, we also entered into a stock purchase agreement with Bio-Rad pursuant to which we issued and sold 308,642 shares of our common stock to Bio-Rad for $3,000,000 based on the average closing price of $9.72 per share for the five days preceding August 14, 2006, the date of the stock purchase agreement. In conjunction with the closing of the Instrument Business Sale, the sale of 308,642 shares of our common stock to Bio-Rad was recorded at its fair value of $3,611,000, which is based on the $11.70 per share closing price of our common stock on November 13, 2006. The stock purchase agreement with Bio-Rad also provided for certain registration rights whereby if we file a registration statement under the Securities Act, Bio-Rad may elect to include their shares in that registration, subject to various conditions. Bio-Rad has exercised these rights in connection with the filing of the registration statement of which this prospectus is a part.

Indemnification Agreement with Respect to United Kingdom Employees

In connection with the Instrument Business Sale, we entered into a letter agreement with Bio-Rad pursuant to which we agreed to indemnify Bio-Rad and its subsidiaries with respect to certain payments made by Bio-Rad in connection with the termination of employees of our former subsidiary in the United Kingdom in the six-month period immediately following the sale. On May 4, 2007, Bio-Rad delivered a claim for

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indemnification under the agreement for $307,000, which was paid out of the escrow fund established pursuant to the asset purchase agreement and related escrow agreement.

Relationship with Quest

Strategic Alliance Agreement

Quest is a significant stockholder of the Company. On July 22, 2005, we entered into a strategic alliance agreement with Quest, which focuses on commercializing up to three diagnostic tests chosen from our pipeline. The term of the agreement ends on the later of (i) the three-year anniversary of the agreement and (ii) the date on which Quest commercializes three diagnostic tests covered by such agreement. Pursuant to the agreement, Quest will have the non-exclusive right to commercialize each test on a worldwide basis, with exclusive commercialization rights in territories where Quest has a significant presence for up to five years following commercialization of such test. As part of the strategic alliance, there is a royalty arrangement under which Quest will pay royalties to us based on fees earned by Quest for applicable diagnostic services, and we will pay royalties to Quest based on our revenue from applicable diagnostic products. To date, no such royalties have been earned by either party. We have also agreed to enter into a supply agreement with Quest under which we will sell instruments and consumable supplies to Quest (to be used for performing diagnostic services), which we will purchase from Bio-Rad under our manufacture and supply agreement.

Under this strategic alliance agreement, Quest has the exclusive right to perform up to three ASR laboratory tests. Upon obtaining FDA clearance, we will begin manufacturing IVD test kits that Quest will purchase. Quest will have the exclusive right during the exclusive period to perform such ASR laboratory tests and market IVD test kits purchased from us in the United States, Mexico, the United Kingdom and other countries where Quest operates a clinical laboratory, and non-exclusive rights to commercialize these diagnostic test kits in the rest of the world, subject to a royalty payable to us.

During the ASR phase for a given ASR laboratory test, and as long as the exclusive period continues, we will sell ASRs and grant rights to perform such ASR laboratory tests to Quest and other reference laboratories, hospitals and medical clinics in countries where Quest does not operate a clinical laboratory. Once the IVD phase begins for a given ASR laboratory test in the exclusive period, we will sell IVD test kits and SELDI instruments to Quest. At the end of the exclusive period with respect to any IVD test kit, Quest s exclusive right to perform ASR laboratory tests using such diagnostic test kit will become non-exclusive. In addition to continuing to sell IVD test kits to Quest, we will also sell IVD test kits to commercial clinical laboratories in the United States, Mexico, the United Kingdom and other countries which were exclusive to Quest during the exclusive period. In addition to working through Quest, we intend to seek partnerships for commercialization purposes with traditional IVD companies and/or with clinical reference labs in territories where Quest does not have exclusive rights.

Credit Agreement

In connection with the strategic alliance we entered into a credit agreement with Quest dated July 22, 2005, pursuant to which Quest agreed to provide us with a $10,000,000 secured line of credit, which is collateralized by certain of our intellectual property, that may only be used for certain costs and expenses directly related to the strategic alliance. Under the terms of this secured line of credit, the interest rate is at the prime rate plus 0.5% and is payable monthly. Additionally, this secured line of credit contains provisions for Quest to forgive portions of the amounts borrowed that corresponds to our achievement of certain milestones related to development, regulatory approval and commercialization of certain diagnostic tests. The amounts to be forgiven and the corresponding milestones that we must achieve are (i) $1,000,000 for each application that allows a licensed laboratory test to be commercialized with a maximum of three applications for $3,000,000; (ii) $3,000,000 for the commercialization of the first diagnostic test

kit; and (iii) $2,000,000 for each subsequent commercialization of diagnostic test kits with a maximum of two subsequent commercialized diagnostic test kits for $4,000,000. Should we fail to achieve these milestones, we would be responsible for the repayment of the outstanding principal amount and any unpaid interest on the secured line of credit on or before July 22, 2010. We have drawn on this secured line of credit in monthly increments of $417,000 on the

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last day of each month during the first two years of the strategic alliance. As of December 31, 2007 and 2006, we have drawn $10,000,000 and $7,083,000, respectively, from this secured line of credit. From the inception of the strategic alliance through December 31, 2007, we have spent $10,000,000 of the amounts drawn on in-house research and development, as well as collaborations with others, directed towards achieving the milestones.

Amendments to 2005 Stock Purchase Agreement

In connection with the strategic alliance, Quest purchased 622,500 shares of our common stock and a warrant to purchase up to an additional 220,000 shares of our common stock with an exercise price of $35.00 per share and expiration date of July 22, 2010, for $14,954,000 in net proceeds. The stock purchase agreement also provided certain registration rights whereby Quest may demand that we register their shares under the Securities Act, or, if we file another registration statement under the Securities Act, Quest may elect to include their shares in that registration, subject to various conditions. On January 12, 2006, the warrant with Quest was amended to clarify that the total number of shares of common stock purchased pursuant to the stock purchase agreement and issuable upon exercise of the warrant will at no time exceed 19.90% of the total number of outstanding shares of our common stock, provided that Quest may, prior to or concurrently with the exercise of the warrant, sell such number of shares of our common stock that, after the exercise of the warrant and such sale of shares, Quest would not own more than 19.90% of our common stock. In connection with Quest s participation in the August 29, 2007, private placement sale, we amended the warrant originally issued to Quest on July 22, 2005. Pursuant to the terms of the amendment, the exercise price for the purchase of our common stock was reduced from $35.00 per share to $25.00 per share and the expiration date of such warrant was extended from July 22, 2010, to July 22, 2011.

2007 Securities Purchase Agreement

On August 29, 2007, Quest purchased an additional 238,095 shares of our common stock and an additional warrant to purchase 190,476 shares of our common stock in a private placement. The aggregate purchase price for the securities was $2,000,000. The related purchase agreement provided for certain registration rights whereby the investors, including Quest may demand that we register their shares under the Securities Act, or, if we file another registration statement under the Securities Act, the investors may elect to include their shares in that registration, subject to various conditions. On August 29, 2007, we entered into a letter agreement with Quest whereby (i) we agreed that the shares of common stock, including the shares of common stock issuable upon the exercise of warrants, issued in the private placement to Quest would be deemed registrable securities under the registration rights provisions of the 2005 stock purchase agreement with Quest, and (ii) Quest waived their registration rights with respect to such shares under the 2007 securities purchase agreement.

Other Relationships

On August 29, 2007, Falcon Technology Partners, L.P. purchased 178,571 shares of our common stock and a warrant to purchase 142,857 shares of our common stock in a private placement. The aggregate purchase price for the securities was $1,500,000. James L. Rathmann, Executive Chairman of the Board of Directors, is a general partner of Falcon Technology Partners, L.P. The related purchase agreement provided for certain registration rights whereby Falcon Technology Partners, L.P. may demand that we register their shares under the Securities Act, or, if we file another registration statement under the Securities Act, Falcon Technology Partners, L.P. may elect to include their shares in that registration, subject to various conditions. Falcon Technology Partners, L.P. has exercised this right to have its shares registered on the registration of which this prospectus forms a part.

In connection with our private placement on August 29, 2007, we amended our shareholder rights agreement to remove the applicability of the purchase rights provided thereunder with respect to the purchase, sale and issuance of the shares of common stock and the warrant held by Phronesis Partners, L.P., or Phronesis, one of our significant

stockholders. On October 12, 2007, at the request of Phronesis, we amended the warrant issued to Phronesis in our private placement in August 2007 to remove the provision limiting

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Phronesis ability to exercise its warrant if it would beneficially own more than 4.99% of our outstanding common stock following such exercise.

We have entered into indemnification agreements with each of our directors and officers which require us to indemnify our directors and officers to the fullest extent permitted by Delaware law.

Review and Approval of Transactions with Related Persons

Our written corporate governance guidelines require all members of the Board of Directors to inform the Audit Committee of all types of transactions between themselves (directly or indirectly) and the Company, prior to their conclusion, even if such transactions are in the ordinary course of business. The Audit Committee reviews and approves all related party transactions for which Audit Committee approval is required by applicable law or the rules of the NASDAQ Stock Market. The guidelines also provide that the Board of Directors should ensure that there is no abuse of corporate assets or unlawful related party transactions.

Our corporate governance guidelines are posted on our website, www.vermillion.com, under the heading Investor Relations. Information contained in our website is not incorporated by reference into and does not form any part of this prospectus.

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DESCRIPTION OF CAPITAL STOCK

As of March 31, 2008, we were authorized to issue up to 150,000,000 shares of common stock and 5,000,000 shares of preferred stock under our Third Amended and Restated Certificate of Incorporation.

Common Stock

As of March 31, 2008, there were 6,380,166 shares of common stock outstanding, 469,675 shares of common stock issuable upon the exercise of outstanding stock options, 2,293,147 shares of common stock issuable upon the exercise of warrants to purchase common stock, 27,208 shares of common stock issuable upon the conversion of the 4.5% Notes and 825,000 shares of common stock issuable upon the conversion of the 7.0% Notes.

Each holder of common stock is entitled to one vote for each share on all matters to be voted upon by the stockholders and there are no cumulative voting rights. Subject to preferences to which holders of preferred stock may be entitled, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the Board of Directors out of funds legally available therefor. In the event of a liquidation, dissolution or winding up of the Company, holders of common stock would be entitled to share in our assets remaining after the payment of liabilities and the satisfaction of any liquidation preference granted the holders of any outstanding shares of preferred stock. Holders of common stock have no preemptive or conversion rights or other subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are, and the shares of common stock offered by us in this offering, when issued and paid for will be, fully paid and nonassesable. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock which we may designate in the future.

Stockholder Rights Plan

We adopted a stockholder rights plan, the purpose of which is, among other things, to enhance the ability of the Board of Directors to protect stockholder interests and to ensure that stockholders receive fair treatment in the event any coercive takeover attempt of the Company is made in the future. The stockholder rights plan could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, the Company or a large block of the Company s common stock.

The rights issued pursuant to our stockholder rights plan will become exercisable the tenth day after a person or group announces acquisition of 15% or more of our common stock or announces commencement of a tender or exchange offer the consummation of which would result in ownership by the person or group of 15% or more of our common stock. If the rights become exercisable, the holders of the rights (other than the person acquiring 15% or more of our common stock) will be entitled to acquire, in exchange for the rights exercise price, shares of our common stock or shares of any company in which the Company is merged, with a value equal to twice the rights exercise price.

Preferred Stock

As of March 31, 2008, there were no shares of our preferred stock outstanding.

Our Board of Directors is authorized, subject to any limitations prescribed by law, without stockholder approval, to issue from time to time up to an aggregate of 5,000,000 shares of preferred stock, in one or more series, each of such series to have such rights and preferences, including voting rights, dividend rights, conversion rights, redemption

privileges and liquidation preferences as shall be determined by the Board of Directors. The rights for the holders of common stock will be subject to, and may be adversely affected by, the rights of holders of any preferred stock that may be issued in the future. Issuance of preferred stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, a majority of the outstanding voting stock of us. We have no present plans to issue any shares of preferred stock.

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Warrants

As of March 31, 2008, warrants to purchase 2,293,147 shares of common stock at exercise prices ranging from $9.25 to $25.00 were outstanding, with a weighted exercise price of $10.79 per share. All outstanding warrants contain provisions for the adjustment of the exercise price in the event of stock dividends, stock splits, reorganizations, reclassifications or mergers. In addition, certain of the warrants contain anti-dilution provisions and a cashless exercise feature that allows the holders thereof to exercise the warrants without a cash payment to us under certain circumstances. The rights of the shares of common stock issuable upon exercise of all of our outstanding warrants shall be the same as those described under Common Stock above.

Convertible Notes

As of March 31, 2008 we had outstanding $16,500,000 principal amount of the 7.0% Notes and $2,500,000 principal amount of the 4.5% Notes. The 7.0% Notes are convertible into shares of our common stock at a conversion rate of 50 shares per $1,000 aggregate principal amount of notes, which is equal to a conversion price of $20.00 per share. Notwithstanding the foregoing, any holder of 7.0% Notes who (together with such holder s affiliates) owns more than $10,000,000 aggregate principal amount of 7.0% Notes is not permitted to convert its notes to the extent that, after giving effect to such conversion, such holder (together with such holder s affiliates) would beneficially own in excess of 4.99% of the total number of shares of our common stock outstanding immediately after giving effect to such conversion. The 4.5% Notes are convertible, at the option of the holder, at any time on or prior to maturity of such notes into shares of the Company s common stock initially at a conversion rate of 10.88329 shares per $1,000 principal amount of 4.5% Notes, which is equal to a conversion price of $91.88 per share. The conversion prices of the 7.0% Notes and the 4.5% Notes, and hence the respective conversion rates, is subject to adjustment upon the occurrence of certain events, such as stock splits, stock dividends and other distributions or recapitalizations.

Registration Rights

The registration statement of which this prospectus is a part covers the resale of (i) 2,058,423 shares of our common stock and 1,847,324 shares of our common stock issuable upon the exercise of warrants issued in a private placement that closed on August 29, 2007, (ii) 308,642 shares of our common stock issued to Bio-Rad in connection with the Instrument Business Sale in November 2006 and (iii) 9,000 shares of our common stock issuable upon the exercise of warrants that were issued to Oppenheimer & Co. Inc. in connection with our sale of the 7.0% Notes in November 2006.

We are obligated to file this registration statement and we have undertaken to use best efforts to keep it effective, generally through the date that these shares are freely tradable under Rule 144(k) under the Securities Act.

Pursuant to the terms of the warrants held by certain employees of Oppenheimer & Co. Inc., we may be required to register the 15,345 shares of our common stock underlying such warrants. The warrants were originally granted to Oppenheimer & Co. Inc. in connection with our private placement that closed on August 29, 2007 and subsequently transferred to such employees.

In addition, pursuant to our stock purchase agreement with Quest dated as of July 22, 2005, we granted Quest demand registration rights and piggy back registration rights with respect to the shares of our common stock underlying warrants held by Quest.

In connection with the Instrument Business Sale, we granted to Bio-Rad piggyback registration rights exercisable until November 13, 2008 any time the Company proposes to file with the SEC a registration statement relating to an offering of any of its securities for its own account or the account of security holders exercising their demand

registration rights (other than on Form S-4 or Form S-8 or their then equivalents relating to securities to be issued solely in connection with an acquisition of any entity or business or equity securities issuable in connection with stock option or other employee benefit plans). Bio-Rad is exercising its registration rights with respect to all of its shares of common stock in connection with the filing of the registration statement of which this prospectus is a part.

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Section 203 of the Delaware Corporation Law

Section 203 of the General Corporation Law of the State of Delaware, or DGCL, prevents an interested stockholder (defined in Section 203 of the DGCL, generally, as a person owning 15% or more of a corporation s outstanding voting stock), from engaging in a business combination (as defined in Section 203 of the DGCL) with a publicly-held Delaware corporation for three years following the date such person became an interested stockholder, unless:

before such person became an interested stockholder, the board of directors of the corporation approved the transaction in which the interested stockholder became an interested stockholder or approved the business combination;

upon consummation of the transaction that resulted in the interested stockholder s becoming an interested stockholder, the interested stockholder owns at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced (excluding stock held by directors who are also officers of the corporation and by employee stock plans that do not provide employees with the rights to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer); or

following the transaction in which such person became an interested stockholder, the business combination is approved by the board of directors of the corporation and authorized at a meeting of stockholders by the affirmative vote of the holders of two-thirds of the outstanding voting stock of the corporation not owned by the interested stockholder.

The provisions of Section 203 of the DGCL could make a takeover of our company difficult.

Effect of Certain Provisions of our Certificate of Incorporation and Bylaws

Certain provisions of our Second Amended and Restated Certificate of Incorporation and Bylaws may have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, control of us. Such provisions could limit the price that certain investors might be willing to pay in the future for shares of our common stock. Our Bylaws eliminate the right of stockholders to call special meetings of stockholders or to act by written consent without a meeting and require advance notice for stockholder proposals and director nominations, which may preclude stockholders from bringing matters before an annual meeting of stockholders or from making nominations for directors at an annual meeting of stockholders. The authorization of undesignated preferred stock makes it possible for the Board of Directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of us. The amendment of any of these provisions would require approval by holders of at least 662/3% of our outstanding common stock.

Limitation of Liability

Section 145 of the DGCL provides a detailed statutory framework covering indemnification of officers and directors against liabilities and expenses arising out of legal proceedings brought against them by reason of their being or having been directors or officers. Section 145 generally provides that a director or officer of a corporation:

(i) shall be indemnified by the corporation for all expenses of such legal proceedings when he is successful on the merits;

(ii) may be indemnified by the corporation for the expenses, judgments, fines and amounts paid in settlement of such proceedings (other than a derivative suit), even if he is not successful on the merits, if he acted in good

faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful; and

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(iii) may be indemnified by the corporation for the expenses of a derivative suit (a suit by a stockholder alleging a breach by a director or officer of a duty owed to the corporation), even if he is not successful on the merits, if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation.

The indemnification discussed in clauses (ii) and (iii) above may be made only upon a determination that indemnification is proper because the applicable standard of conduct has been met. Such a determination may be made by a majority of a quorum of disinterested directors, independent legal counsel, the stockholders or a court of competent jurisdiction. The indemnification discussed in clause (iii) above may not apply, however, if the director or officer is adjudged liable for negligence or misconduct in the performance of his duties to the corporation, unless the corporation determines that despite such adjudication, but in view of all the circumstances, he is entitled to indemnification.

Article VII of our Third Amended and Restated Certificate of Incorporation and Article VI of our Bylaws provide in substance that, to the fullest extent permitted by the DGCL, each director and officer shall be indemnified against reasonable costs and expenses, including attorney s fees, and any liabilities which he may incur in connection with any action to which he may be made a party by reason of his being or having been a director or officer of our company, a predecessor of our company, or serves or served as a director, officer or employee of another enterprise at the request of our company or any predecessor of our company. The indemnification provided by our certificate of incorporation is not deemed exclusive of or intended in any way to limit any other rights to which any person seeking indemnification may be entitled. Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability

for any breach of the director s duty of loyalty to the corporation or its stockholders,

for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law,

under Section 174 of the DGCL, or

for any transaction from which the director derived an improper personal benefit.

Article VII of our Third Amended and Restated Certificate of Incorporation provides for the elimination of personal liability of a director for monetary damages for breach of fiduciary duty, as permitted by Section 102(b)(7) of the DGCL. We maintain liability insurance on our officers and directors against liabilities that they may incur in such capacities. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our company pursuant to the foregoing provisions, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Act and is therefore unenforceable.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Wells Fargo Shareowner Services.

Listing

Currently, our shares are traded on the NASDAQ Capital Market, under the symbol VRML .

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LEGAL MATTERS

Paul, Hastings, Janofsky & Walker LLP, Palo Alto, California, will pass upon the validity of the shares of common stock being registered by the registration statement of which this prospectus is a part.

EXPERTS

The consolidated financial statements as of December 31, 2007 and 2006, and for the years then ended included in this prospectus have been so included in reliance on the report (which contains an explanatory paragraph relating to the Company s ability to continue as a going concern as described in Note 1 to our audited consolidated financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION ABOUT US

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any document we file at the SEC s Public Reference Rooms in Washington, D.C., New York, New York and Chicago, Illinois. The Public Reference Room in Washington, D.C. is located at 450 Fifth Street, N.W. Please call the SEC at 1-800-SEC-0330 for further information on the public conference rooms. Our SEC filings are also available to the public from the SEC s web site at www.sec.gov.

You may request a copy of any or all of the information that has been incorporated in this prospectus but that has not been delivered, at no cost, by writing or telephoning us at the following address or phone number:

Vermillion, Inc.
6611 Dumbarton Circle
Fremont, California 94555
(510) 505-2100

You should rely only on the information incorporated by reference or provided in this prospectus or the prospectus supplement. We have authorized no one to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus or the prospectus supplement is accurate as of any date other than the date on the front of the document.

No person has been authorized to give any information or to make any representations other than those contained in this prospectus in connection with our recent convertible debt offering made hereby, and if given or made, such information or representations must not be relied upon as having been authorized by us, any selling stockholder or by any other person. Neither the delivery of this prospectus nor any sale made hereunder shall, under any circumstances, create any implication that information herein is correct as of any time subsequent to the date hereof. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any security other than the securities covered by this prospectus, nor does it constitute an offer to or solicitation of any person in any jurisdiction in which such offer or solicitation may not lawfully be made.

INDEX TO FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Vermillion, Inc.:

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1), present fairly, in all material respects, the financial position of Vermillion, Inc. and its subsidiaries at December 31, 2007 and 2006, and the results of their operations and their cash flows for the years then ended, 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 the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit of financial statements 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.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses and negative cash flows from operations and has a net capital deficiency that raise substantial doubt about its ability to continue as a going concern. Management s plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ PricewaterhouseCoopers LLP

San Jose, California
March 31, 2008

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Vermillion, Inc. and Subsidiaries

Consolidated Balance Sheets
(Dollars in thousands, except share and par value amounts)

	December 31, 2007	December 31, 2006
ASSETS		
Current assets:		
Cash and cash equivalents	$ 7,617	$ 17,711
Short-term investments, at fair value	8,875	
Accounts receivable, net of allowance for doubtful accounts of $- and $2 at December 31, 2007 and 2006, respectively	19	29
Prepaid expenses and other current assets	1,064	2,300
Total current assets	17,575	20,040
Property, plant and equipment, net	1,938	2,260
Long-term investments, at fair value	3,902	
Other assets	638	716
Total assets	$ 24,053	$ 23,016
LIABILITIES AND STOCKHOLDERS DEFICIT		
Current liabilities:		
Accounts payable	$ 2,975	$ 2,401
Accrued liabilities	3,595	4,645
Current portion of convertible senior notes, net of discounts	2,471	
Total current liabilities	9,041	7,046
Long-term debt owed to related party	10,000	7,083
Convertible senior notes, net of discount	16,196	18,428
Other liabilities	278	360
Total liabilities	35,515	32,917
Commitments and contingencies (Note 11)		
Stockholders deficit:		
Preferred stock, $0.001 par value, 5,000,000 shares authorized, none issued and outstanding at December 31, 2007 and 2006		
Common stock, $0.001 par value, 150,000,000 and 80,000,000 shares authorized at December 31, 2007 and 2006, respectively; 6,380,197 and 3,922,044 shares issued and outstanding at December 31, 2007 and 2006, respectively	6	39
Additional paid-in capital	227,895	207,991
Accumulated deficit	(239,142)	(217,860)

Accumulated other comprehensive loss	(221)	(71)
Total stockholders deficit	(11,462)	(9,901)
Total liabilities and stockholders deficit	$ 24,053	$ 23,016

See accompanying notes to consolidated financial statements.

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Vermillion, Inc. and Subsidiaries

Consolidated Statements of Operations
(Dollars in thousands, except share and per share amounts)

	Year Ended December 31, 2007	2006
Revenue:		
Products	$	$ 11,292
Services	44	6,923
Total revenue	44	18,215
Cost of revenue:		
Products		5,818
Services	28	3,520
Total cost of revenue	28	9,338
Gross profit	16	8,877
Operating expenses:		
Research and development	8,213	11,474
Sales and marketing	2,175	12,568
General and administrative	10,858	10,661
Total operating expenses	21,246	34,703
Gain on sale of instrument business	1,610	6,929
Loss from operations	(19,620)	(18,897)
Interest income	734	843
Interest expense	(2,302)	(2,254)
Loss on extinguishment of debt		(1,481)
Other income (expense), net	69	(125)
Loss before income taxes	(21,119)	(21,914)
Income tax expense	(163)	(152)
Net loss	$ (21,282)	$ (22,066)
Loss per share basic and diluted	$ (4.47)	$ (6.05)
Shares used to compute basic and diluted loss per common share	4,765,341	3,646,473

See accompanying notes to consolidated financial statements.

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Vermillion, Inc. and Subsidiaries

Consolidated Statements of Changes in Stockholders Equity (Deficit) and Comprehensive Loss
(Dollars in thousands, except share and per share amounts)

	Common Stock		Additional Paid-in	Accumulated	Accumulated Other Comprehensive	Total Stockholders Equity	Comprehensive
	Shares	Amount	Capital	Deficit	Loss	(Deficit)	Loss
Balance at December 31, 2005	3,599,888	$ 36	$ 202,485	$ (195,794)	$ (204)	$ 6,523	
Net loss				(22,066)		(22,066)	$ (22,066)
Foreign currency translation adjustment					133	133	133
Comprehensive loss							$ (21,933)
Common stock shares issued in connection with:							
Exercise of stock options	2,485		12			12	
Employee stock purchase plan	11,029		131			131	
Private offering to Bio-Rad Laboratories, Inc.	308,642	3	3,608			3,611	
Value assigned to warrants issued to Oppenheimer & Co., Inc.			140			140	
Stock compensation charge			1,615			1,615	
Balance at December 31, 2006	3,922,044	$ 39	$ 207,991	$ (217,860)	$ (71)	$ (9,901)	
Net loss				(21,282)		(21,282)	$ (21,282)
Unrealized loss on available for sale securities					(98)	(98)	(98)
Foreign currency translation adjustment					(52)	(52)	(52)

Comprehensive loss							$ (21,432)
Common stock shares issued in connection with:							
Exercise of stock options	2,031		24			24	
Employee stock purchase plan	4,813		42			42	
Private placement offering, net of issuance costs and registration fees	2,451,309	25	18,902			18,927	
Effect of 1 for 10 reverse stock split		(58)	58				
Stock compensation charge			878			878	
Balance at December 31, 2007	6,380,197	$ 6	$ 227,895	$ (239,142)	$ (221)	$ (11,462)	

See accompanying notes to consolidated financial statements.

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Vermillion, Inc. and Subsidiaries

Consolidated Statements of Cash Flows
(Dollars in thousands)

	Year Ended December 31,	
	2007	**2006**
Cash flows from operating activities:		
Net loss	$ (21,282)	$ (22,066)
Adjustments to reconcile net loss to net cash used in operating activities:		
Gain on sale of instrument business	(1,610)	(6,929)
Loss on extinguishment of convertible senior notes		1,481
Depreciation and amortization	1,181	4,082
Stock-based compensation expense	878	1,615
Amortization of debt discount associated with beneficial conversion feature of convertible senior notes	239	488
Amortization of debt issuance costs	71	332
(Gain) loss on sale and retirement of fixed assets	(50)	35
Provision for (recovery of) bad debt	(2)	66
Loss on write-down of inventory		130
Accrued investment income		(5)
Changes in operating assets and liabilities:		
Decrease in accounts receivable	12	3,207
Decrease (increase) in prepaid expenses and other current assets	877	(647)
Decrease in inventories		136
Decrease in other assets	19	145
Decrease in accounts payable and accrued liabilities	(501)	(1,075)
Decrease in deferred revenue	(18)	(1,174)
Decrease in other liabilities	(82)	(260)
Net cash used in operating activities	(20,268)	(20,439)
Cash flows from investing activities:		
Sales of investments	6,300	2,245
Purchases of investments	(19,175)	
Proceeds from sale of instrument business	2,000	15,218
Proceeds from sale of property, plant and equipment	55	
Purchase of property, plant and equipment	(864)	(589)
Payment for license related to litigation settlement		(346)
Net cash provided by (used in) investing activities	(11,684)	16,528
Cash flows from financing activities:		
	18,927	

Proceeds from private placement offering of common stock and common stock warrants, net of issuance costs and registration fees		
Proceeds from issuance of common stock to Bio-Rad Laboratories, Inc.		3,000
Proceeds from exercises of stock options	24	12
Proceeds from purchase of common stock by employee stock purchase plan	42	130
Proceeds from secured line of credit with Quest Diagnostics Incorporated	2,917	4,583
Principal payments on capital lease obligations		(37)
Principal payments on equipment financing loan		(377)
Debt discount and issuance costs on convertible senior notes		(479)
Principal payment on convertible senior notes		(11,000)
Net cash provided by (used in) financing activities	21,910	(4,168)
Effect of exchange rate changes on cash and cash equivalents	(52)	52
Net increase (decrease) in cash and cash equivalents	(10,094)	(8,027)
Cash and cash equivalents, beginning of period	17,711	25,738
Cash and cash equivalents, end of period	$ 7,617	$ 17,711

See accompanying notes to consolidated financial statements

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements

1. Basis of Presentation and Summary of Significant Accounting and Reporting Policies

Organization

Vermillion, Inc. (Vermillion ; Vermillion and its wholly-owned subsidiaries are collectively referred to as the Company), formerly Ciphergen Biosystems, Inc., is incorporated in the state of Delaware, and is engaged in the business of discovering, developing and commercializing diagnostics tests in the fields of oncology, hematology, cardiology and women s health.

Prior to the November 13, 2006, sale of assets and liabilities of the Company s protein research tools and collaborative services business (the Instrument Business Sale) to Bio-Rad Laboratories, Inc. (Bio-Rad), the Company developed, manufactured and sold ProteinChip Systems for life sciences research. This patented technology is recognized as Surface Enhanced Laser Desorption/Ionization (SELDI). The systems consist of ProteinChip Readers, ProteinChip Software and related accessories, which were used in conjunction with consumable ProteinChip Arrays. These products were sold primarily to biologists at pharmaceutical and biotechnology companies, and academic and government research laboratories. The Company also provided research services through its Biomarker Discovery Center laboratories, and offered consulting services, customer support services and training classes to its customers and collaborators.

The accompanying consolidated financial statements of the Company were prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The Company has incurred significant net losses and negative cash flows from operations since inception. At December 31, 2007, the Company had an accumulated deficit of $239,142,000. On November 13, 2006, the Company completed the Instrument Business Sale to Bio-Rad, and as a result the Company currently concentrates its resources on developing clinical protein biomarker diagnostic products and services, and it does not have a source of revenue. Management believes that current available resources will not be sufficient to fund the Company s obligations. The Company s ability to continue to meet its obligations and to achieve its business objectives is dependent upon, among other things, raising additional capital or generating sufficient revenue in excess of costs. At such time as the Company requires additional funding, the Company may seek to raise such additional funding from various possible sources, including the public equity market, private financings, sales of assets, collaborative arrangements and debt. If additional capital is raised through the issuance of equity securities or securities convertible into equity, stockholders will experience dilution, and such securities may have rights, preferences or privileges senior to those of the holders of common stock or convertible senior notes. If the Company obtains additional funds through arrangements with collaborators or strategic partners, the Company may be required to relinquish its rights to certain technologies or products that it might otherwise seek to retain. There can be no assurance that the Company will be able to obtain such financing, or obtain it on acceptable terms. If the Company is unable to obtain financing on acceptable terms, it may be unable to execute its business plan, the Company could be required to delay or reduce the scope of its operations, and it may not be able to pay off the convertible senior notes if and when they come due.

The Company s inability to operate profitably and to consistently generate cash flows from operations and its reliance on external funding either from loans or equity, raise substantial doubt about the Company s ability to continue as a going concern.

Principals of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany transactions have been eliminated in consolidation.

Basis of Presentation

At the February 14, 2008, Special Meeting of Stockholders, the stockholders of Vermillion approved the proposal to authorize the Board of Directors in its discretion, without further authorization of Vermillion s stockholders, to amend Vermillion s Certificate of Incorporation to effect a reverse split of Vermillion s common stock by a ratio of between 1 for 6 to 1 for 10. On February 15, 2008, Vermillion s Board of

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

Directors approved a 1 for 10 reverse stock split (the Reverse Stock Split) of Vermillion s common stock effective at the close of business on Monday, March 3, 2008. Accordingly, basic and diluted loss per share on the consolidated statement of operations for the year ended December 31, 2007 and 2006, was adjusted to reflect the impact of the Reverse Stock Split. The number of issued and outstanding shares of Vermillion s common stock on the consolidated balance sheets at December 31, 2007 and 2006, consolidated statement of changes in stockholders equity (deficit) and comprehensive loss at and for the years ended December 31, 2007 and 2006, was also adjusted to take into account the Reverse Stock Split. Additionally, all share and per share amounts were adjusted to take into account the Reverse Stock Split in the accompanying notes to the consolidated financial statements.

Use of Estimates

The preparation of consolidated financial statements in accordance with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and highly liquid investments with maturities of three months or less from the date of purchase, which are readily convertible into known amounts of cash and are so near to their maturity that they present an insignificant risk of changes in value because of interest rate changes. Highly liquid investments that are considered cash equivalents include money market funds, certificates of deposits, treasury bills and commercial paper. The carrying value of cash equivalents approximates fair value due to the short-term maturity of these securities.

Investments

The appropriate classification of investments in marketable securities is determined at the time of purchase, and is reassessed at each balance sheet date. Auction rate securities, which settled in its most recent auction, with auction dates within one year or less of the previous auction date that have been identified for funding operations within one year or less are classified as available-for-sale short-term investments. Due to the recent disruptions in the credit markets and the uncertainty surrounding the Company s ability to the liquidate certain auction rate securities in the next twelve months if at all auction rate securities that have failed to settle at auction subsequent to December 31, 2007, have been classified as available-for-sale long-term investments. Other marketable securities with maturities of one year or less from the date of purchase and have been identified for funding operations within one year or less are classified as available-for-sale short-term investments. All other marketable securities are classified as available-for-sale long-term investments.

These marketable securities are carried at fair value with unrealized gains or losses reported in accumulated other comprehensive loss. Fair value is generally based on quoted market price of the marketable security, and if the quoted market price is not available, the fair value is extrapolated from the quoted market prices of similar marketable securities or by discounting the future cash flows taking into consideration the interest rate probabilities that reflect the risk associated with that marketable security. Typically, the carrying value of auction rate securities approximates fair value due to the frequent resetting of the interest rates. Realized gains and losses on marketable securities are

computed using the specific identification method and are reported in other income (expense), net. The amortized cost of marketable debt securities is adjusted for the amortization of premiums and accretion of discounts to maturity, which is included in interest income. Declines in value judged to be other-than-temporary is determined based on the specific identification method and are reported in other income (expense), net.

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Concentration of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash and cash equivalents, investments in marketable securities and accounts receivable. The Company maintains the majority of its cash and cash equivalents in recognized financial institutions in the United States. The Company also maintains cash deposits with banks in Western Europe, Canada, China and Japan. The Company has not experienced any losses associated with its deposits of cash and cash equivalents. The Company s investment in marketable securities consists of auction rate securities, and are managed by recognized financial institutions. The Company does not invest in derivative instruments or engage in hedging activities.

The Company s accounts receivable are derived from sales made to customers located in North America. The Company performs ongoing credit evaluations of its customers financial condition and generally does not require collateral. The Company maintains an allowance for doubtful accounts based upon the expected collectability of accounts receivable. The Company s accounts receivable at December 31, 2007, and revenues for the year ended at December 31, 2007, is from one customer. No customer accounted for more than 10.0% of revenue for the year ended December 31, 2006.

Inventory

Inventory is stated at the lower of standard cost, which approximates cost on a first-in, first-out basis, or market value. Cost includes direct materials, direct labor, contracted manufacturing services and manufacturing overhead. Reserves for potentially excess and obsolete inventory are recorded based on management s analysis of inventory levels, planned changes in product offerings, sales forecasts and other factors.

Property, Plant and Equipment

Property, plant and equipment are stated at cost less accumulated depreciation and amortization. Machinery and equipment, demonstration equipment, computer equipment, computer software, development systems used for collaborations, and furniture and fixtures are depreciated using the straight-line method over the estimated useful life of the asset. Leasehold improvements are amortized using the straight-line method over the shorter of the estimated useful lives of the improvement or the original term of the underlying lease. Repair and maintenance costs are expensed as incurred. Property, plant and equipment retired or otherwise disposed of and the related accumulated depreciation are removed from the accounts and the resulting gain or loss is included in operating expenses. Property, plant and equipment are depreciated and amortized using the following estimated useful lives:

	Estimated Useful Life
Machinery and equipment	3 to 5 years
Demonstration equipment	2 years
Computer equipment	3 years
Computer software	3 years
Development systems used for collaborations	3 years

Furniture and fixtures	5 years
Leasehold improvements	2 to 8 years

Property, plant and equipment are reviewed for impairment when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. If property, plant and equipment are considered to be impaired, an impairment loss is recognized.

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Notes to Consolidated Financial Statements (Continued)

Goodwill and Other Intangible Assets

Goodwill represents the purchase price amount paid over the fair value of the net assets of an acquired business. Goodwill is tested annually for impairment or more frequently if conditions arise that might indicate the carrying amount of goodwill may be impaired. Impairment of goodwill is determined by comparing the estimated fair value to the net book value of the reporting unit. The estimated fair value of the reporting unit is calculated using the discounted future cash flow method. If the net book value of a reporting unit exceeds its estimated fair value, the amount of the impairment loss is measured by comparing the reporting unit s implied goodwill estimated fair value to its carrying amount of that goodwill. To the extent that the carrying amount of a reporting unit s goodwill exceeds its implied fair value, a goodwill impairment loss is recognized.

Other intangible assets represented a technology license acquired in connection with the settlement of litigation in 2003, which is stated at cost and was being amortized on a straight-line basis over its estimated useful life of 17 years. Other intangible assets were reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may no longer be recoverable.

Revenue Recognition

Prior to the Instrument Business Sale, revenue from product sales, including systems, accessories and consumables was recognized upon product shipment, provided no significant obligations remain and collection of the receivables was reasonably assured. Revenue from shipping and handling was generally recognized upon product shipment, based on the amount billed to customers for shipping and handling. The related cost of shipping and handling was included in cost of revenue upon product shipment.

Revenue from sales of separately priced software products was recognized when realized or realizable and earned after meeting the following criteria:

persuasive evidence of an agreement existed;

the price was fixed or determinable;

the product was delivered;

no significant obligations remained; and

collection of the receivable was deemed probable.

The Company generally included a standard 12-month warranty on its instruments and accessories in the form of a maintenance contract upon initial sale. The Company also sold separately priced maintenance (extended warranty) contracts, which were generally for 12 or 24 months, upon expiration of the initial maintenance contract. Coverage under both the standard and extended maintenance contracts was identical. Revenue for both the standard and extended maintenance contracts was deferred and recognized ratably over the maintenance contract term. Related costs were expensed as incurred. Factors that affected the Company s warranty costs included the number of installed units, historical and anticipated rates of warranty claims, and cost per claim.

For revenue arrangements with multiple elements that are delivered at different points in time (for example, where Vermillion delivered the hardware and software but was also obligated to provide services, maintenance and/or training), the Company evaluated whether the delivered elements had standalone value to the customer, whether the fair value of the undelivered elements was reliably determinable, and whether the delivery of the remaining elements was probable and within the Company s control. When all these conditions were met, the Company recognized revenue on the delivered elements. If any one of these conditions were not met, the Company deferred the recognition of revenue until all these conditions were met or all elements had been delivered. Fair values for ongoing maintenance were based upon separate sales of renewals to other

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customers. Fair values for services, such as training or consulting, were based upon separate sales by the Company of those services to other customers.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development costs consist primarily of payroll and related costs, materials and supplies used in the development of new products, and fees paid to third parties that conduct certain research and development activities on behalf of the Company. Software development costs incurred in the research and development of new products are expensed as incurred until technological feasibility is established. To date, products and upgrades have generally reached technological feasibility and have been released for sale at substantially the same time.

Stock-Based Compensation

Effective January 1, 2006, the Company adopted Statement of Financial Accounting Standards (SFAS) No. 123(R), *Share-Based Payment*. Under SFAS No. 123(R), the total fair value of the stock options awards is expensed ratably over the service period of the employees receiving the awards. In adopting SFAS No. 123(R), the Company used the modified prospective method of adoption. Under this adoption method, compensation expense recognized subsequent to adoption includes: (a) compensation costs for all share-based awards granted prior to but not yet vested as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions of SFAS No. 123, *Accounting for Stock-Based Compensation*, and (b) compensation costs for all share-based awards granted subsequent to January 1, 2006, based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123(R).

Prior to January 1, 2006, the Company accounted for employee stock-based compensation using the intrinsic value method in accordance with Accounting Principles Board (the APB) Opinion No. 25, *Accounting for Stock Issued to Employees*, as allowed by SFAS No. 123, *Accounting for Stock-Based Compensation*, as amended by SFAS No. 148, *Accounting for Stock-Based Compensation Transition and Disclosure*. Under the intrinsic value method, no stock-based employee compensation cost is recorded, provided the stock options are granted with an exercise price equal to or greater than the market value of the underlying common stock on the date of grant. Unearned compensation expense was based on the difference, if any, on the date of the grant between the fair value of the Company s stock and the exercise price. Unearned compensation was amortized and expensed using an accelerated method. The Company accounted for stock issued to non-employees using the fair value method of accounting as prescribed under Emerging Issues Task Force (EITF) Issue No. 96-18, *Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling Goods or Services*. As of December 31, 2007, the Company had three stock-based employee compensation plans (see description of the three stock-based compensation plans in Note 15, Employee Benefit Plans).

Income Taxes

The Company accounts for income taxes using the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and the tax bases of assets and liabilities using the current tax laws and rates. A valuation allowance is established when necessary to reduce deferred tax assets to the amounts expected to be realized. Interest and penalties related to income taxes are recorded to interest

and other expense of the consolidated statement of operations.

On January 1, 2007, the Company adopted FASB Interpretation No. (FIN) 48, *Accounting for Uncertainty in Income Taxes an Interpretation of FASB Statement No. 109*, which clarifies the accounting for income tax uncertainties that have been recognized in an enterprise s financial statements in accordance with Statement of Financial Accounting Standards (SFAS) No. 109, *Accounting for Income Taxes*. The results of the Internal Revenue Code 382 study conducted during the year ended December 31, 2007, led to a

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Notes to Consolidated Financial Statements (Continued)

reduction of the Company s gross net operating loss deferred tax asset. As of December 31, 2007, the Company has not recorded any liability related to FIN 48. Since the Company has incurred net losses since inception and all deferred tax assets have been fully reserved, FIN 48 had no impact to the Company s effective tax rate or retained earnings. Additionally, the Company has not recorded any interest or penalties related to FIN 48.

Foreign Currency Translation

The functional currency of Ciphergen Biosystems KK is the Japanese yen. Accordingly, all balance sheet accounts of this operation are translated into United States dollars using the current exchange rate in effect at the balance sheet date. The revenues and expenses of Ciphergen Biosystems KK are translated using the average exchange rates in effect during the period, and the gains and losses from foreign currency translation are recorded in accumulated other comprehensive loss.

The functional currency of all other foreign operations is the United States dollar. Accordingly, all monetary assets and liabilities of these foreign operations are translated into United States dollars at current period-end exchange rates and non-monetary assets and related elements of expense are translated using historical rates of exchange. Income and expense elements are translated to United States dollars using average exchange rates in effect during the period. Gains and losses from the foreign currency transactions of these subsidiaries are recorded as other income (expense), net and were not material for the years ended December 31, 2007 and 2006.

Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss consists of unrealized losses from available-for-sale securities and foreign currency translation.

Loss Per Share

Basic loss per share is computed by dividing the net loss by the weighted average number of common stock shares outstanding during the period. Diluted loss per share is computed by dividing the net loss by the weighted average number of common stock shares adjusted for the dilutive effect of common stock equivalent shares outstanding during the period. Common stock equivalents consist of convertible senior notes (using the as if converted method), stock options, stock warrants and common stock issuable under the 2000 Employee Stock Purchase Plan (using the treasury stock method). Common equivalent shares are excluded from the computation in periods in which they have an anti-dilutive effect on earnings per share.

Fair Value of Financial Instruments

Financial instruments include cash and cash equivalents, marketable securities, accounts receivables, accounts payable, accrued liabilities, convertible senior notes and the amount owed on a secured line of credit with Quest Diagnostics Incorporated (Quest). The estimated fair value of financial instruments has been determined using available market information or other appropriate valuation methodologies. However, considerable judgment is required in interpreting market data to develop estimates of fair value; therefore, the estimates are not necessarily indicative of the amounts that could be realized or would be paid in a current market exchange. The effect of using different market assumptions and/or estimation methodologies may be material to the estimated fair value amounts.

The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities are at cost, which approximates fair value due to the short maturity of those instruments. The carrying value of marketable securities is at fair value, which is generally based on quoted market price of the marketable security, and if the quoted market price is not available, the fair value is extrapolated from the quoted market prices of similar marketable securities or by discounting the future cash flows taking into consideration the interest rate probabilities that reflect the risk associated with

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Notes to Consolidated Financial Statements (Continued)

that marketable security. The carrying value of auction rate securities approximates fair value due to the frequent resetting of the interest rates. The estimated fair value of the convertible senior notes is based on quoted market prices. The carrying value of the amount owed on a secured line of credit with Quest approximates fair value, which is based on discounting the future cash flows using applicable spreads to approximate current interest rates available to the Company.

Segment Reporting

As a result of the Instrument Business Sale, management has determined that the Company operates one reportable segment, novel diagnostic tests. Prior to the Instrument Business Sale, the Company operated one reportable segment, which was the protein research products and collaborative services business.

2. Recent Accounting Pronouncements

Accounting for Business Combinations

In December 2007, the FASB issued SFAS No. 141(R), *Business Combinations*, which replaces SFAS No. 141, *Business Combinations.* SFAS No. 141(R) retains the fundamental requirements that the acquisition method of accounting, which was called the purchase method under SFAS No. 141, be used for all business combinations and for an acquirer to be identified for each business combination. SFAS No. 141(R) requires an acquirer to measure the assets acquired, the liabilities assumed and any noncontrolling interest in the acquiree at their fair values at the acquisition date, with limited exceptions. This replaces the cost-allocation process under SFAS No. 141, which required the cost of an acquisition to be allocated to the individual assets acquired and liabilities assumed based on their estimated fair values. SFAS No. 141(R) also requires the acquirer in a business combination achieved in stages, which is sometimes referred to as a step acquisition, to recognize the identifiable assets and liabilities, as well as the noncontrolling interest in the acquiree, at the full amounts of their fair values or other amounts determined in accordance with SFAS No. 141(R). SFAS No. 141(R) applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. An entity may not apply it before that date. The Company is currently evaluating the impact that adopting SFAS No. 141(R) will have on its consolidated financial statements.

Accounting for Nonrefundable Advance Payments for Goods or Services to be Used in Future Research and Development Activities

In June 2007, the Emerging Issues Task Force (the EITF) reached a consensus on EITF Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to be Used in Future Research and Development Activities*. EITF Issue No. 07-3 requires companies to defer and capitalize prepaid, nonrefundable research and development payments to third parties over the period that the research and development activities are performed or the services are provided, subject to an assessment of recoverability. EITF Issue No. 07-3 is effective for new contracts entered into in fiscal years beginning after December 15, 2007, including interim periods within those fiscal years. The Company s adoption of EITF Issue No. 07-3 is not expected to have a material impact on its consolidated financial statements.

Fair Value Option for Financial Assets and Financial Liabilities

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities Including an Amendment of FASB Statement No. 115*. SFAS No. 159 provides entities with an option to report selected financial assets and liabilities at fair value. Unrealized gains and losses on items for which the fair value option has been elected are reported in earnings. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007. The Company s adoption of SFAS No. 159 is not expected to have a material impact on its consolidated financial statements.

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Fair Value Measurements

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*. SFAS No. 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. SFAS No. 157 clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. Under the standard, fair value measurements would be separately disclosed by level within the fair value hierarchy. The provisions of SFAS No. 157 are effective for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years, with early adoption permitted. The Company s adoption of SFAS No. 157 is not expected to have a material impact on its consolidated financial statements.

3. Strategic Alliance with Quest Diagnostics Incorporated

On July 22, 2005, Vermillion and Quest entered into a strategic alliance agreement, which focuses on commercializing up to three diagnostic tests chosen from Vermillion s pipeline. The term of the agreement ends on the later of (i) the three-year anniversary of the agreement and (ii) the date on which Quest commercializes the three diagnostic tests covered by such agreement. Pursuant to the agreement, Quest will have the non-exclusive right to commercialize these tests on a worldwide basis, with exclusive commercialization rights in territories where Quest has a significant presence for up to five years following commercialization. As part of the strategic alliance, there is a royalty arrangement under which Quest will pay royalties to Vermillion based on fees earned by Quest for applicable diagnostics services, and Vermillion will pay royalties to Quest based on Vermillion s revenue from applicable diagnostics products. To date, no such royalties have been earned by either party. In connection with the strategic alliance, Quest purchased 622,500 shares of Vermillion common stock and warrants to purchase up to an additional 220,000 shares of its common stock with an exercise price of $35.00 per share and expiration date of July 22, 2010, for $14,954,000 in net proceeds. In connection with Quest s participation in the August 29, 2007, private placement sale, Vermillion amended the warrant originally issued to Quest on July 22, 2005. Pursuant to the terms of the amendment, the exercise price for the purchase of Vermillion s common stock was reduced from $35.00 per share to $25.00 per share and the expiration date of such warrant was extended from July 22, 2010, to July 22, 2011 (see further discussion of the private placement sale in Note 12, Common Stock).

Quest also agreed to provide Vermillion with a $10,000,000 secured line of credit, which is collateralized by certain intellectual property of Vermillion, that may only be used for certain costs and expenses directly related to the strategic alliance. Under the terms of this secured line of credit, the interest rate is at the prime rate plus 0.5% and is payable monthly. Additionally, this secured line of credit contain provisions for Quest to forgive portions of the amounts borrowed that corresponds to Vermillion s achievement of certain milestones related to development, regulatory approval and commercialization of certain diagnostic tests. The amounts to be forgiven and the corresponding milestones that Vermillion must achieve are (i) $1,000,000 for each application that allows a licensed laboratory test to be commercialized with a maximum of three applications for $3,000,000; (ii) $3,000,000 for the commercialization of the first diagnostic test kit; and (iii) $2,000,000 for each subsequent commercialization of diagnostic test kits with a maximum of two subsequent commercialized diagnostic test kits for $4,000,000. Should Vermillion fail to achieve these milestones, it would be responsible for the repayment of the outstanding principal amount and any unpaid interest on the secured line of credit on or before July 22, 2010. Vermillion has drawn on this secured line of credit in monthly increments of $417,000 on the last day of each month during the first two years of the strategic alliance. As of December 31, 2007 and 2006, Vermillion has drawn $10,000,000 and $7,083,000,

respectively, from this secured line of credit. From the inception of the strategic alliance through December 31, 2007, the Company had spent $10,000,000 of the amounts drawn on in-house research and development, as well as collaborations with others, directed towards achieving the milestones.

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4. Sale of Instrument Business to Bio-Rad Laboratories, Inc.

The Instrument Business Sale to Bio-Rad included the Company s SELDI technology, ProteinChip arrays and accompanying software. Pursuant to the terms of the sales agreement entered into with Bio-Rad, the total sales price was $20,000,000 of which $16,000,000 was paid by Bio-Rad to the Company at the closing of the transaction on November 13, 2006, and a total of $4,000,000 was held back from the sales proceeds contingent upon the Company meeting certain obligations. From the amounts held back, $2,000,000, subject to certain adjustments, is being held in escrow until November 13, 2009, to serve as security for Vermillion to fulfill certain obligations. The other $2,000,000 was withheld by Bio-Rad from the sales proceeds until the issuance of a reexamination certificate confirming United States Patent No. 6,734,022 (the 022 Patent). On October 23, 2007, the United States Patent and Trademark Office issued a reexamination certificate of the 022 Patent, and on November 9, 2007, the Company received $2,000,000 from Bio-Rad that was withheld from the proceeds of the Instrument Business Sale, which was recorded as a gain on sale of Instrument Business for the year ended December 31, 2007.

In connection with the Instrument Business Sale, Vermillion sold 308,642 shares of its common stock to Bio-Rad for $3,000,000 based on the average closing price of $9.72 per share for the 5 days preceding the sales agreement on August 14, 2006. In conjunction with the closing of the Instrument Business Sale, the sale of 308,642 shares of Vermillion common stock to Bio-Rad was recorded at its fair value of $3,611,000, which is based on November 13, 2006, Vermillion s common stock closing price of $11.70 per share. The $611,000 difference between the $3,000,000 sales price and $3,611,000 fair value is included in the gain on sale of Instrument Business. The calculation of the gain on sale of the Instrument Business at the date of sale was as follows (in thousands):

Cash proceeds	$ 19,000
Transaction costs	(782)
Net proceeds	18,218
Cost basis:	
Accounts receivable, net and other current assets	2,661
Inventories	4,536
Property, plant and equipment, net	3,231
Other intangible assets	1,856
Goodwill	76
Other long-term assets	152
Accounts payable and accrued liabilities	(1,400)
Deferred revenues	(3,420)
Capital lease obligations	(14)
Value of common stock issued	3,611
Total cost basis	11,289
Gain on sale of Instrument Business	$ 6,929

In connection with the Instrument Business Sale, Vermillion also entered into a cross-license agreement with Bio-Rad whereby Vermillion retained the royalty-free, exclusive right to commercially exploit existing technology, including SELDI technology, in the clinical diagnostics market for a period of five years after the effective date of the agreement (the Exclusivity Period), after which the rights become co-exclusive with Bio-Rad. Bio-Rad has the royalty-free, non-exclusive right under Vermillion s retained intellectual property in existence as of the effective date of the agreement to commercially exploit the products, processes and services of the Instrument Business outside of the clinical diagnostics market. Vermillion and Bio-Rad have also

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Notes to Consolidated Financial Statements (Continued)

granted each other the first right to negotiate in good faith to obtain a non-exclusive, worldwide license on commercially reasonable terms for any improvements created or developed and owned by such party during the exclusivity period for commercialization in the clinical diagnostics market, in the case of the Company, and outside the clinical diagnostics market, in the case of Bio-Rad. Bio-Rad also agreed (1) during the exclusivity period, not to sell products or services in the clinical diagnostics market that utilize the SELDI technology or enter into any agreement with any third party to sell any such products or services and (2) not to sell products or services in the clinical diagnostics market that utilize any mass spectrometry technology, or to enter into any agreement with any third party to sell any such products or services for a specified period after the effective date of the agreement.

Since the Instrument Business Sale, Bio-Rad has taken over Vermillion s manufacturing operations. In connection with the Instrument Business Sale, Vermillion entered into a manufacture and supply agreement with Bio-Rad, whereby Vermillion agreed to purchase from Bio-Rad the ProteinChip Systems and ProteinChip Arrays (collectively referred to herein as the Research Tools Products) necessary to support Vermillion s diagnostics efforts.

Under this agreement, Vermillion must provide Bio-Rad quarterly, non-binding, twelve-month rolling forecasts setting forth Vermillion s anticipated needs for Research Tools Products over the forecast period. Vermillion may provide revised forecasts as necessary to reflect changes in demand for the products, and Bio-Rad is required to use commercially reasonable efforts to supply amounts in excess of the applicable forecast. Under the terms of the manufacture and supply agreement, Vermillion has a commitment to purchase 10 systems and 30,000 arrays in the first year, 13 systems and 30,000 arrays in the second year and 20 systems and 30,000 arrays for the third year in order to support its collaboration agreements with Quest, which may be used as inventory for resale, fixed assets for collaboration purposes or supplies for research and development. The Company has estimated the cost to be $70,000 per system and $40 per array for a total estimated obligation of $6,610,000. If Bio-Rad fails to supply any Research Tools Products to Vermillion, including any new Research Tools Products developed by Bio-Rad for sale to its customers or any new Research Tools Products Vermillion has requested Bio-Rad to make and sell to Vermillion, under certain conditions Vermillion has the right to manufacture or have such Research Tools Products manufactured by a third party for Vermillion s own use and sale to its customers and collaborators in the clinical diagnostics market, subject to payment of a reasonable royalty to Bio-Rad on sales of such Research Tools Products. Vermillion will be responsible for assuring through its incoming quality control process that the Research Tools Products Vermillion purchases from Bio-Rad will comply with applicable government regulations.

The term of this agreement expires on November 12, 2011, but may be renewed for two successive two-year periods at Vermillion s option. Either party may terminate the agreement for convenience upon 180 days prior written notice, or upon default if the other party fails to cure such default within 30 days after notice thereof. Vermillion made total purchases of $1,032,000 and $38,000 under this agreement for the years ended December 31, 2007 and 2006, respectively. As of December 31, 2007, Vermillion had a total remaining first year obligation to purchase 4 systems and 13,098 arrays, or $804,000 based the on estimated costs of $70,000 per system and $40 per array. As of December 31, 2007, the Company owed Bio-Rad $246,000 for Research Tools Products.

In order to allocate support services between Bio-Rad and Vermillion s remaining business following the Instrument Business Sale, Vermillion entered into a transition services agreement with Bio-Rad. Under this agreement, Bio-Rad and the Company agreed to provide each other with certain administrative and operational support and related services and share the use of certain equipment. The term of the agreement was generally six months from the closing of the asset sale but could be extended or shortened with respect to certain items upon mutual agreement by the parties. The

agreement was amended in May and June 2007 to extend the term during which the parties would provide certain consulting services to each other until December 31, 2007. Either party may terminate one, some or all of the remaining services of which it is the recipient at any time

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Notes to Consolidated Financial Statements (Continued)

upon 60 days advance notice. The parties pay each other a fee for the provision of the consulting services based on an hourly rate tied to the salary of the employee or consultant who is providing such services. For the years ended December 31, 2007 and 2006, transitional services provided by Vermillion to Bio-Rad amounted to $115,000 and $66,000, respectively. For the years ended December 31, 2007 and 2006, transitional services provided by Bio-Rad to Vermillion amounted to $74,000 and $52,000, respectively.

In connection with the Instrument Business Sale, Vermillion entered into a sublease agreement with Bio-Rad, pursuant to which Vermillion subleases approximately 29,000 square feet of its Fremont, California facility. Bio-Rad may use the sublet premises only for general office, laboratory, research and development, and other uses necessary to conduct their business, and may not sublet the premises without Vermillion s consent. The sublease expires on July 31, 2008, unless terminated earlier in accordance with the terms of the sublease or master lease. Bio-Rad may terminate the sublease at any time upon six months written notice. Rent under the sublease is payable monthly and consists of base rent plus a proportionate share of certain other expenses including property taxes, management fees, insurance, maintenance and utilities. Rent and certain other facility related expenses are paid directly to Vermillion, and in accordance with the terms of the master lease, all payments received by Vermillion from Bio-Rad under the sublease are paid to the landlord. Under the sublease agreement, Vermillion recognized $204,000 in base rent and $25,000 in other rental expenses for the year ended December 31, 2006, and $1,549,000 in base rent and $53,000 in other rental expenses for the year ended December 31, 2007.

Subsequent to the Instrument Business Sale, both the Company and Bio-Rad recognized business activities on behalf of each other. As of December 31, 2007, the Company owed Bio-Rad $50,000, which consisted of $42,000 for accounts receivable the Company collected on behalf of Bio-Rad and $8,000 for invoices paid by the Company that were reimbursed twice by Bio-Rad. Similarly, Bio-Rad owed the Company $33,000, which consisted of $15,000 of invoices paid by the Company on behalf of Bio-Rad and $18,000 for Bio-Rad s portion of expenses related to facilities shared by the Company. As of December 31, 2006, the Company owed Bio-Rad $1,571,000, which consisted of $1,511,000 for accounts receivable the Company collected on behalf of Bio-Rad, $8,000 for invoices processed by Bio-Rad on behalf of the Company and $52,000 for services Bio-Rad provided to the Company. Similarly, Bio-Rad owed the Company $619,000, which consisted of $174,000 for invoices processed by the Company on behalf of Bio-Rad, $200,000 for sales taxes on the sale of assets and $245,000 for unbilled receivables from Bio-Rad. Additionally, for the year ended December 31, 2007, the Company recorded a charge of $390,000 related to a post-closing adjustment resulting from the Instrument Business Sale, which is reflected in the gain on sale of Instrument Business.

5. Short-Term and Long-Term Investments

The Company had no investments in marketable securities at December 31, 2006. At December 31, 2007, the Company s investments consisted of $12,777,000 invested in auction rate securities, including $3,902,000 classified as available-for-sale long-term investments as a result of certain auction rate securities failing to settle at auctions subsequent to December 31, 2007. These auction rate securities have a rating of AAA by a major credit rating agency. The Company s available-for-sale short-term and long-term investments consist of the following at December 31, 2007 (in thousands):

	Gross	Gross

	Amortized Cost	Unrealized Gain	Unrealized Loss	Market Value
Short-term investments:				
Auction rate securities	$ 8,875	$	$	$ 8,875
Long-term investments:				
Auction rate securities	$ 4,000	$	$ (98)	$ 3,902

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Notes to Consolidated Financial Statements (Continued)

The net unrealized loss on marketable securities available-for-sale was $98,000 at December 31, 2007. The Company had no sales of marketable securities available-for-sale for the year ended December 31, 2006.

The unrealized loss positions of the Company s available-for-sale short-term and long-term investments at December 31, 2007 were as follows (in thousands):

	Less Than 12 Months		12 Months or More		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Short-term investments:						
Auction rate securities	$	$	$	$	$	$
Long-term investments:						
Auction rate securities	$ 902	$ (98)	$	$	$ 902	$ (98)

The scheduled contractual maturity dates for available-for-sale short-term and long-term investments at December 31, 2007, are as follows (in thousands):

	Within 1 Year	After 1 Year through 5 Years	After 5 Year through 10 Years	After 10 Years	Total
Short-term investments:					
Auction rate securities	$	$	$	$ 8,875	$ 8,875
Long-term investments:					
Auction rate securities	$	$	$	$ 4,000	$ 4,000

6. Property, Plant and Equipment

The components of property, plant and equipment as of December 31, 2007 and 2006, were as follows (dollars in thousands):

	2007	2006

Machinery and equipment	$ 4,276	$ 3,853
Demonstration equipment	675	649
Leasehold improvements	2,744	2,753
Computer equipment and software	718	720
Furniture and fixtures	183	197
Gross property, plant and equipment	8,596	8,172
Accumulated depreciation and amortization	(6,658)	(5,912)
Property, plant and equipment, net	$ 1,938	$ 2,260

Depreciation expense for property, plant and equipment was $1,181,000 and $3,175,000 for the years ended December 31, 2007 and 2006, respectively.

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7. Goodwill and Other Intangible Assets

The activity for goodwill and other intangibles for the year ended December 31, 2006, were as follows (in thousands):

	Goodwill	Other Intangible Assets	Total
Balance at December 31, 2005	$ 76	$ 2,417	$ 2,493
Acquired license related to litigation settlement		346	346
Amortization		(907)	(907)
Write-downs due to the Instrument Business Sale to Bio-Rad Laboratories, Inc.	(76)	(1,856)	(1,932)
Balance at December 31, 2006	$	$	$

In connection with the Instrument Business Sale, Vermillion sublicensed to Bio-Rad certain rights to the core SELDI technology for use outside of the clinical diagnostics field. Vermillion retained exclusive rights to the license rights for use in the field of clinical diagnostics for a five-year period, after which the license will be co-exclusive in this field. The rights to the SELDI technology are derived through royalty-bearing sublicenses from Molecular Analytical Systems, Inc. (MAS). MAS holds an exclusive license to patents directed to the SELDI technology from the owner, Baylor College of Medicine. In 1997, MAS granted certain rights under these patents to Vermillion s wholly owned subsidiaries, IllumeSys Pacific, Inc. and Ciphergen Technologies, Inc. Vermillion obtained further rights under the patents in 2003 through sublicenses and assignments executed as part of the settlement of a lawsuit between Vermillion, MAS, LumiCyte and T. William Hutchens. Together, the sublicenses and assignments provide all rights to develop, make and have made, use, sell, import, market and otherwise exploit products and services covered by the patents throughout the world in all fields and applications, both commercial and non-commercial. The sublicenses carry the obligation to pay MAS a royalty equal to 2% of revenues recognized between February 21, 2003, and the earlier of (i) February 21, 2013, or (ii) the date on which the cumulative payments to MAS have reached $10,000,000 (collectively the Sublicenses). As of December 31, 2007, Vermillion has paid $2,597,000 in royalties to MAS under the Sublicenses. Under Vermillion s sublicense agreement with Bio-Rad, Bio-Rad agreed to pay the royalties directly to MAS under the license rights.

8. Accrued Liabilities

The components of accrued liabilities as of December 31, 2007 and 2006, were as follows (dollars in thousands):

	2007	2006
Payroll and related expenses	$ 755	$ 785
Compensated absences	285	320

Collaboration and research agreements expenses	596	1,697
Legal and accounting fees	326	437
Tax-related liabilities	519	637
Accrued interest on convertible senior notes and long-term debt owed to related party	493	185
Current deferred revenue	27	45
Other accrued liabilities	594	539
Total accrued liabilities	$ 3,595	$ 4,645

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9. Warranties and Maintenance Contracts

Prior to the Instrument Business Sale, the Company had product warranty activities and obligations to provide services for its products. The Company generally included a standard 12-month warranty on its ProteinChip Systems and certain accessories upon initial sale, after which maintenance and support was available under a separately priced contract or on an individual call basis. The Company also sold separately priced maintenance (extended warranty) contracts, which are generally for 12 or 24 months, upon expiration of the initial 12-month warranty. Coverage under both the standard and extended maintenance contracts were identical. Revenue for both the standard and extended maintenance contracts was deferred and recognized on a straight-line basis over the period of the applicable maintenance contract. Related costs are recognized as incurred.

For the year ended December 31, 2007, the Company had no product warranty obligations or activity, as all warranty obligations were assumed by Bio-Rad as of November 13, 2006. Changes in product warranty obligations, including separately priced maintenance obligations, for the year ended December 31, 2006, were as follows (in thousands):

Balance at December 31, 2005	$ 2,831
Add: Costs incurred for maintenance contracts	1,928
Revenue deferred for maintenance contracts	3,271
Less: Settlements made under maintenance contracts	(1,928)
Revenue recognized for maintenance contracts	(3,896)
Deferred Revenue sold to Bio-Rad Laboratories, Inc.	(2,206)
Balance at December 31, 2006	$

10. Long-Term Debt

7.00% Convertible Senior Notes Due September 1, 2011

On November 15, 2006, Vermillion closed the sale of $16,500,000 of convertible senior notes due September 1, 2011 (the 7.00% Notes). Offering costs were $104,000 and fees of $514,500, which were paid on behalf of the debt holders, were recorded as debt discount on the 7.00% Notes. Fees paid on behalf of debt holders included the fair value of two warrants issued to underwriters to purchase a total of 20,000 shares of common stock at $12.60 per share. The warrants were valued at $140,000 based on the fair value as determined by a Black-Scholes model using the following assumptions: a risk free interest rate of 4.75%, 5 year contractual life, and 88.00% volatility rate. Interest on the 7.00% Notes is 7.00% per annum on the principal amount, payable semiannually on March 1 and September 1 of each year, beginning March 1, 2007. The 7.00% Notes were sold pursuant to separate exchange and redemption agreements between Vermillion and each of Highbridge International LLC, Deerfield International Limited, Deerfield Partners, L.P., Bruce Funds, Inc. and Professional Life & Casualty, each holders of Vermillion s existing 4.50% convertible senior notes due September 1, 2008 (the 4.50% Notes), pursuant to which holders of an aggregate of $27,500,000 of the 4.50% Notes agreed to exchange and redeem their 4.50% Notes for an aggregate of $16,500,000 in aggregate principal amount of the 7.00% Notes and $11,000,000 in cash, plus accrued and unpaid interest on the 4.50% Notes of $254,000 through and including the day prior to the closing. The transaction was treated as a debt extinguishment and

accordingly, $613,000 of unamortized prepaid offering costs and $868,000 of unamortized debt discount related to the 4.50% Notes were charged to expense as loss on extinguishment of debt. The debt discount related to the 7.00% Notes is amortized to interest expense using the effective interest method. The amortization of the debt discount related to the 7.00% Notes amounted to $195,000 and $15,000 for the years ended December 31, 2007 and 2006, respectively.

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Notes to Consolidated Financial Statements (Continued)

Vermillion issued the 7.00% Notes pursuant to an indenture, dated November 15, 2006, between Vermillion and U.S. Bank National Association, as Trustee. Following the closing, $2,500,000 in aggregate principal amount of the 4.50% Notes remain outstanding.

The 7.00% Notes are unsecured senior indebtedness of Vermillion and bear interest at the rate of 7.00% per annum, which may be reduced to 4.00% per annum if Vermillion receives approval or clearance for commercial sale of any of its ovarian cancer tests by the United States Food and Drug Administration (the FDA). Interest is payable on March 1 and September 1 of each year, commencing March 1, 2007. The effective interest rate is 8.18% per annum.

The 7.00% Notes are convertible at the option of each holder, at any time on or prior to the close of business on the business day immediately preceding September 1, 2011, into shares of Vermillion common stock at a conversion price of $20.00 per share, equivalent to a conversion rate equal to 50 shares of common stock per $1,000 principal of the 7.00% Notes, subject to adjustment for standard anti-dilution provisions including distributions to common stockholders and stock splits as well as occurrence of a change in control, in which case the conversion rate is adjusted for a make-whole premium.

The make-whole premium shall be equal to the principal amount of 7.00% Notes to be converted divided by $1,000 and multiplied by the applicable number of shares of common stock based upon Vermillion s share prices as of the change of control date. Specifically, as the 7.00% Notes approach their redemption date of September 1, 2009, as discussed below, the make-whole payment decreases. Vermillion is not required to make a make-whole payment if its stock price is less than $12.00 or greater than $80.00 as of the date of the change in control. The make-whole premium associated with the 7.00% Notes sets a maximum additional 1,500,000 shares that may be issued on conversion (90.9091 shares per $1,000 principal amount of 7.00% Notes).

If a holder converts all or any portion of their 7.00% Notes prior to October 31, 2008, upon such conversion, in addition to the common stock such holder would receive, the holder will be entitled to receive with respect to each 7.00% Note so converted an amount in cash equal to the difference of (i) the amount of all interest that Vermillion would be required to pay on such 7.00% Note from the date of the indenture through October 31, 2008, and (ii) the amount of interest actually paid on such 7.00% Note by Vermillion prior to the time of conversion.

Holders of the 7.00% Notes have the option to require Vermillion to repurchase the 7.00% Notes under certain circumstances, including at any time after September 1, 2009, if Vermillion has not received approval or clearance for commercial sale of any of its ovarian cancer test by the FDA. Vermillion may redeem the 7.00% Notes at its option, in whole or in part, at any time on or after September 1, 2009, at specified redemption prices plus accrued and unpaid interest; provided that the 7.00% Notes will be redeemable only if the closing price of the stock equals or exceeds 200.0% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on the trading day before the date of the notice of the optional redemption. Upon a change of control, each holder of the 7.00% Notes may require Vermillion to repurchase some or all of the 7.00% Notes at specified redemption prices, plus accrued and unpaid interest. The 7.00% Notes contains a put option that entitles the holder to require Vermillion to redeem the 7.00% Note at a price equal to 105.0% of the principal balance upon a change in control of the Company.

Vermillion identified the guaranteed interest payment for any conversion of any 7.00% Note by a holder prior to October 31, 2008, and the written put option permitting the holder to put the debt at 105.0% of principal plus accrued

and unpaid interest upon a change of control as a compound embedded derivative, which needs to be separated and measured at its fair value. The factors impacting the fair value of the guaranteed interest payment for any conversion of any 7.00% Note by a holder prior to October 31, 2008, is based upon certain factors including Vermillion s stock price, the time value of money and the likelihood holders would convert within the next two years. However, due to Vermillion s current stock price at the date

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Notes to Consolidated Financial Statements (Continued)

of 7.00% Note issuance and through December 31, 2007, resulting in the conversion feature being substantially out of the money, the likelihood of conversion was deemed to be remote. The factors impacting the fair value of the written put option permitting the holder to put the 7.00% Note at 105.0% of principal plus accrued and unpaid interest upon a change of control, is contingent upon a change of control. However, due to significant related party holdings of Vermillion s common stock shares and the presence of certain anti-takeover provisions in the bylaws of Vermillion, a change of control is deemed to be remote. When the fair values of these two features are combined, the fair value of the compound embedded derivative had de minimis fair value on the date of inception and through December 31, 2007.

Vermillion and the investors entered into a registration rights agreement in which Vermillion agrees to make reasonable best efforts to file a shelf registration and keep it effective permitting the 7.00% Note holders to sell the 7.00% Notes or the underlying common stock shares. In the circumstance of a failed registration, Vermillion agrees to pay interest as partial relief for the damages (Liquidated Damages) until the earlier of (1) the day on which the registration default has been cured and (2) the date the shelf registration statement is no longer required to be kept effective, in an amount in cash equal to 1.5% of the aggregate outstanding principal amount of the 7.00% Notes until such registration default is cured; provided that in no event shall Liquidated Damages exceed 10.0% of the holder s initial investment in the 7.00% Notes in the aggregate.

The Company evaluated the Liquidated Damages according to guidance under FASB Staff Position No. EITF (FSP EITF) 00-19-2, *Accounting for Registration Payment Arrangements*, which specifies that the contingent obligation to make future payments or otherwise transfer consideration under a registration payment arrangement, whether issued as a separate agreement or included as a provision of a financial instrument or other agreement, shall be recognized and measured separately in accordance with SFAS No. 5, *Accounting for Contingencies*, and FIN 14, *Reasonable Estimation of the Amount of a Loss*. FSP EITF 00-19-2 further states that an entity should recognize and measure a registration payment arrangement as a separate unit of accounting from the financial instrument subject to that arrangement. Accordingly, the Company concluded that the transfer of consideration under a registration payment arrangement is not probable at the time of inception or through December 31, 2007. Therefore a contingent liability under the registration payment arrangement was not recognized.

The 7.00% Notes and common stock issuable upon conversion of the 7.00% Notes were registered with the United States Securities and Exchange Commission (the SEC) on Form S-3 on December 15, 2006, and at December 31, 2007 and 2006, all 7.00% Notes remained issued and outstanding.

4.50% Convertible Senior Notes Due September 1, 2008

On August 22, 2003, the Company closed the sale of $30,000,000 of the 4.50% Notes. Offering costs were $1,866,000. Interest on the notes is 4.50% per annum on the principal amount, payable semiannually on March 1 and September 1, beginning March 1, 2004. The effective interest rate is 6.28% per annum. The 4.50% Notes are convertible, at the option of the holder, at any time on or prior to maturity of the 4.50% Notes into shares of the Company s common stock initially at a conversion rate of 10.88329 shares per $1,000 principal amount of the 4.50% Notes, which is equal to a conversion price of $91.88 per share. The conversion price, and hence the conversion rate, is subject to adjustment upon the occurrence of certain events, such as stock splits, stock dividends and other distributions or recapitalizations. Because the market value of the stock rose above the conversion price between the day the 4.50% Notes were priced and the closing date, the Company recorded a discount of $2,677,000

related to the intrinsic value of the beneficial conversion feature resulting from this price change and the fact that the initial purchaser of the 4.50% Notes was not required to purchase the 4.50% Notes until the closing date. Immediately after the closing, Vermillion s common stock had a market price of $100.10 per share, or $8.22 per share higher than the conversion price. The value of the beneficial conversion feature was determined by multiplying this difference in the per share price of

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Notes to Consolidated Financial Statements (Continued)

Vermillion s common stock by the 326,498 underlying shares. This amount is being amortized to interest expense using the effective interest method over the five-year term of the notes, or shorter period in the event of conversion of the 4.50% Notes. The debt discount related to the 4.50% Notes is amortized to interest expense using the effective interest method. The amortization of the beneficial conversion feature amounted to $44,000 and $473,000 for the years ended December 31, 2007 and 2006, respectively.

The 4.50% Notes are Vermillion s senior unsecured obligations and rank on parity in right of payment with all of Vermillion s existing and future senior unsecured debt and rank senior to Vermillion s existing and future debt that expressly provides that it is subordinated to the 4.50% Notes. The 4.50% Notes are also effectively subordinated in right of payment to Vermillion s existing and future secured debt, to the extent of such security, and to its subsidiaries liabilities. The indenture does not limit the incurrence by Vermillion or its subsidiaries of other indebtedness.

Vermillion may redeem the 4.50% Notes at its option, in whole or in part, at any time on or after September 1, 2006, at specified redemption prices plus accrued and unpaid interest; provided that the 4.50% Notes will be redeemable only if the closing price of the stock equals or exceeds 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on the trading day before the date of the notice of the redemption. Upon a change of control, each holder of the 4.50% Notes may require Vermillion to repurchase some or all of the 4.50% Notes at specified redemption prices, plus accrued and unpaid interest. The 4.50% Notes contains a put option that entitles the holder to require Vermillion to redeem the 4.50% Notes at a price equal to 105.0% of the principal balance upon a change in control of Vermillion. Vermillion does not anticipate that the put option will have significant value because no change of control is currently contemplated.

The 4.50% Notes and common stock issuable upon conversion of the notes were registered with the SEC on Form S-3 on October 8, 2003. Following the closing of the November 15, 2006, sale of $16,500,000 of the 7.00% Notes due September 1, 2011, holders of an aggregate of $27,500,000 of the 4.50% Notes agreed to exchange and redeem their 4.50% Notes for an aggregate of $16,500,000 in aggregate principal amount of the 7.00% Notes and $11,000,000 in cash. Therefore, the remaining $2,500,000 in aggregate principal amount of the 4.50% Notes remain outstanding.

Equipment Financing Loan

In June 2003, the Company entered into a loan and security agreement with General Electric Capital Corporation to obtain financing for up to $5,000,000 of capital equipment purchases. The Company financed $2,065,000 of capital equipment purchases through this facility at an annual interest rate of 7.48%, repayable in monthly installments over 36 months from the date of each drawdown under the agreement. The loan is collateralized by the equipment being financed as well as certain other assets of the Company. The outstanding loan balance of $377,000 was paid off in July 2006. Total payments made for this facility including principal and interest were $450,000 for the year ended December 31, 2006.

11. Commitments and Contingencies

Operating Leases

Currently, the Company leases various equipment and facilities to support its business of discovering, developing and commercializing diagnostics tests in the fields of oncology, hematology, cardiology and women s health. Prior to

November 13, 2006, the Company leased various equipment and facilities to support its worldwide manufacturing, research and development and sales and marketing activities related to the Instrument Business. The Company leases its Fremont facility under a noncancelable operating lease that expires on July 31, 2008. The lease provides for escalations of lease payments of approximately 4% per year and is recognized as rent expense on a straight-line basis. Approximately 29,000 square feet of the Fremont

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facility has been subleased to Bio-Rad for the remaining lease term (see Note 4, Sale of Instrument Business to Bio-Rad Laboratories, Inc.). Rental expense under operating leases for the years ended December 31, 2007 and 2006, were as follows (in thousands):

	2007	2006
Gross rental expense	$ 3,165	$ 3,710
Sublease rental income	(1,628)	(230)
Net rental expense	$ 1,537	$ 3,480

As of December 31, 2007, future minimum rental payments under noncancelable operating leases net of aggregate minimum noncancelable sublease rentals are as follows (in thousands):

2008	$ 2,030
2009	9
Total minimum rental payments	2,039
Total sublease rentals	(695)
Net rental payments	$ 1,344

Noncancelable Collaboration Obligations and Other Commitments

The research collaboration agreement with The Johns Hopkins University School of Medicine (JHU), which was extended through December 31, 2007,was directed at the discovery and validation of biomarkers in human subjects, including but not limited to clinical application of biomarkers in the understanding, diagnosis and management of human diseases. As of December 31, 2007, Vermillion had a remaining obligation of $150,000 related to the research collaboration agreement extension with JHU. Collaboration costs, which are included in research and development expenses, related to these extended research collaboration agreement were $368,000 and $964,000 for the years ended December 31, 2007 and 2006, respectively.

On September 22, 2005, Vermillion entered into a two year collaborative research agreement with University College London and UCL Biomedica Plc (collectively referred to as UCL), which expired on September 30, 2007. The collaborative research agreement was directed at the utilization of Vermillion s former suite of proteomic solutions to further both parties ongoing research in ovarian cancer and breast cancer. Under the terms of the agreement, Vermillion had exclusive rights to license intellectual property resulting from discoveries made during the course of this collaboration for use in developing, manufacturing and commercializing products and services utilizing the intellectual property. Under the terms of the collaborative research agreement, Vermillion had a noncancelable obligation to contribute £604,000 in the first year of the agreement. In the second year of the agreement, which was

cancelable with three months advance notice, Vermillion had an obligation to contribute cash of £605,000. As of December 31, 2007, Vermillion has paid £816,000 or $1,603,000 and had a remaining cash obligation of £393,000 or $827,000 related to this agreement. Additionally, under the terms of the collaborative research agreement, Vermillion had a noncancelable obligation to provide equipment, software, arrays and consumable supplies with an estimated value at Vermillion s list selling price of £370,000 to cover part of the costs incurred by UCL specifically for this research program. As of December 31, 2007, Vermillion had provided at its cost $112,000, or $546,000 valued at Vermillion s list selling price, of equipment, software, arrays and consumable supplies to UCL. Collaboration costs, which are included in research and development expenses, related to this agreement were $1,105,000 and $1,083,000 for the years ended December 31, 2007 and 2006, respectively.

On October 4, 2006, Vermillion entered into a one-year research and development agreement, which has automatic renewals for two additional one-year terms, with Katholieke Universiteit Leuven, Belgium, directed at discovery, validation and characterization of novel biomarkers related to gynecologic disease. Under the

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terms of the agreement, Vermillion has exclusive rights to license discoveries made during the course of this collaboration. Under the terms of the research and development agreement, Vermillion had a noncancelable obligation of 45,000 in the first year of the agreement to fund sample collection at the Katholieke Universiteit Leuven from patients undergoing evaluation of a persistent mass who will undergo surgical intervention. As of December 31, 2007, the Company has paid 45,000 or $61,000 related to this agreement. Collaboration costs, which are included in research and development expenses, related to this agreement were $61,000 for the year ended December 31, 2007.

On October 13, 2006, the Company entered into a two year research and collaboration agreement, which has automatic renewals of additional one-year terms, with The Ohio State University Research Foundation (OSU) directed at discovery, purification, identification and/or validation of biomarkers related to thrombotic thrombocytopenic purpura (TTP) and production of associated technology. Under the terms of the agreement, Vermillion has an option to take an exclusive license to discoveries made during the course of this collaboration. During the first fifteen months of the agreement, Vermillion had a total noncancelable obligation of $150,000 to OSU in consideration for costs incurred specifically for this research program. As of December 31, 2007, the Company has paid $120,000 and had a remaining obligation of $30,000 related to this agreement. Collaboration costs, which are included in research and development expenses, related to this agreement were $120,000 and $30,000 for the years ended December 31, 2007 and 2006, respectively.

On December 11, 2006, Vermillion entered into a consulting agreement with PrecisionMed International (PrecisionMed), which was subsequently amended on April 5, 2007. Under the terms of the amended agreement, PrecisionMed collected whole blood specimens from up to 1,000 research subjects for the purposes of Vermillion s whole blood collection protocol for its ovarian tumor triage test clinical trial. The amended agreement provided for a maximum payment of $1,335,000 for 500 research subjects and a maximum payment of $1,788,000 for 1,000 research subjects. As of December 31, 2007, Vermillion has paid a total of $1,433,000, including travel expenses of $50,000, related to this agreement. These costs, which are included in research and development expenses, related to this agreement were $972,000 and $461,000 for the years ended December 31, 2007 and 2006, respectively.

On June 1, 2007, Vermillion entered into a nonexclusive license agreement with the National Cardiovascular Center (NCVC), an entity organized and existing under the laws of Japan. Under this agreement, Vermillion obtained a ten-year worldwide nonexclusive license with the right to extend the term for the life of the licensed patent, which includes a United States Patent Application, a Japan Patent and a Patent Cooperation Treaty (PCT) Application, for technology used in Vermillion s TTP diagnostic test kit that is under development. Under this agreement, Vermillion will pay NCVC a non-refundable license fee of $50,000. The payment terms are $20,000 upon execution of this agreement, $10,000 upon submission of an in vitro diagnostic test to the FDA for clearance, $10,000 upon the first commercial sale of such in vitro diagnostic test kit and $10,000 upon achievement of $500,000 in net sales of such in vitro diagnostic test kits. Additionally, Vermillion will pay royalties to NCVC for net sales to customers located in the United Sates, Japan, Europe and China. As of December 31, 2007, Vermillion has paid $20,000 related to the execution of this agreement.

In connection with the Instrument Business Sale, Vermillion entered into a manufacture and supply agreement with Bio-Rad, whereby Vermillion agreed to purchase Research Tools Products from Bio-Rad (see Note 4, Sale of Instrument Business to Bio-Rad Laboratories, Inc.). Under the terms of the manufacture and supply agreement, Vermillion has a commitment to purchase 10 systems and 30,000 arrays in the first year, 13 systems and 30,000 arrays in the second year and 20 systems and 30,000 arrays for the third year. The Company has estimated the cost to be

$70,000 per system and $40 per array for a total estimated obligation of $6,610,000. Vermillion made total purchases of $1,032,000 and $38,000 under this agreement for the years ended December 31, 2007 and 2006, respectively. As of December 31, 2007, Vermillion had a total remaining first year obligation to purchase 4 systems and 13,098 arrays, or $804,000 based the on estimated costs of

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$70,000 per system and $40 per array. As of December 31, 2007, the Company owed Bio-Rad $246,000 for Research Tools Products.

Litigation

On September 17, 2007, MAS filed a lawsuit in the Superior Court of California for the County of Santa Clara naming Vermillion and Bio-Rad as defendants. Under the lawsuit, MAS seeks an unspecified amount of damages and alleges, among other things, that Vermillion is in breach of its license agreement with MAS relating to SELDI technology as a result of Vermillion s entry into a sublicense agreement with Bio-Rad. In connection with the Instrument Business Sale, Vermillion sublicensed to Bio-Rad certain rights to the SELDI technology that Vermillion obtained under the MAS license for use outside of the clinical diagnostics field. Vermillion retained exclusive rights to the technology for use in the field of clinical diagnostics for a five-year period, after which it will retain nonexclusive rights in that field. Vermillion s deadline to answer or otherwise respond to the Complaint is April 1, 2008. Vermillion intends to vigorously defend this action. Given the early stage of this action, management cannot predict the ultimate outcome of this matter at this time.

On June 26, 2006, Health Discovery Corporation (HDC) filed a lawsuit against Vermillion in the United States District Court for the Eastern District of Texas, Marshall Division (the Court), claiming that software used in certain Vermillion ProteinChip Systems infringes on three of its United States patents. HDC sought injunctive relief as well as unspecified compensatory and enhanced damages, reasonable attorney s fees, prejudgment interest and other costs. On August 1, 2006, Vermillion filed an unopposed motion with the Court to extend the deadline for Vermillion to answer or otherwise respond until September 2, 2006. Vermillion filed its answer and counterclaim to the complaint with the Court on September 1, 2006. Concurrent with its answer and counterclaims, Vermillion filed a motion to transfer the case to the Northern District of California. On January 10, 2007, the Court granted Vermillion s motion to transfer the case to the Northern District of California. The parties met for a scheduled mediation on May 7, 2007. On July 10, 2007, Vermillion entered into a license and settlement agreement with HDC (the HDC Agreement) pursuant to which it licensed more than 25 patents covering HDC s support vector machine technology for use with Surface Enhanced Laser Desorption/Ionization (SELDI) technology. Under the terms of the HDC Agreement, Vermillion receives a worldwide, royalty-free, non-exclusive license for life sciences and diagnostic applications of the technology and it has access to any future patents resulting from the underlying intellectual property in conjunction with use of SELDI systems. Pursuant to the HDC Agreement, Vermillion paid to HDC $200,000 upon entry into the agreement on July 10, 2007, and $100,000 three months following the date of the agreement on October 10, 2007. The remaining $300,000 under the HDC Agreement is payable as follows: $150,000 twelve months following the date of the agreement and $150,000 twenty-four months following the date of the agreement. The total settlement of $600,000 was expensed for the year ended December 31, 2007. The HDC Agreement settled all disputes between Vermillion and HDC.

In addition, from time to time, the Company is involved in legal proceedings and regulatory proceedings arising out of its operations. The Company establishes reserves for specific liabilities in connection with legal actions that it deems to be probable and estimable. No amounts have been accrued in the consolidated financial statements with respect to any pending litigation. The Company is not able to make a reasonable estimate of any liability due to the uncertainties related to the outcome and the amount or range of loss. Other than as disclosed above, the Company is not currently a party to any proceeding, the adverse outcome of which would have a material adverse effect on the Company s financial position or results of operations.

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12. Common Stock

Stockholders Rights Plan

Vermillion has adopted a Stockholder Rights Plan, the purpose of which is, among other things, to enhance the Vermillion Board of Directors ability to protect stockholder interests and to ensure that stockholders receive fair treatment in the event any coercive takeover attempt of the Company is made in the future. The Stockholder Rights Plan could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, the Company or a large block of Vermillion s common stock. The following summary description of the Stockholder Rights Plan does not purport to be complete.

The rights issued pursuant to Vermillion s Stockholder Rights Plan will become exercisable the tenth day after a person or group announces acquisition of 15% or more of Vermillion s common stock or announces commencement of a tender or exchange offer the consummation of which would result in ownership by the person or group of 15% or more of Vermillion s common stock. If the rights become exercisable, the holders of the rights (other than the person acquiring 15% or more of Vermillion s common stock) will be entitled to acquire, in exchange for the rights exercise price, shares of Vermillion s common stock or shares of any company in which the Company is merged, with a value equal to twice the rights exercise price.

Authorized Shares

At the annual stockholders meeting on June 29, 2007, the stockholders approved an amendment to the Certificate of Incorporation to increase the number of authorized shares of common stock from 80,000,000 to 150,000,000. On July 13, 2007, the Company amended and restated its Certificate of Incorporation with the State of Delaware for the increased authorized shares. Additionally, after the Reverse Stock Split the number of authorized shares of common stock and preferred stock remained at 150,000,000 and 5,000,000, respectively.

Private Placement Sale

On August 29, 2007 (the Closing Date), Vermillion completed a private placement sale of 2,451,309 shares of its common stock and warrants to purchase up to an additional 1,961,047 shares of its common stock with an exercise price of $9.25 per share and expiration date of August 29, 2012, to a group of new and existing investors for $20,591,000 in gross proceeds. Existing investors included affiliates of the Company, who purchased 964,285 shares of Vermillion common stock and warrants to purchase up to an additional 771,428 shares of Vermillion common stock for $8,100,000. In connection with Quest s participation in this transaction, Vermillion amended a warrant originally issued to Quest on July 22, 2005. Pursuant to the terms of the amendment, the exercise price for the purchase of Vermillion s common stock was reduced from $35.00 per share to $25.00 per share and the expiration date of such warrant was extended from July 22, 2010, to July 22, 2011. For services as placement agent, Vermillion paid Oppenheimer & Co. Inc. (Oppenheimer) $1,200,000 and issued a warrant to purchase up to 92,100 shares of Vermillion s common stock with an exercise price of $9.25 per share and expiration date of August 29, 2012. The warrants issued to the investors and Oppenheimer were valued at $7,194,000 and $581,000, respectively, based on the fair value as determined by the Black-Scholes model. The amended value of the warrant issued to Quest on July 22, 2005, increased by $356,000, which is reflected in additional paid-in capital, from the its original value of $2,200,000.

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

Assumptions used to value the warrants issued to the investors and Oppenheimer, and the amended value of the warrant issued to Quest were as follows:

	Private Investors and Oppenheimer & Co. Inc.	Amendment to Quest Diagnostics Incorporated
Dividend yield	%	%
Volatility	80.14%	82.92%
Risk-free interest rate	4.31%	4.24%
Expected lives (years)	5.00	3.90

Under the terms of the securities purchase agreement, the Company is required to prepare and file with the SEC a Shelf Registration Statement and have the Registration Statement be declared effective by the SEC. The Company shall pay each investor liquidated damages of 1/13 of 1.5% of the aggregate purchase price with respect to any shares not previously sold or transferred for the following events:

Each day in excess of 30 days from the Closing Date until the Shelf Registration Statement is filed with the SEC.

Each day in excess of 90 days from the Closing Date until the Registration Statement is declared effective by the SEC if no SEC review of the Shelf Registration Statement, or each day in excess of 120 days from the Closing Date until the Registration Statement is declared effective by the SEC in the event of an SEC review of the Registration Statement.

Each day for a period in excess of 20 consecutive days or 45 total days in any 12-month period that the SEC issues a stop order to suspend the effectiveness of the Registration Statement.

The maximum cumulative liquidated damages are 10.0% of the aggregate purchase price. Payment of liquidated damages is due 30 days after coming into compliance with above events. Interest is 1.5% every 30 days for delinquent payments.

The Company evaluated the liquidated damages provision according to guidance under FSP EITF 00-19-2, which specifies that the contingent obligation to make future payments or otherwise transfer consideration under a registration payment arrangement, whether issued as a separate agreement or included as a provision of a financial instrument or other agreement, shall be recognized and measured separately in accordance with SFAS No. 5 and FIN 14. FSP EITF 00-19-2 further states that an entity should recognize and measure a registration payment arrangement as a separate unit of account from the financial instrument subject to that arrangement. The Company filed a Form S-1, Shelf Registration Statement, with the SEC on September 27, 2007, which became effective on December 13, 2007. The Company considers the likelihood of the SEC suspension of the effectiveness of the Registration Statement for a period of 20 consecutive days or not more than 45 days in any 12-month period to be

remote. As a result, to date no contingent liability was recorded related to this registration payment arrangement. As of December 31, 2007, the Company had incurred costs of $2,245,000 in connection with the registration of these securities, which is reflected as a reduction to additional paid-in capital.

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

13. Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive loss as of December 31, 2007 and 2006, were as follows (in thousands):

	2007	2006
Net unrealized loss on long-term investments available-for-sale	$ (98)	$
Cumulative translation adjustment	(123)	(71)
Accumulated other comprehensive loss	$ (221)	$ (71)

14. Loss Per Share

The reconciliation of the numerators and denominators of basic and diluted earnings per share for the years ended December 31, 2007 and 2006, was as follows (dollars in thousands, except shares and per share amounts):

	Loss (Numerator)	Shares (Denominator)	Per Share Amount
Year ended December 31, 2007:			
Net loss basic	$ (21,282)	4,765,341	$ (4.47)
Dilutive effect of shares purchasable under the Employee Stock Purchase Plan, stock options, warrants and convertible senior notes			
Net loss diluted	$ (21,282)	4,765,341	$ (4.47)
Year ended December 31, 2006:			
Net loss basic	$ (22,066)	3,646,473	$ (6.05)
Dilutive effect of common stock shares issuable upon exercise of stock options, purchase by Employee Stock Purchase Plan, exercise of warrants and conversion of convertible senior notes			
Net loss diluted	$ (22,066)	3,646,473	$ (6.05)

Due to net losses for the years ended December 31, 2007 and 2006, diluted loss per share is calculated using the weighted average number of common shares outstanding and excludes the effects of potential common stock shares that are antidilutive. The potential shares of common stock that have been excluded from the diluted loss per share calculation above for the years ended December 31, 2007 and 2006, were as follows:

	2007	2006
Stock options	469,675	476,581
Employee Stock Purchase Plan	2,786	2,893
Stock warrants	2,293,147	240,000
Convertible senior notes	852,208	852,208
Potential common shares	3,617,816	1,571,682

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

15. Employee Benefit Plans

1993 Stock Option Plan

Vermillion has no shares of its common stock reserved for sale to employees, directors or consultants under its 1993 Stock Option Plan (the 1993 Plan). Under the 1993 Plan, options were granted at prices not lower than 85% and 100% of the fair market value of the common stock for nonstatutory and statutory stock options, respectively. All outstanding options under the 1993 Plan are now fully vested, and unexercised options generally expire ten years from the date of grant. At December 31, 2007 and 2006, no shares of Vermillion common stock were subject to repurchase by Vermillion. Since Vermillion s initial public offering, no options have been granted under the 1993 Plan. There were no option exercises for the year ended December 31, 2007, and options for 1,825 shares of Vermillion common stock were exercised for the year ended December 31, 2006.

2000 Stock Plan

Under the Amended and Restated 2000 Stock Plan (the 2000 Plan), options may be granted at prices not lower than 85% and 100% of the fair market value of the common stock for nonstatutory and statutory stock options, respectively. Options generally vest monthly over a period of four years and unexercised options generally expire ten years from the date of grant. At December 31, 2007, Vermillion had 6,776,983 shares of its common stock reserved for future stock option grants to employees, directors and consultants under the 2000 Plan. Options for 2,031 shares and 660 shares were exercised, for the years ended December 31, 2007 and 2006, respectively.

In conjunction with the Reverse Stock Split, an additional 6,525,000 shares of Vermillion common stock were reserved for issuance under the 2000 Plan for the year ended December 31, 2007. No additional shares of Vermillion common stock were reserved for issuance under the 2000 Plan for the year ended December 31, 2007. On January 1, 2006, an additional 130,000 shares of Vermillion common stock were reserved for issuance under the 2000 Plan.

Employee Stock Purchase Plan

The Amended and Restated 2000 Employee Stock Purchase Plan (ESPP) provides for eligible employees to purchase Vermillion common stock through payroll deductions during six-month offering periods. Each offering period begins on May 1 or November 1 and ends October 31 or April 30, respectively.

ESPP provides for the purchase of Vermillion common stock at the lower of 85.00% of the closing price of Vermillion common stock on the first day of the offering period or 85.00% of the closing price of Vermillion common stock on the last day of the offering period. In conjunction with the Reverse Stock Split, an additional 1,355,215 shares of Vermillion common stock were reserved for issuance under ESPP for the year ended December 31, 2007. No additional Vermillion common stock shares were reserved for issuance under ESPP for the year ended December 31, 2007. On January 1, 2006, an additional 17,000 shares of Vermillion common stock were reserved for issuance under ESPP.

Stock-Based Compensation

In estimating the fair value of each stock option award on their respective grant dates and stock purchased under ESPP, the Company uses the Black-Scholes pricing model. The Black-Scholes pricing model requires the Company to make assumptions with regard to the options granted and stock purchased under ESPP during a reporting period namely, expected life, stock price volatility, expected dividend yield and risk-free interest rate.

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

The expected life of options is based on historical data of Vermillion s actual experience with the options it has granted and represents the period of time that the options granted are expected to be outstanding. This data includes employees expected exercise and post-vesting employment termination behaviors. The expected stock price volatility is estimated using the historical volatility of Vermillion s common stock for the year ended December 31, 2007. The historical volatility covers a period that corresponds to the expected life of the options. For the year ended December 31, 2006, the Company used a combination of historical and peer group volatility for a blended volatility in deriving its expected volatility assumption as allowed under SFAS No. 123(R) and the SEC s Staff Accounting Bulletin (SAB) No. 107. At that point in time, the Company made an assessment that blended volatility is more representative of future stock price trends than just using historical or peer group volatility. The expected dividend yield is based on the estimated annual dividends that Vermillion expects to pay over the expected life of the options as a percentage of the market value of Vermillion s common stock as of the grant date. The risk-free interest rate for the expected life of the options granted is based on the United States Treasury yield curve in effect as of the grant date.

The expected life of shares purchased under ESPP is six months, which corresponds to the offering period. The expected stock price volatility is estimated using a six-month historical volatility of Vermillion s common stock, which corresponds to the offering period. The expected dividend yield is based on the estimated annual dividends that Vermillion expects to pay over the expected life of shares purchased under ESPP as a percentage of the market value of Vermillion s common stock as of the grant date. The risk-free interest rate for the expected life of the shares purchased under ESPP is based on the United States Treasury yield curve in effect as of the beginning of the offering period.

The average assumptions used to calculate the fair value of options granted and shares purchasable under ESPP that were incorporated in the Black-Scholes pricing model for the years ended December 31, 2007 and 2006, were as follows:

	2000 Stock Plan		Employee Stock Purchase Plan	
	2007	2006	2007	2006
Dividend yield	%	%	%	%
Volatility	81.46%	86.23%	83.30%	84.55%
Risk-free interest rate	4.81%	4.80%	4.78%	4.96%
Expected lives (years)	5.20	6.07	0.50	0.50
Weighted average fair value	$ 8.55	$ 9.02	$ 4.84	$ 6.30

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

The activity related to shares available for grant under the 1993 Plan, 2000 Plan and ESPP for the years ended December 31, 2007 and 2006, were as follows:

	1993 Stock Option Plan	2000 Stock Plan	2000 Employee Stock Purchase Plan	Total
Shares available at December 31, 2005		25,930	16,650	42,580
Additional shares reserved		130,000	17,000	147,000
Options canceled	37,198	274,033		311,231
Reduction in shares reserved	(37,198)			(37,198)
Options granted		(156,945)		(156,945)
Shares purchased			(11,029)	(11,029)
Shares available at December 31, 2006		273,018	22,621	295,639
Additional shares reserved		6,525,000	1,355,215	7,880,215
Options canceled	25,910	153,735		179,645
Reduction in shares reserved	(25,910)			(25,910)
Options granted		(174,770)		(174,770)
Shares purchased			(4,813)	(4,813)
Shares available at December 31, 2007		6,776,983	1,373,023	8,150,006

The stock option activity under the 1993 Plan and 2000 Plan for the years ended December 31, 2007 and 2006, was as follows (dollars are in thousands, except weighted average exercise price):

	Number of Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value	Weighted Average Remaining Contractual Term
Options outstanding at December 31, 2005	633,352	$ 44.61	$ 28,256	7.71
Granted	156,945	12.04	1,890	
Exercised	(2,485)	4.92	(12)	
Canceled	(311,231)	41.60	(12,948)	
Options outstanding at December 31, 2006	476,581	$ 36.06	17,186	7.60
Granted	174,770	12.41	2,169	

Exercised	(2,031)	11.85	(24)	
Canceled	(179,645)	38.84	(6,978)	
Options outstanding at December 31, 2007	469,675	$ 26.30	$ 12,353	7.72
Shares exercisable:				
December 31, 2007	272,162	$ 36.44	$ 9,919	6.84
December 31, 2006	304,652	48.52	14,781	6.74

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

The range of exercise prices for options outstanding and exercisable at December 31, 2007, are as follows:

Exercise Price	Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Life in Years	Options Exercisable	Weighted Average Exercise Price
$ 8.80 - $ 9.00	68,500	$ 8.98	8.19	40,500	$ 9.00
$ 9.01 - $10.10	47,900	9.54	9.41	1,294	9.95
$10.11 - $11.63	25,934	10.34	8.88	12,313	10.50
$11.64 - $12.00	75,250	12.00	8.34	42,812	12.00
$12.01 - $13.60	11,460	13.29	9.00	988	13.00
$13.61 - $14.70	69,000	14.70	9.32	11,500	14.70
$14.71 - $21.90	53,790	20.42	7.14	48,526	20.70
$21.91 - $48.60	47,048	37.01	4.83	43,436	37.02
$48.61 - $96.00	70,793	86.22	5.61	70,793	86.22
$8.80 - $96.00	469,675	$ 26.30	7.72	272,162	$ 36.44

The allocation of stock-based compensation expense by functional area for the years ended December 31, 2007 and 2006, was as follows (in thousands):

	2007	2006
Cost of revenue	$	$ 144
Research and development	167	337
Sales and marketing	88	321
General and administrative	623	813
Total	$ 878	$ 1,615

The Company has a 100% valuation allowance recorded against its deferred tax assets, and as a result SFAS No. 123(R) had no effect on income tax expense in the consolidated statement of operations or the consolidated statement of cash flows. As of December 31, 2007, total unrecognized compensation cost related to nonvested stock option awards was $1,456,000 and the related weighted average period over which it is expected to be recognized was 2.88 years.

Ciphergen Biosystems, Inc. 401(k)

The Company maintains the Ciphergen Biosystems, Inc. 401(k) Plan (the 401(k) Plan) for its United States employees. The 401(k) Plan allows eligible employees to defer up to an annual limit of the lesser of 90% of eligible compensation or a maximum contribution amount subject to the Internal Revenue Service annual contribution limit,. The Company is not required to make contributions under the 401(k) Plan. As of December 31, 2007, the Company has not contributed to the 401(k) Plan.

16. Income Taxes

The Company accounts for income taxes using the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using the current tax laws and rates. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

The provision for income taxes was due to foreign income taxes, which were $163,000 and $152,000 for the years ended December 31, 2007 and 2006, respectively.

Based on the available objective evidence, management believes it is more likely than not that the net deferred tax assets will not be fully realizable. Accordingly, the Company has provided a full valuation allowance against its net deferred tax assets at December 31, 2007.

The components of deferred tax assets (liabilities) at December 31, 2007 and 2006, were as follows (in thousands):

	2007	2006
Deferred tax assets:		
Depreciation and amortization	$ 18,236	$ 21,515
Other	4,575	4,093
Research and development and other credits	3,610	9,145
Net operating loses	17,152	46,999
Total deferred tax assets	43,573	81,752
Valuation allowance	(43,573)	(81,752)
Net deferred tax assets	$	$
Deferred tax liabilities:		
Investment in foreign subsidiaries	$ (259)	$

The reconciliation of the statutory federal income tax rate to the Company s effective tax rate for the years ended December 31, 2007 and 2006, was as follows:

	2007	2006
Tax at federal statutory rate	(34)%	(34)%
State tax, net of federal benefit	(6)	
Foreign loss		(5)
Research and development credits	(1)	2
Deferred tax assets not benefited	(181)	35
Stock based compensation	1	2
Foreign rate difference and other		1
Net operating loss and credit reduction due to Section 382 limitations	222	
Effective income tax rate	1%	1%

As of December 31, 2007, the Company has net operating loss carryforwards of $40,332,000 for federal and $43,730,000 for state income tax purposes. If not utilized, these carryforwards will begin to expire in 2009 for federal purposes and 2008 for state purposes.

As of December 31, 2007, the Company has $2,609,000 of net operation carryforwards from its Japan operations. If not utilized, this carry forward will begin to expire in 2012.

The Company has research credit carryforwards of $109,000 and $4,918,000 for federal and state income tax purposes, respectively. If not utilized, the federal carryforwards will expire in various amounts beginning in 2017. The California credit can be carried forward indefinitely.

The Tax Reform Act of 1986 limits the use of net operating loss and tax credit carryforwards in certain situations where equity transactions resulted in a change of ownership by Internal Revenue Code 382. During

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

the year ended December 31, 2007, the Company conducted a study and determined that Company s use of its net operating loss and federal credits is subject to such a restriction. Accordingly, the Company reduced its deferred tax assets and the corresponding valuation allowance by $46,826,000. As a result, the net operating loss and federal credit amounts as of December 31, 2007, reflect the restriction on the Company s ability to use the net operating loss and credits.

Pursuant to paragraph 31 of SFAS No. 109, a deferred tax liability should be recognized if the excess of book basis over tax basis of an investment in a foreign subsidiary is expected to reverse in the foreseeable future. Since Vermillion is in the process of liquidating all of its foreign subsidiaries except for Ciphergen Biosystems KK, the Company anticipates the basis difference to reverse in the foreseeable future. As such, a deferred tax liability was recorded for the excess of book basis over the tax basis of the Company s investment in those foreign subsidiaries being liquidated.

17. Fair Value of Financial Instruments

The convertible senior notes carrying value and estimated fair value at December 31, 2007 and 2006, were as follows (in thousands):

	2007		2006	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
4.50% convertible senior notes due September 1, 2008	$ 2,471	$ 2,450	$ 2,427	$ 1,456
7.00% convertible senior notes due September 1, 2011	16,196	14,850	16,001	13,201
Total	$ 18,667	$ 17,300	$ 18,428	$ 14,657

18. Supplemental Cash Flow Information

The supplemental cash flow information for the years ended December 31, 2007 and 2006, was as follows (dollars in thousands):

	2007	2006
Cash paid during the period for:		
Interest	$ 1,807	$ 1,732
Income taxes	214	227
Noncash investing and financing activities:		
Transfer of fixed assets to (from) inventory	$	$ (793)

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

19. Geographic Information

Prior to November 13, 2006, the Company sold its products and services directly to customers in North America, Western Europe and Japan, and through distributors in other parts of Europe and Asia, and in Australia. Revenue for geographic regions reported below is based upon the customers locations. The following is a summary of the geographic information related to revenue for the years ended December 31, 2007 and 2006 (in thousands):

	2007	2006
United States	$ 44	$ 5,155
Canada		973
Europe		6,984
Asia-Pacific		5,103
Total	$ 44	$ 18,215

Sales to customers in Japan were 23.4% of revenue for the year ended December 31, 2006. No other country outside the United States accounted for 10.0% or more of total revenue during this period.

Long-lived assets, primarily machinery and equipment, are reported based on the location of the assets. Long-lived asset information by geographic area as of December 31, 2007 and 2006, were as follows (in thousands):

	2007	2006
United States	$ 1,938	$ 2,244
Europe		16
Total	$ 1,938	$ 2,260

20. Subsequent Events

On January 30, 2008, Vermillion renewed its research collaboration agreement with JHU. The agreement has an effective period from January 1, 2008, through December 31, 2010, with automatic one-year extensions for up to three additional years unless terminated by Vermillion or JHU. Under the terms of the research collaboration agreement, Vermillion is required to pay noncancelable contributions of $600,000, $618,000 and $637,000 for the years ending December 31, 2008, 2009 and 2010, respectively. In conjunction with the renewed collaboration agreement, Vermillion also amended and restated the patent license agreement with JHU, which grants Vermillion an exclusive worldwide license to any inventions resulting from the research related to biomarkers for ovarian cancer. Under the terms of the amended and restated patent license agreement, Vermillion is required to pay annual noncancelable

minimum royalties of $50,000 for years ending December 31, 2008, 2009 and 2010, and royalties on net sales and sublicensing consideration received by Vermillion related to ovarian diagnostic test kits.

As of March 24, 2008, the Company s entire investment portfolio of $6,550,000 was invested in auction rate securities, which failed to settle at auctions from January 1, 2008, to March 24, 2008, due to the current overall credit concerns in the capital markets, and are classified as available-for-sale long-term investments. The investment portfolio at March 24, 2008, consists of $3,902,000 of auction rate securities classified as available-for-sale long-term investments at December 31, 2007, and an additional $2,550,000 of auction rate securities purchased during January and February 2008, which failed to settle at auctions during March 2008. These auction rate securities provide liquidity via an auction process that resets the applicable interest rate at predetermined calendar intervals, which is generally every 28 days. The failure of the auctions impact the Company s ability to readily liquidate its auction rate securities into cash until a future auction of these investments is successful or the auction rate security is refinanced by the issuer into another type of debt instrument. The Company continues to earn interest on the investments that failed to settle at auction, at the maximum contractual rate. The Company will continue to monitor the value of its auction rate securities each reporting period for a possible impairment if a decline in fair value occurs.

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4,223,389 Shares

Vermillion, Inc.

Common Stock

PROSPECTUS

We have not authorized any dealer, salesperson or other person to give any information or to make any representations not contained in this prospectus or any prospectus supplement. You must not rely on any unauthorized information. This prospectus is not an offer to sell these securities in any jurisdiction where an offer or sale is not permitted. The information in this prospectus is current as of the date of this prospectus. You should not assume that this prospectus is accurate as of any other date.

, 2008

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. *Other Expenses of Issuance and Distribution*

The estimated expenses to be borne by us in connection with the offering are as follows:

SEC registration fee	$ 1,335
Placement Agent fees	1,315,000
Legal fees and expenses	300,000
Accounting fees and expenses	135,000
Miscellaneous fees and expenses	150,000
Total	1,901,335

The Company will bear all of the expenses shown above.

Item 14. *Indemnification of Directors and Officers*

Section 145 of the Delaware General Corporation Law allows for the indemnification of officers, directors and any corporate agents in terms sufficiently broad to indemnify such persons under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933, as amended, or the Securities Act. The Company s Third Amended and Restated Certificate of Incorporation and its Bylaws provide for indemnification of the Company s directors, officers, employees and other agents to the extent and under the circumstances permitted by the Delaware General Corporation Law. The Company has also entered into agreements with its directors and executive officers that require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors and executive officers to the fullest extent permitted by Delaware law. The Company has also purchased directors and officers liability insurance, which provides coverage against certain liabilities including liabilities under the Securities Act.

Item 15. *Recent Sales of Unregistered Securities*

The following sets forth information regarding all securities sold by the Company since January 1, 2005 which were not registered under the Securities Act. All share and per share amounts set forth below have been adjusted to reflect the impact of the 1 for 10 reverse stock split of the Company s common stock effected on March 3, 2008.

1. On August 29, 2007, the Company completed a private placement sale of 2,451,309 shares of its common stock and warrants to purchase up to an additional 1,961,047 shares of its common stock with an exercise price of $9.25 per share and expiration date of August 29, 2012, to a group of existing and new investors for $20,591,000 in gross proceeds. In connection with Quest Diagnostics Incorporated s, or Quest, participation in this transaction, the Company amended a warrant originally issued to Quest on July 22, 2005. Pursuant to the terms of the amendment, the warrant to purchase 220,000 shares of the Company s common stock was reduced from $35.00 per share to $25.00 per share and the expiration date was extended from July 22, 2010, to July 22, 2011. The sale, offer and issuance of the securities was exempt from registration under Section 4(2) and/or Rule 506 of Regulation D of the Securities Act, as a transaction not involving a public offering, because among other things, the investors were accredited investors at the time of the transaction and appropriate legends were affixed to the instruments representing such securities issued in such transaction.

2. As partial consideration for services as placement agent in connection with the August 29, 2007, private placement sale, the Company issued a warrant to Oppenheimer & Co. Inc., or Oppenheimer, to purchase up to 92,100 shares of our common stock with an exercise price of $9.25 per share and expiration date of August 29, 2012. The Company s Board of Directors determined the value of such warrant to be equal to the price paid for the warrant by the investors in the offering, or $1.25 per warrant share, for an aggregate

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value of approximately $115,000. The value of the warrant issued to Oppenheimer was valued on the Company s accounting records at $581,000, based on the Black-Scholes pricing model. The sale, offer and issuance of the securities was exempt from registration under Section 4(2) and/or Rule 506 of Regulation D of the Securities Act, as a transaction not involving a public offering, because among other things, Oppenheimer was an accredited investor at the time of the transaction and appropriate legends were affixed to the instruments representing such securities issued in such transaction.

3. On November 15, 2006, the Company completed the sale of $16,500,000 in aggregate principal of the 7.00% convertible senior notes due September 1, 2011, or the 7.00% Notes. The 7.00% Notes were sold pursuant to separate exchange and redemption agreements between the Company and certain holders of our existing 4.50% convertible senior notes due September 1, 2008, or the 4.50% Notes. The holders agreed to exchange and redeem $27,500,000 in aggregate principal of the 4.50% Notes for $16,500,000 in aggregate principal of the 7.00% Notes and $11,000,000 in cash, plus accrued and unpaid interest on the 4.50% Notes of $254,000. Offering costs of $104,000 and fees of $514,500 were paid on behalf of the debt holders and recorded as a debt discount to the 7.0% Notes. The sale, offer and issuance of the securities was exempt from registration under Section 4(2) and/or Rule 506 of Regulation D of the Securities Act, as a transaction not involving a public offering, because among other things, the investors were accredited investors at the time of the transaction and appropriate legends were affixed to the instruments representing such securities issued in such transaction.

4. On August 3, 2006 and November 15, 2006, the Company issued warrants to purchase an aggregate of 20,000 shares of the Company s common stock with an exercise price of $12.60 per share to Oppenheimer in partial consideration for its services as the placement agent for the offering of the 7.0% Notes. Fees paid on behalf of the debt holders included the fair value of two warrants issued to Oppenheimer and were recorded as a discount on the 7.0% Notes. The two warrants were valued at $140,000 based on the fair value as determined by the Black-Scholes method of valuation using a risk free interest rate of 4.75%, five year contractual life, and 88.00% volatility rate. The sale, offer and issuance of the securities was exempt from registration under Section 4(2) and/or Rule 506 of Regulation D of the Securities Act, as a transaction not involving a public offering, because among other things, Oppenheimer was an accredited investor at the time of the transaction and appropriate legends were affixed to the instruments representing such securities issued in such transaction.

5. In connection with the sale of the assets and liabilities of its protein research products and collaborative services, the Company sold to Bio-Rad Laboratories, Incorporated 308,642 shares of its common stock for an aggregate purchase price of $3,000,000. The sale, offer and issuance of the securities was exempt from registration under Section 4(2) and/or Rule 506 of Regulation D of the Securities Act, as a transaction not involving a public offering, because among other things, Bio-Rad was an accredited investor at the time of the transaction and appropriate legends were affixed to the instruments representing such securities issued in such transaction.

6. On July 22, 2005, the Company sold to Quest 622,500 shares of its common stock and issued a warrant to purchase up to 220,000 shares of the Company s common stock at an exercise price of $35.00 per share, which was subsequently reduced to $25.00 per share with the August 29, 2007, private placement sale, for $14,954,000 in net proceeds. The sale, offer and issuance of the securities was exempt from registration under Section 4(2) and/or Rule 506 of Regulation D of the Securities Act, as a transaction not involving a public offering, because among other things, Quest was an accredited investor at the time of the transaction and appropriate legends were affixed to the instruments representing such securities issued in such transaction.

Item 16. ***Exhibits and Financial Statements Schedules***

The exhibits filed as part of this Registration Statement are listed in the exhibit index immediately preceding such exhibits, which index in incorporated herein by reference.

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Item 17. ***Undertakings***

The undersigned registrant hereby undertakes:

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

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

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

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

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

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

(4) That, for the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

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

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the following Registrant has duly caused this Post-Effective Amendment No. 1 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Fremont, State of California, on the 17th day of April, 2008.

VERMILLION, INC.

By: /s/ Gail S. Page

Gail S. Page
Director, President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to Registration Statement has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signatures	Title	Date
/s/ Gail S. Page Gail S. Page	Director, President and Chief Executive Officer (Principal Executive Officer)	April 17, 2008
/s/ Qun Zhou Qun Zhou	Corporate Controller and Interim Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 17, 2008
* James L. Rathmann	Executive Chairman of the Board of Directors	April 17, 2008
* James S. Burns	Director	April 17, 2008
* Michael J. Callaghan	Director	April 17, 2008
* Kenneth J. Conway	Director	April 17, 2008
* Rajen K. Dalal	Director	April 17, 2008
/s/ John Hamilton	Director	April 17, 2008

John Hamilton		
*	Director	April 17, 2008
John A. Young		

*By: /s/ Gail S. Page

as attorney-in-fact

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EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Filed Previously
		Form	File No.	Exhibit	Filing Date		
2.1	Share Purchase Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and LumiCyte, Inc. dated May 28, 2003	8-K	000-31617	2.1	June 11, 2003		
2.2	Asset Purchase Agreement by and between Invitrogen Corporation and Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) dated June 25, 2001	10-Q	000-31617	10.28	August 14, 2001		
3.1	Third Amended and Restated Certificate of Incorporation of Vermillion, Inc.	8-K	000-31617	3.1	March 3, 2008		
3.2	Amended and Restated Bylaws of Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.)	S-1	333-32812	3.4	August 24, 2000		
4.1	Form of Vermillion, Inc. s (formerly Ciphergen Biosystems, Inc.) Common Stock Certificate	S-1	333-32812	4.1	August 24, 2000		
4.2	Indenture between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and U.S. Bank National Association dated August 22, 2003	S-3	333-109556	4.1	October 8, 2003		
4.3	Indenture between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and U.S. Bank National Association dated November 15, 2006	8-K	000-31617	4.1	November 21, 2006		
4.4	Preferred Shares Rights Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Continental	8-A	000-31617	4.2	March 21, 2002		

	Stock Transfer & Trust Company dated March 20, 2002				
4.5	Amendment to Rights Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Wells Fargo Bank, N.A. dated July 22, 2005	8-K	000-31617	4.4	July 28, 2005
4.6	Second Amendment to Rights Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Wells Fargo Bank, N.A. dated September 30, 2005	8-K	000-31617	4.5	October 4, 2005
4.7	Third Amendment to Rights Agreement between Vermillion, Inc. and Wells Fargo Bank, N.A., dated September 11, 2007	8-K	000-31617	10.1	September 12, 2007

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Filed Previously
		Form	File No.	Exhibit	Filing Date		
5	Opinion of Paul, Hastings, Janofsky & Walker LLP						ü
10.1	Form of Preferred Stock Purchase Agreement	S-1	333-32812	10.1	March 20, 2000		
10.2	Fourth Amended and Restated Investors Rights Agreement dated March 3, 2000	S-1	333-32812	10.2	March 20, 2000		
10.3	1993 Stock Option Plan	S-1	333-32812	10.3	March 20, 2000		
10.4	Form of Stock Option Agreement	S-1	333-32812	10.4	August 24, 2000		
10.5	2000 Stock Plan and related form of Stock Option Agreement	S-1	333-32812	10.5	August 24, 2000		
10.6	Amended and Restated 2000 Employee Stock Purchase Plan	10-Q	000-31617	10.6	November 14, 2007		
10.7	Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) 401(k) Plan	10-K	000-31617	10.7	March 22, 2005		
10.8	Form of Warrant	S-1	333-32812	10.8	March 20, 2000		
10.9	Form of Proprietary Information Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and certain of its employees	S-1	333-32812	10.9	August 24, 2000		
10.10	Lease Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and John Arrillaga, Trustee of the John Arrillaga Survivor s Trust and Richard T. Peery, Trustee of the Richard T. Peery Separate Property Trust, dated January 28, 2000, and Amendment No. 1 dated August 8, 2000	S-1	333-32812	10.12	September 27, 2000		
10.11	MAS License Agreement with IllumeSys Pacific, Inc. dated April 7, 1997	S-1	333-32812	10.23	August 24, 2000		

10.12	MAS License Agreement with Ciphergen Technologies, Inc. (formerly ISP Acquisition Corporation) dated April 7, 1997	S-1	333-32812	10.24	August 24, 2000		
10.13	Sublicense Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006						ü
10.14	Joint Venture Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Sumitomo Corporation	S-1	333-32812	10.25	March 20, 2000		

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Filed Previously
		Form	File No.	Exhibit	Filing Date		
10.15	First Amendment to the Joint Venture Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.), Sumitomo Corporation, SC Biosciences Corporation (a subsidiary of Sumitomo Corporation) and Ciphergen Biosystems KK dated March 15, 2002	10-K	000-31617	10.33	March 31, 2003		
10.16	Second Amendment to Joint Venture Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.), Sumitomo Corporation, SC Biosciences Corporation (a subsidiary of Sumitomo Corporation) and Ciphergen Biosystems KK dated November 15, 2002	10-K	000-31617	10.34	March 31, 2003		
10.17	Third Amendment to Joint Venture Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.), Sumitomo Corporation, SC Biosciences Corporation (a subsidiary of Sumitomo Corporation) and Ciphergen Biosystems KK dated November 15, 2002	10-K	000-31617	10.35	March 31, 2003		
10.18	Distribution and Marketing Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Ciphergen Biosystems	S-1	333-32812	10.26	September 22, 2000		

	KK dated March 24, 1999				
10.19	Joint Development Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Stanford Research Systems, Inc. dated February 2, 1995 and amendment thereto	S-1	333-32812	10.27	March 20, 2000
10.20	Asset Purchase Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Pall Corporation dated October 27, 2004	8-K	000-31617	2.1	December 6, 2004
10.21	Stock Purchase Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and SC Biosciences Corporation dated August 30, 2002	10-K	000-31617	10.32	March 31, 2003

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Filed Previously
		Form	File No.	Exhibit	Filing Date		
10.22	Lease Agreement between Symbion and Ciphergen Biosystems A/S dated February 24, 2003	10-K	000-31617	10.37	March 31, 2003		
10.23	Employment Agreement between Gail Page and Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) dated December 31, 2005	10-K	000-31617	10.39	March 17, 2006		
10.24	Separation Agreement and Release between Debra A. Young and Vermillion, Inc. dated November 1, 2007	8-K	000-31617	10.1	November 5, 2007		
10.25	Registration Rights Agreement dated August 22, 2003, of Vermillion, Inc. s (formerly Ciphergen Biosystems, Inc.) 4.50% Convertible Senior Notes due September 1, 2008	S-3	333-109556	10.1	October 8, 2003		
10.26	Extension of Term of Service and Support Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Applied Biosystems/MDS Sciex dated March 10, 2004	10-K	000-31617	10.43	March 15, 2004		
10.27	Settlement Agreement and Mutual General Release by and among Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.), IllumeSys Pacific, Inc., Ciphergen Technologies, Inc., Molecular Analytical Systems, Inc., LumiCyte, Inc. and T. William Hutchens dated	8-K	000-31617	99.2	June 11, 2003		

	May 28, 2003				
10.28	Assignment Agreement by and among Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.), IllumeSys Pacific, Inc., Ciphergen Technologies, Inc., Molecular Analytical Systems, Inc., LumiCyte, Inc. and T. William Hutchens dated May 28, 2003	8-K	000-31617	99.3	June 11, 2003
10.29	License Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Molecular Analytical Systems, Inc. dated May 28, 2003	8-K	000-31617	99.4	June 11, 2003
10.30	Strategic Alliance Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Quest Diagnostics Incorporated dated July 22, 2005	8-K	000-31617	10.44	July 28, 2005

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Filed Previously
		Form	File No.	Exhibit	Filing Date		
10.31	Stock Purchase Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Quest Diagnostics Incorporated dated July 22, 2005	8-K	000-31617	10.45	July 28, 2005		
10.32	Letter Agreement dated August 29, 2007 between Vermillion, Inc. and Quest Diagnostics Incorporated						ü
10.33	Warrant between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Quest Diagnostics Incorporated dated July 22, 2005	8-K	000-31617	10.46	July 22, 2005		
10.34	Memorialization Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Quest Diagnostics Incorporated dated January 12, 2006						ü
10.35	Amendment to Warrant between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Quest Diagnostics Incorporated dated August 29, 2007	8-K	000-31617	10.2	August 29, 2007		
10.36	Credit Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Quest Diagnostics Incorporated dated July 22, 2005	8-K	000-31617	10.47	July 28, 2005		
10.37	Patent Security Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Quest Diagnostics Incorporated	8-K	000-31617	10.48	July 28, 2005		

	dated July 22, 2005					
10.38	Collaborative Research Agreement between University College London, UCL Biomedica plc and Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) dated September 22, 2005	10-K	000-31617	10.54	March 17, 2006	
10.39	Form of Exchange and Redemption Agreement, dated as of November 3, 2006 between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and certain holders of its 4.50% Convertible Senior Notes due September 1, 2008	8-K	000-31617	10.55	November 6, 2006	
10.40	Letter Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Oppenheimer & Co. Inc. dated August 3, 2006					ü

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Filed Previously
		Form	File No.	Exhibit	Filing Date		
10.41	Warrant dated August 3, 2006 with Oppenheimer & Co. Inc.						ü
10.42	Warrant dated November 15, 2006 with Oppenheimer & Co. Inc.						ü
10.43	Engagement Letter between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Oppenheimer & Co. Inc. dated August 3, 2006						ü
10.44	Asset Purchase Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated August 14, 2006	14a	000-31617	Annex A	September 12, 2006		
10.45	Amendment to Asset Purchase Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006						ü
10.46	Stock Purchase Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006						ü
10.47	Transition Services Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13,						ü

	2006	
10.48	Amendment No. 1 to Transition Services Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated May 11, 2007	ü
10.49	Amendment No. 2 to Transition Services Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated June 15, 2007	ü
10.50	Manufacture and Supply Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006	ü

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Filed Previously
		Form	File No.	Exhibit	Filing Date		
10.51	Amendment No. 1 to Manufacture and Supply Agreement between Vermillion, Inc. and Bio-Rad Laboratories, Inc. dated August 27, 2007						ü
10.52	Cross License Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006						ü
10.53	Letter Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006						ü
10.54	Sublease Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006						ü
10.55	Placement Agent Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Oppenheimer & Co. Inc. dated March 28, 2007						ü
10.56	Securities Purchase Agreement by and among Vermillion, Inc. and the purchasers party thereto dated as of August 23, 2007						ü
10.57	Form of Warrant	10-Q	000-31617	10.51	November 14, 2007		
10.58	Registration Rights Agreement dated November 15, 2006, between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Initial Purchasers of its	8-K	000-31617	10.1	November 21, 2006		

	7.00% Convertible Senior Notes due September 1, 2011						
21	Subsidiaries of Registrant	10-K	000-31617	21.1	March 22, 2005		
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm					ü	
23.2	Consent of Paul, Hastings, Janofsky & Walker LLP (included in Exhibit 5)						ü
24	Power of Attorney (included in Part II of the Registration Statement)						ü

Certain portions of this exhibit have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to such omitted portions.