VERMILLION, INC.
Form S-1/A
December 06, 2007

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As Filed with the Securities and Exchange Commission on December 6, 2007
Registration No. 333-146354

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

Amendment No. 2
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

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 DECEMBER 6, 2007

PROSPECTUS

43,935,269 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 85 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 December 5, 2007, the last reported sale price of our common stock on the Nasdaq Capital Market was $0.83 per share.

Investing in our common stock involves risks. See Risk Factors beginning on page 6.

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 , 2007.

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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 6 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.

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 in May 2000, we reincorporated in Delaware. We had our initial public offering on September 28, 2000. On November 13, 2006, we sold assets and liabilities of our protein research tools and collaborative services business, referred to herein as the Instrument Business, 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.

Prior to the November 13, 2006, sale of assets and liabilities of our Instrument Business to Bio-Rad, 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 sale of assets and liabilities of our Instrument Business to Bio-Rad, we have dedicated ourselves to the discovery, development and commercialization of specialty diagnostic tests that provide physicians with information with which to manage their patients care and to improve patient outcomes. We do this using translational proteomics, which is the process of answering clinical questions by utilizing advanced protein separation methods to identify and resolve variants of specific biomarkers, developing assays, and commercializing tests.

Through collaborations with leading academic and research institutions, including The Johns Hopkins School of Medicine, The University of Texas M.D. Anderson Cancer Center, University College London, The University of Texas Medical Branch, The Katholieke Universiteit Leuven, The Ohio State University Research Foundation, and Stanford University, we plan to develop diagnostic tests in the fields of hematology/oncology, cardiovascular disease and women s health. The clinical questions we are addressing include early disease detection, treatment response, monitoring of disease progression, prognosis and others. In July 2005, we entered into a strategic alliance agreement with Quest Diagnostics Incorporated, referred to herein as Quest Diagnostics, 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 Diagnostics commercializes the three diagnostic tests.

Our most established programs are in the field of 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 cases are diagnosed each year, with the majority in patients with late stage disease, where the cancer has spread beyond the ovary.

Unfortunately, the prognosis is poor in these patients, leading to the high mortality rate from this disease. We believe that one unmet clinical need is a diagnostic test that can provide adequate predictive value to stratify patients with a pelvic mass into those with a high risk of invasive ovarian cancer versus those with a low risk. We believe that there are at least 5 million testing opportunities each year addressing this need. We have developed a panel of biomarkers we believe provides risk stratification

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information for ovarian cancer based on a series of studies involving over 2,500 clinical samples from more than five sites. In a cohort study we were able to show, in 525 consecutively sampled women, a significant increase in the positive predictive value using our marker 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 two-fold. We are undertaking a prospective clinical trial to support submission to the United States Food and Drug Administration, referred to herein as the FDA, for approval as an in vitro diagnostic, or IVD, test kit.

A second major program is a test intended to aid in the detection of peripheral arterial disease, or PAD. This test, which is based on research done in collaboration with Stanford University, fills the unmet clinical need for a blood test that can be used as an adjunct to detect PAD, which affects 10 million Americans, but is under diagnosed. Accurate diagnosis of PAD permits aggressive lifestyle modification and therapeutic intervention that can decrease the risk of major adverse cardiovascular events. We reported in August 2007 the publication of a discovery of two blood markers for PAD in the peer-reviewed journal *Circulation*, which is published by the American Heart Association. We are currently performing clinical validation of this test, which will be commercialized with Quest Diagnostics under the terms of the strategic alliance agreement.

Recent Developments

Effective November 1, 2007, Debra A. Young resigned from her position as Vice President and Chief Financial Officer of the Company for personal reasons. Immediately upon Ms. Young s resignation from the Company, Qun Zhou, the Company s Corporate Controller, was appointed to serve as Chief Financial Officer on an interim basis.

On September 17, 2007, we were served with a complaint filed in the Superior Court of California for the County of Santa Clara naming us and Bio-Rad as defendants and Molecular Analytical Systems, referred to herein as MAS, as plaintiff. The complaint 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 sale of assets and liabilities of our Instrument Business to Bio-Rad, 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. On November 14, 2007, we filed a petition to compel MAS to arbitrate its claims with the Court. Given the early stage of this action, we cannot predict the ultimate outcome of this matter at this time.

On August 15, 2007, we were notified by the staff of the Nasdaq Capital Market that we were not in compliance with Marketplace Rule 4310(c)(3) and, as required by Marketplace Rule 4310(c)(8)(C), we had 30 days to regain compliance. Marketplace Rule 4310(c)(3) requires us to (i) have minimum stockholders equity of $2,500,000, (ii) have a minimum common stock market value of $35,000,000 or (iii) 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. Subsequently, on September 14, 2007, the staff of the Nasdaq Capital Market notified us that we had regained compliance with Marketplace Rule 4310(c)(3) because the market value of our common stock exceeded $35,000,000 for ten consecutive business days.

Additionally, on September 6, 2007, we were notified by the staff of the Nasdaq Capital Market that our common stock bid price closed below the minimum $1.00 per share for more than 30 consecutive business days, in violation of 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.

On August 29, 2007, we completed a private placement sale of 24,513,092 shares of our common stock and warrants to purchase up to an additional 19,610,470 shares of our common stock with an exercise price of $0.925 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. The net proceeds of the transaction will be used for general working capital needs. In connection with this transaction, we amended a warrant originally issued to Quest Diagnostics on July 22, 2005. Pursuant to the terms of the amendment, the exercise price for such warrant was reduced from $3.50 per share to $2.50 per share and the expiration date of such warrant was extended from July 22, 2010 to July 22, 2011. For services as placement agent, we paid Oppenheimer & Co. Inc. $1,200,000 and issued a

warrant to purchase up to 921,000 shares of our common stock with an exercise price of $0.925 per share and expiration date of August 29, 2012.

In August 2007, we announced the discovery of biomarkers that could assist in the diagnosis of PAD. These findings, which were made in collaboration with Stanford University, form the basis of a novel blood test for PAD. The biomarkers are currently undergoing validation. The results were published in the journal *Circulation*, which is published by the American Heart Association. Quest Diagnostics has accepted the PAD test for further development under the strategic alliance agreement.

On June 26, 2006, Health Discovery Corporation filed a lawsuit against us in the United States District Court for the Eastern District of Texas, Marshall Division, referred to herein as the Court, claiming that software used in certain of our ProteinChip Systems infringes on three of its United States patents. Health Discovery Corporation 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 July 10, 2007, we entered into a license and settlement agreement with Health Discovery Corporation, referred to herein as the HDC Agreement, pursuant to which we licensed more than 25 patents covering Health Discovery Corporation 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 Health Discovery Corporation upon entry into the agreement in July 2007. The remaining $400,000 payable under the HDC Agreement is payable as follows: $100,000 three months following the date of the agreement, $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 settles all disputes between us and Health Discovery Corporation.

At our annual stockholders meeting on June 29, 2007, stockholders approved amendments to our 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. We amended our certificate of incorporation to reflect our name change on August 21, 2007.

In connection with the sale of assets and liabilities of our Instrument Business on November 13, 2006, Bio-Rad withheld $2,000,000 from the sales proceeds until the issuance of a reexamination certificate confirming United States Patent No. 6,734,022, referred to herein as the 022 Patent. If the United States Patent and Trademark Office, or USPTO, does not issue a reexamination certificate confirming the patentability of all of the claims as originally issued in the 022 Patent, or claims of equivalent scope, we will not be entitled to receive the $2,000,000 withheld by Bio-Rad. The 022 Patent is directed to a fundamental process of SELDI that involves capturing an analyte from a sample on the surface of a mass spectrometry probe derivatized with an affinity reagent, applying matrix and detecting the captured analyte by laser desorption mass spectrometry. In March 2007, the USPTO issued a final office action in the reexamination, rejecting all of the claims of the 022 Patent. Although the office action was designated final , we, under the USPTO rules, advocated the outstanding rejections and the patentability of the claimed invention with the patent examiners on March 30, 2007 and April 11, 2007. In addition, on April 18, 2007, we filed a response to the final office action with the USPTO. On October 23, 2007, the USPTO issued us a reexamination certificate of the 022 Patent. On November 9, 2007, we received $2,000,000 from Bio-Rad that was withheld from the proceeds of the sale of our Instrument Business.

In May 2007, the European Patent Office issued an EU Patent, Biomarkers of Transitional Cell Carcinoma of the Bladder, for aiding in bladder cancer diagnosis when used in conjunction with the current

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standard of care, cystoscopy (a diagnostic procedure that uses a scope to view the bladder). The patent describes using mass spectrometry to detect certain protein biomarkers that are present in patients with bladder cancer versus patients who do not have bladder cancer. These discoveries were made under our collaborative agreement with Eastern Virginia Medical School. We retain exclusive rights to these discoveries for diagnostic development.

The Offering

Common stock offered by selling stockholders.	43,935,269 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 6 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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Summary Consolidated Financial and Operating Data

The following table shows our historical financial and operating data as of and for each of the periods indicated, and should be read in conjunction with Selected Consolidated Financial Data and Management s Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this prospectus. The following tables set forth our consolidated balance sheet data as of September 30, 2007, and December 31, 2006, 2005, 2004, 2003 and 2002 and our consolidated statements of operations data for the nine months ended September 30, 2007 and 2006, and the years ended December 31, 2006, 2005, 2004, 2003 and 2002. We derived the selected consolidated financial data for the years ended December 31, 2006, 2005 and 2004 from our audited consolidated financial statements included elsewhere in this prospectus. The consolidated statements of operations data for the years ended December 31, 2003 and 2002, and the consolidated balance sheet data as of December 31, 2004, 2003 and 2002, were derived from our audited consolidated financial statements that are excluded from this prospectus. The summary consolidated financial data as of September 30, 2007, and for the nine months ended September 30, 2007 and 2006 are derived from our unaudited consolidated financial statements included elsewhere in this prospectus.

Our historical results are not necessarily indicative of the results that may be expected for any future period. The results of operations data for the nine-month periods presented below are not necessarily indicative of the operating results for the entire year or any other future interim period.

	Nine Months Ended September 30,		Year Ended December 31,				
	2007	2006	2006	2005	2004	2003	2002
	(unaudited)		(in thousands, except per share amounts)				
Consolidated Statements of Operations Data:							
Total revenue	$ 21	$ 16,999	$ 18,215	$ 27,246	$ 40,181	$ 43,638	$ 29,208
Loss from operations	(16,739)	(18,814)	(18,897)	(34,509)	(34,317)	(38,654)	(32,139)
Loss from continuing operations	(17,990)	(20,215)	(22,066)	(36,387)	(36,571)	(38,818)	(30,660)
Income from discontinued operations				954	16,730	2,071	1,588
Net loss	$ (17,990)	$ (20,215)	$ (22,066)	$ (35,433)	$ (19,841)	$ (36,747)	$ (29,072)
Basic and diluted income (loss) per share:							
Loss from continuing operations	$ (0.43)	$ (0.56)	$ (0.61)	$ (1.13)	$ (1.25)	$ (1.38)	$ (1.14)
Income from discontinued operations				0.03	0.57	0.07	0.06
Net loss	$ (0.43)	$ (0.56)	$ (0.61)	$ (1.10)	$ (0.68)	$ (1.31)	$ (1.08)
	42,214	36,042	36,465	32,321	29,244	28,154	26,965

Shares used to compute basic and diluted loss per common share						

	September 30, 2007	2006	2005	December 31, 2004	2003	2002
	(unaudited)		(in thousands)			
Consolidated Balance Sheets Data:						
Cash and cash equivalents	$ 19,498	$ 17,711	$ 25,738	$ 35,392	$ 32,853	$ 25,145
Investment in securities	4,000		2,240	2,175	14,463	17,396
Working capital	16,068	12,994	27,130	39,932	51,970	47,667
Total assets	26,867	23,016	52,811	74,377	102,026	87,615
Long-term debt and capital lease obligations, including current portion	28,610	25,511	31,512	29,397	31,865	2,816
Total stockholders equity (deficit)	(8,092)	(9,901)	6,523	26,715	47,892	68,354

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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 impair our operations.

Risks Related to Our Business

We expect to continue to incur net losses in 2007 and 2008. If we are unable to significantly increase our revenues, we may never achieve profitability.

From our inception through September 30, 2007, we have generated cumulative revenue from the sale of products and services to customers of $229.3 million and have incurred net losses of $235.9 million. 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 2007 and 2008. For example, we experienced net losses of $22.1 million in 2006 and $18.0 million for the nine months ended September 30, 2007. 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 derived from our Instrument Business which we sold to Bio-Rad on November 13, 2006. We expect to incur additional operating losses that may be substantial. We may never achieve profitability. 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 beyond 12 months. 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 cash flows.

As of September 30, 2007, we had $19.0 million aggregate principal amount of convertible senior notes outstanding and $10.0 million outstanding under our secured line of credit with Quest Diagnostics. 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 notes;

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

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

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

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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.

We may not succeed in developing diagnostic products and even if we do succeed in developing diagnostic products, they 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.

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 additional 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 Diagnostics.

On July 22, 2005, Vermillion and Quest Diagnostics entered into a strategic alliance, which focuses on commercializing up to three assays 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 Diagnostics commercializes the three diagnostic tests covered by such agreement. If this strategic alliance does not continue for its full term or if Quest Diagnostics fails 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 Diagnostics 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. If we fail to develop diagnostic tests, it would jeopardize our ability to continue as a business.

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, such as our potential ovarian cancer diagnostic test, is 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 revenues.

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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 The Johns Hopkins University School of Medicine and The University of Texas M.D. Anderson Cancer Center. 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.

We have drawn $10.0 million from the secured line of credit provided by Quest Diagnostics. 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 September 30, 2007, we have drawn $10.0 million from the secured lined of credit in connection with our strategic alliance with Quest Diagnostics. 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 to pay 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.

If a competitor infringes our proprietary rights, we may lose any competitive advantage we may have as a result of diversion of management 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 directed to subsequent technological improvements and utilization of the SELDI technology, including 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 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, or 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, financial condition and results of operations.

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, financial condition and results of operations.

On September 17, 2007, we were served with a complaint naming us and Bio-Rad as defendants and MAS as the plaintiff. In the complaint, MAS alleges 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. On November 14, 2007, we filed a petition to compel MAS to arbitrate its claims with the Court. 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 operating results.

In connection with the sale of assets and liabilities of our Instrument Business, we entered into a manufacture and supply agreement with Bio-Rad pursuant to which Bio-Rad manufactures and supplies our SELDI instruments and consumables. 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 these products for another reason, we would have to find another third party supplier or begin manufacturing and supplying such products ourselves. We or another third-party supplier may not be able to produce those products at a cost, quantity or quality that are available from Bio-Rad. In addition, any such interruption could delay or diminish our ability to satisfy our customers orders which could reduce our revenues, adversely affect our relationships with our customers, and materially and adversely affect our operating results.

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

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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 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 QSRs. Our suppliers manufacturing facilities are 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. The resignation of the Chief Financial Officer and loss of service of any other executive officers or certain key employees could 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 entail 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, may require us to make substantial payments. This could adversely affect our cash position and results of operations and could 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 financial position, cash flows and results of operations.

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, or 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 non-accelerated filer. We have completed the process of documenting our systems of internal control and are

currently evaluating 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. If, in the future, we identify one or more material weaknesses, or our external auditors are unable to attest that our management s report is fairly stated or to express an opinion on the effectiveness of

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our internal controls, this could result in a loss of investor 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 management time and attention from revenue-generating activities to compliance activities.

Limitations on our use of net operating loss carryforwards and research and development deferred tax assets to offset future state and federal income taxes may have an impact on our future results of operations.

We are evaluating our net operating loss carryforwards and research and development deferred tax assets to determine whether our use of such deferred tax assets in the future may be limited due to prior year ownership changes. We expect to complete the studies by the end of 2007. If our ability to use any of these deferred tax assets is limited, it may have an adverse impact on our results of operations.

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 also are 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 financial results.

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 November 30, 2007, Quest Diagnostics possessed voting power over 8,605,952 shares, or 13.49%, and Phronesis Partners, L.P., referred to herein as Phronesis, possessed voting power over 6,665,678 shares, or 10.45%, of our outstanding common stock. As a result, Quest Diagnostics 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 Diagnostics 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.

Although we currently meet the standards for continued listing on the Nasdaq Capital Market, there is no guarantee that we will continue to meet these standards in the future and if we are delisted the value of your investment in Vermillion may substantially decrease.

To remain listed on the Nasdaq Capital Market, the bid price for our common stock may not be below $1.00 per share for more than 30 consecutive business days. We received a delisting notice on September 6, 2007, following a period of 30 business days during which the bid price for our common stock was below $1.00. We have until March 4, 2008

to regain compliance otherwise Nasdaq may provide written notification that the Company s securities will be delisted, at which time, we may appeal Nasdaq s decision.

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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 stock would be traded over-the-counter, more commonly 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;

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delisting from the Nasdaq Capital Market; and

economic and other external factors, disasters or crises.

In addition, the stock market in general and, in particular, the Nasdaq Capital Market and the market for technology companies, 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 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 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 November 30, 2007, we had 63,801,971 shares of common stock outstanding. In addition, as of November 30, 2007, there were 7,653,758 shares of common stock reserved for future issuance to employees, directors and consultants pursuant to our employee stock plans, of which 5,669,958 shares of common stock were subject to outstanding options. In addition, as of November 30, 2007, warrants to purchase 22,931,470 shares of common stock were outstanding at exercise prices ranging from $0.925 to $2.50 per share, with a weighted exercise price of $1.079 per share. In addition, there are 272,082 shares of common stock reserved for issuance upon conversion of our outstanding 4.5% Convertible Senior Notes due 2008, referred to herein as the 4.5% Notes, and 8,250,000 shares of common stock reserved for issuance upon conversion of our 7.0% Convertible Senior Notes due 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

Some statements in this prospectus 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 , could , continue or similar words. These forward-looking statements may also use different phrases. We have based these forward-looking statements on our 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 Diagnostics;
- 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 Diagnostics;
- 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 evaluation of the net operating loss carryforwards and research and development deferred tax credits to determine whether there is a limit due to prior year ownership changes; 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 18,626,709 shares of common stock at an exercise price of $0.925 per share, subject to certain adjustments, which are exercisable until August 29, 2012, (ii) warrants to purchase up to an aggregate of 45,000 shares of common stock at an exercise price of $1.26 per share, subject to certain adjustments, which are exercisable until August 2, 2011 and (iii) warrants to purchase up to an aggregate of 45,000 shares of common stock at an exercise price of $1.26 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 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 2005		
First Quarter	$ 4.34	$ 2.62
Second Quarter	$ 2.81	$ 1.39
Third Quarter	$ 2.65	$ 1.67
Fourth Quarter	$ 1.99	$ 0.64
Fiscal Year 2006		
First Quarter	$ 2.25	$ 1.00
Second Quarter	$ 1.86	$ 1.00
Third Quarter	$ 1.55	$ 0.85
Fourth Quarter	$ 1.39	$ 0.82
Fiscal Year 2007		
First Quarter	$ 1.99	$ 0.92
Second Quarter	$ 1.53	$ 0.85
Third Quarter	$ 1.15	$ 0.55
Fourth Quarter (through December 5, 2007)	$ 1.09	$ 0.58

The closing price for our common stock on December 5, 2007 was $0.83. As of November 20, 2007, there were approximately 142 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 3,982 as of such date.

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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SELECTED CONSOLIDATED FINANCIAL DATA

You should read the following selected consolidated financial data in conjunction with our audited consolidated financial statements and the notes thereto, and Management s Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this prospectus. The following tables set forth our consolidated balance sheet data as of September 30, 2007, and December 31, 2006, 2005, 2004, 2003 and 2002 and our consolidated statements of operations data for the nine months ended September 30, 2007 and 2006, and the years ended December 31, 2006, 2005, 2004, 2003 and 2002. We derived the selected consolidated financial data for the years ended December 31, 2006, 2005 and 2004 from our audited consolidated financial statements included elsewhere in this prospectus. The consolidated statements of operations data for the years ended December 31, 2003 and 2002, and the consolidated balance sheet data as of December 31, 2004, 2003 and 2002, were derived from our audited consolidated financial statements that are excluded from this prospectus. The summary consolidated financial data as of September 30, 2007, and for the nine months ended September 30, 2007 and 2006 are derived from our unaudited consolidated financial statements included elsewhere in this prospectus.

Our historical results are not necessarily indicative of the results that may be expected for any future period. The results of operations data for the nine-month periods presented below are not necessarily indicative of the operating results for the entire year or any other future interim period.

	Nine Months Ended September 30,		Year Ended December 31,				
	2007	2006	2006	2005	2004	2003	2002
	(unaudited)		(in thousands, except per share amounts)				
Consolidated Statements of Operations Data:							
Revenue:							
Products	$	$ 10,702	$ 11,292	$ 18,350	$ 31,378	$ 35,872	$ 23,572
Products from related parties							827
Services	21	6,297	6,923	8,896	8,803	7,766	4,809
Total revenue	21	16,999	18,215	27,246	40,181	43,638	29,208
Cost of revenue:							
Products		5,714	5,818	9,372	11,199	11,911	6,761
Products from related parties							334
Services	15	3,118	3,520	4,321	3,876	3,426	2,277
Litigation settlement						7,257	
Total cost of revenue	15	8,832	9,338	13,693	15,075	22,594	9,372
Gross profit	6	8,167	8,877	13,553	25,106	21,044	19,836

Operating expenses:							
Research and development	6,297	8,780	11,474	13,196	19,268	23,628	19,593
Sales and marketing	1,440	10,652	12,568	18,009	26,019	21,255	17,960
General and administrative	8,626	7,549	10,661	14,404	14,136	14,815	14,422
Goodwill impairment				2,453			
Total operating expenses	16,363	26,981	34,703	48,062	59,423	59,698	51,975

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	Nine Months Ended September 30,		Year Ended December 31,				
	2007	2006	2006	2005	2004	2003	2002
	(unaudited)		(in thousands, except per share amounts)				
Gain (loss) on sale of instrument business	(382)		6,929				
Loss from operations	(16,739)	(18,814)	(18,897)	(34,509)	(34,317)	(38,654)	(32,139)
Loss on extinguishment of debt			(1,481)				
Interest income	458	654	843	839	505	702	1,543
Interest expense	(1,727)	(1,691)	(2,254)	(1,993)	(2,001)	(763)	(43)
Other income (expense) net	17	(174)	(125)	(717)	(649)	(150)	(65)
Loss from continuing operations before income taxes	(17,991)	(20,025)	(21,914)	(36,380)	(36,462)	(38,865)	(30,704)
Income tax benefit (expense) from continuing operations	1	(190)	(152)	(7)	(109)	47	44
Loss from continuing operations	(17,990)	(20,215)	(22,066)	(36,387)	(36,571)	(38,818)	(30,660)
Discontinued operations:							
Income (loss) from operations, net of tax					(1,797)	2,071	1,588
Gain from sale of operations, net of tax				954	18,527		
Income from discontinued operations				954	16,730	2,071	1,588
Net loss	$ (17,990)	$ (20,215)	$ (22,066)	$ (35,433)	$ (19,841)	$ (36,747)	$ (29,072)
Basic and diluted income (loss) per share:							
Loss from continuing operations	$ (0.43)	$ (0.56)	$ (0.61)	$ (1.13)	$ (1.25)	$ (1.38)	$ (1.14)
Income from discontinued operations				0.03	0.57	0.07	0.06
Net loss per common share	$ (0.43)	$ (0.56)	$ (0.61)	$ (1.10)	$ (0.68)	$ (1.31)	$ (1.08)
	42,214	36,042	36,465	32,321	29,244	28,154	26,965

Shares used to compute basic and diluted loss per common share						

	September 30,		December 31,			
	2007	2006	2005	2004	2003	2002
	(unaudited)		(in thousands)			
Consolidated Balance Sheets Data:						
Cash and cash equivalents	$ 19,498	$ 17,711	$ 25,738	$ 35,392	$ 32,853	$ 25,145
Investment in securities	4,000		2,240	2,175	14,463	17,396
Working capital	16,068	12,994	27,130	39,932	51,970	47,667
Total assets	26,867	23,016	52,811	74,377	102,026	87,615
Long-term debt and capital lease obligations, including current portion	28,610	25,511	31,512	29,397	31,865	2,816
Total stockholders equity (deficit)	(8,092)	(9,901)	6,523	26,715	47,892	68,354

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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 notes thereto 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 in May 2000, we reincorporated in Delaware. We had our initial public offering on September 28, 2000. On November 13, 2006, we sold assets and liabilities of our 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 November 13, 2006, sale of assets and liabilities of our Instrument Business to Bio-Rad, 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. Additionally, 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 sale of assets and liabilities of our Instrument Business to Bio-Rad, we have dedicated ourselves to the discovery, development and commercialization of specialty diagnostic tests that provide physicians with information with which to manage their patients care and to improve patient outcomes. We intend to do this using translational proteomics, which is the process of answering clinical questions by utilizing advanced protein separation methods to identify and resolve variants of specific biomarkers, developing assays, and commercializing tests. As a result of the transition from our historical roots as a proteomics research products business to a specialty diagnostic testing 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 The Johns Hopkins School of Medicine, The University of Texas M.D. Anderson Cancer Center, University College London, The University of Texas Medical Branch, The Katholieke Universiteit Leuven, The Ohio State University Research Foundation, and Stanford University, we plan to develop diagnostic tests in the fields of hematology/oncology, cardiovascular disease

and women s health. The clinical questions we are addressing include 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 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 Diagnostics commercializes the three diagnostic tests. Thus, our major initiatives are currently aimed at commercializing these tests, both within the context of our strategic alliance agreement with Quest Diagnostics as well as with other customers, to the extent permitted under the agreement. In May 2007, we hired Steve Lundy as our Senior Vice President of Sales and Marketing. We anticipate adding additional members to our sales and marketing team to expedite these activities.

Our most established programs are in the field of 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 cases are diagnosed each year, with the majority in patients with late stage disease, where the cancer has spread beyond the ovary. Unfortunately, the prognosis is poor in these patients, leading to the high mortality from this disease. We believe that one unmet clinical need is a diagnostic test that can provide adequate predictive value to stratify patients with a pelvic mass into those with a high risk of invasive ovarian cancer versus those with a low risk. We believe that there are at least 5 million testing opportunities each year addressing this need. We have developed a panel of biomarkers we believe provides risk stratification information for ovarian cancer based on a series of studies involving over 2,500 clinical samples from more than five sites. In a cohort study we were able to show, in 525 consecutively sampled women, a significant increase in the positive predictive value using our marker panel over the baseline level. This translates into the potential to enrich the concentration of ovarian cancer cases referred to a gynecologic oncologist by more than two-fold. We are undertaking a prospective clinical trial to support submission to the FDA for approval as an IVD test kit.

A second major program is a test intended to aid in the detection of PAD. This test, which is based on research done in collaboration with Stanford University, fills the unmet clinical need for a blood test that can be used as an adjunct to detect PAD, which affects 10 million Americans but is underdiagnosed. Accurate diagnosis of PAD permits aggressive lifestyle modification and therapeutic intervention that can decrease the risk of major adverse cardiovascular events. We reported in August the publication of a discovery of two blood markers for PAD in the peer-reviewed journal *Circulation*, which is published by the American Heart Association. We are currently performing clinical validation of this test, which will be commercialized with Quest Diagnostics under the terms of the strategic alliance agreement.

We expect to incur losses for at least the next year. Due to the sale of assets and liabilities of our Instrument Business to Bio-Rad, 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

Effective November 1, 2007, Debra A. Young resigned from her position as Vice President and Chief Financial Officer of the Company for personal reasons. In connection with her resignation, the Company and Ms. Young entered into a Separation Agreement and Release. Under the terms of this agreement, Ms. Young agreed to resign from her position and release any claims she may have against us. As consideration for entering into this agreement, the Company agreed to pay Ms. Young the equivalent of her base salary for a period of six months for an aggregate amount of $113,000 and to continue Ms. Young s health and dental coverage through April 2008. Immediately upon Ms. Young s resignation from the Company, Qun Zhou, our Corporate Controller, was appointed to serve as Chief

Financial Officer on an interim basis. Ms. Zhou currently receives an annual base salary of $160,000.

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On September 17, 2007, we were served with a complaint filed in the Superior Court of California for the County of Santa Clara naming us and Bio-Rad as defendants and MAS as plaintiff. The complaint 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 sale of assets and liabilities of our Instrument Business to Bio-Rad, 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. On November 14, 2007, we filed a petition to compel MAS to arbitrate its claims with the Court. Given the early stage of this action, we cannot predict the ultimate outcome of this matter at this time.

On August 15, 2007, we were notified by the staff of the Nasdaq Capital Market that we were not in compliance with Marketplace Rule 4310(c)(3) and, as required by Marketplace Rule 4310(c)(8)(C), we had 30 days to regain compliance. Marketplace Rule 4310(c)(3) requires us to (i) have minimum stockholders equity of $2,500,000, (ii) have a minimum common stock market value of $35,000,000 or (iii) 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. Subsequently, on September 14, 2007, the staff of the Nasdaq Capital Market notified us that we had regained compliance with Marketplace Rule 4310(c)(3) because the market value of our common stock exceeded $35,000,000 for ten consecutive business days.

Additionally, on September 6, 2007, we were notified by the staff of the Nasdaq Capital Market that our common stock bid price closed below the minimum $1.00 per share for more than 30 consecutive business days, in violation of 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.

On August 29, 2007, we completed a private placement sale of 24,513,092 shares of our common stock and warrants to purchase up to an additional 19,610,470 shares of our common stock with an exercise price of $0.925 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. The net proceeds of the transaction will be used for general working capital needs. In connection with this transaction, we amended a warrant originally issued to Quest Diagnostics on July 22, 2005. Pursuant to the terms of the amendment, the exercise price for such warrant was reduced from $3.50 per share to $2.50 per share and the expiration date of such warrant was extended from July 22, 2010 to July 22, 2011. For services as placement agent, we paid Oppenheimer & Co. Inc. $1,200,000 and issued a warrant to purchase up to 921,000 shares of our common stock with an exercise price of $0.925 per share and expiration date of August 29, 2012.

In August 2007, we announced the discovery of biomarkers that could assist in the diagnosis of PAD. These findings, which were made in collaboration with Stanford University, form the basis of a novel blood test for PAD. The biomarkers are currently undergoing validation. The results were published in the journal *Circulation*, which is published by the American Heart Association. Quest Diagnostics has accepted the PAD test for further development under the strategic alliance agreement.

On June 26, 2006, Health Discovery Corporation 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. Health Discovery Corporation 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 July 10, 2007, we entered into a

license and settlement agreement with Health Discovery Corporation, pursuant to which we licensed more than 25 patents covering Health Discovery Corporation 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

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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 Health Discovery Corporation upon entry into the agreement in July 2007. The remaining $400,000 payable under the HDC Agreement is payable as follows: $100,000 three months following the date of the agreement, $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 settles all disputes between us and Health Discovery Corporation.

At our annual stockholders meeting on June 29, 2007, stockholders approved amendments to our 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. We amended our certificate of incorporation to reflect our name change on August 21, 2007.

In connection with the sale of assets and liabilities of our Instrument Business on November 13, 2006, Bio-Rad withheld $2,000,000 from the sales proceeds until the issuance of a reexamination certificate confirming the 022 Patent. If the USPTO does not issue a reexamination certificate confirming the patentability of all of the claims as originally issued in the 022 Patent, or claims of equivalent scope, we will not be entitled to receive the $2,000,000 withheld by Bio-Rad. The 022 Patent is directed to a fundamental process of SELDI that involves capturing an analyte from a sample on the surface of a mass spectrometry probe derivatized with an affinity reagent, applying matrix and detecting the captured analyte by laser desorption mass spectrometry. In March 2007, the USPTO issued a final office action in the reexamination, rejecting all of the claims of the 022 Patent. Although the office action was designated final , we, under the USPTO rules, advocated the outstanding rejections and the patentability of the claimed invention with the patent examiners on March 30, 2007, and April 11, 2007. In addition, on April 18, 2007, we filed a response to the final office action with the USPTO. On October 23, 2007, the USPTO issued a reexamination certificate of the 022 Patent. On November 9, 2007, we received $2,000,000 from Bio-Rad that was withheld from the proceeds of the sale of our Instrument Business.

In May 2007, the European Patent Office issued an EU Patent, Biomarkers of Transitional Cell Carcinoma of the Bladder, for aiding in bladder cancer diagnosis when used in conjunction with the current standard of care, cystoscopy (a diagnostic procedure that uses a scope to view the bladder). The patent describes using mass spectrometry to detect certain protein biomarkers that are present in patients with bladder cancer versus patients who do not have bladder cancer. These discoveries were made under our collaborative agreement with Eastern Virginia Medical School. We retain exclusive rights to these discoveries for diagnostic development.

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Results of Operations

Nine Months Ended September 30, 2007 Compared to Nine Months Ended September 30, 2006

The following table sets forth selected summary financial and operating data of Vermillion for the nine months ended September 30, 2007 and 2006:

	Nine Months Ended September 30,		Increase (Decrease)	
	2007	2006	Amount	%
	(unaudited, in thousands)			
Revenue:				
Products	$	$ 10,702	$ (10,702)	(100.00)
Services	21	6,297	(6,276)	(99.67)
Total revenue	21	16,999	(16,978)	(99.88)
Cost of revenue:				
Products		5,714	(5,714)	(100.00)
Services	15	3,118	(3,103)	(99.52)
Total cost of revenue	15	8,832	(8,817)	(99.83)
Gross profit	6	8,167	(8,161)	(99.93)
Operating expenses:				
Research and development	6,297	8,780	(2,483)	(28.28)
Sales and marketing	1,440	10,652	(9,212)	(86.48)
General and administrative	8,626	7,549	1,077	14.27
Total operating expenses	16,363	26,981	(10,618)	(39.35)
Loss on sale of Instrument Business	(382)		(382)	
Loss from operations	(16,739)	(18,814)	(2,075)	(11.03)
Interest income	458	654	(196)	(29.97)
Interest expense	(1,727)	(1,691)	36	2.13
Other income (expense), net	17	(174)	(191)	(109.77)
Loss before income taxes	(17,991)	(20,025)	(2,034)	(10.16)
Income tax benefit (expense)	1	(190)	(191)	(100.53)
Net loss	$ (17,990)	$ (20,215)	$ (2,225)	(11.01)

Products Revenue. There was no products revenue for the nine months ended September 30, 2007, compared to $10,702,000 for the same period in 2006. The decrease was the result of the sale of assets and liabilities of our

Instrument Business to Bio-Rad.

Services Revenue. Services revenue decreased to $21,000 for the nine months ended September 30, 2007 from $6,297,000 for the same period in 2006. Services revenue for the nine months ended September 30, 2007, was from ongoing support services provided to a customer. This decrease was the result of the sale of assets and liabilities of our Instrument Business to Bio-Rad.

Cost of Products Revenue. There was no cost of products revenue for the nine months ended September 30, 2007, compared to $5,714,000 for the same period in 2006. This decrease was the result of the sale of assets and liabilities of our Instrument Business to Bio-Rad

Cost of Services Revenue. Cost of services revenue decreased to $15,000 for the nine months ended September 30, 2007, from $3,118,000 for the same period in 2006. Cost of services revenue for the nine months ended September 30, 2007, was from ongoing support services provided to a customer. This decrease was the result of the sale of assets and liabilities of our Instrument Business to Bio-Rad.

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Research and Development Expenses. Research and development expenses decreased by $2,483,000, or 28.3%, to $6,297,000 for the nine months ended September 30, 2007, from $8,780,000 for the same period in 2006. This decrease is primarily due to our transition from our historical roots as a proteomics research products business to a specialty diagnostic testing business following the sale of assets and liabilities of our Instrument Business to Bio-Rad. This transition resulted in reductions in employee headcount to twelve at September 30, 2007, from twenty-seven at September 30, 2006, and, correspondingly, salaries, payroll taxes, employee benefits and stock-based compensation decreased by $1,736,000; materials and supplies used in the development of new products decreased by $721,000; equipment related expenses decreased by $400,000; occupancy costs decreased by $168,000; outside services decreased by $125,000; and other operating costs decreased by $258,000. These decreases were offset by the increased collaboration cost of $1,021,000. Stock-based compensation expense included in research and development expenses was $129,000 and $273,000 for the nine months ended September 30, 2007 and 2006, respectively.

Sales and Marketing Expenses. Sales and marketing expenses decreased to $1,440,000 for the nine months ended September 30, 2007 from $10,652,000 for the same period in 2006. The decrease was largely due to the sale of assets and liabilities of our Instrument Business to Bio-Rad. Correspondingly, employee headcount decreased to five at September 30, 2007, from sixty-two at September 30, 2006, which resulted in a decline in salaries, payroll taxes, employee benefits and stock-based compensation of $5,699,000. This also resulted in reductions in travel by $1,122,000; internal consumption of ProteinChip Arrays and other consumables for customer demonstrations and support by $670,000; outside services by $432,000; and equipment related expenses by $1,169,000. Stock-based compensation expense included in sales and marketing expenses was $66,000 and $252,000 for the nine months ended September 30, 2007 and 2006, respectively.

General and Administrative Expenses. General and administrative expenses increased to $8,626,000 for the nine months ended September 30, 2007 from $7,549,000 for the same period in 2006, an increase of $1,077,000, or 14.3%. The increase was primarily due to the settlement of the Health Discovery Corporation lawsuit of $600,000; increased professional services of $201,000 primarily from our name change and printing costs associated with the annual proxy and annual financial report; increased legal fees of $266,000 primarily due to filings of new patent applications, costs incurred from the Health Discovery Corporation lawsuit and costs incurred from the 022 Patent reexamination; and increased accounting and audit fees of $414,000 due to the timing of domestic and international services performed. These increases were offset by a decrease in equipment related expense of $109,000 and other operating expenses of $312,000, primarily from the reduction in postage and shipping costs attributable to reduced activity resulting from the sale of assets and liabilities of our Instrument Business to Bio-Rad. Employee headcount declined to thirteen at September 30, 2007, from sixteen at September 30, 2006. Stock-based compensation expense included in general and administrative expenses was $488,000 and $673,000 for the nine months ended September 30, 2007 and 2006, respectively.

Loss on Sale of Instrument Business. Loss on sale of the Instrument Business of $382,000 for the nine months ended September 30, 2007 resulted from a post-closing adjustment related to the sale of assets and liabilities of our Instrument Business to Bio-Rad.

Interest and Other Expense, Net. Interest income was $458,000 for the nine months ended September 30, 2007, compared to $654,000 for the same period in 2006. Interest income decreased primarily due to the liquidation of short-term investments during 2006 to fund operations.

Interest expense was $1,727,000 for the nine months ended September 30, 2007, compared to $1,691,000 for the same period in 2006. Interest expense in both periods consisted largely of interest related to our convertible senior notes and borrowings from Quest Diagnostics. Interest expense included the amortization of the beneficial conversion feature associated with the convertible senior notes amounting to $182,000 and $400,000 for the nine months ended September 30, 2007 and 2006, respectively.

Net other income was $17,000 for the nine months ended September 30, 2007, compared to net other expense of $174,000 for the same period in 2006. Net other income for the nine months ended September 30, 2006, included $160,000 received in settlement of a claim against a service provider. The increase to net other income also includes the reduction of offering costs amortization related to the convertible notes amounting to $54,000 for the nine months ended September 30, 2007, from $280,000 for the same period in 2006.

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Additionally, realized foreign currency exchange resulted in a gain of $83,000 for the nine months ended September 30, 2007, as compared to a loss of $46,000 for the same period in 2006. The change in realized foreign currency exchange is due to our foreign operations and foreign subsidiary balances, and increase in foreign currency exchange rates.

Income Tax Expense. Income tax benefit for the nine months ended September 30, 2007, was $1,000 compared to $190,000 for the same period in 2006. The decrease in expense was primarily due to reduction of net income in our foreign operations as a result of the sale of assets and liabilities of our Instrument Business to Bio-Rad.

Year Ended December 31, 2006 Compared to Year Ended December 31, 2005

The following table sets forth selected summary financial and operating data of Vermillion for the years ended December 31, 2006 and 2005:

	Year Ended December 31,		Increase (Decrease)	
	2006	2005	Amount	%
	(In thousands)			
Revenue:				
Products	$ 11,292	$ 18,350	$ (7,058)	(38.46)
Services	6,923	8,896	(1,973)	(22.18)
Total revenue	18,215	27,246	(9,031)	(33.15)
Cost of revenue:				
Products	5,818	9,372	(3,554)	(37.92)
Services	3,520	4,321	(801)	(18.54)
Total cost of revenue	9,338	13,693	(4,355)	(31.80)
Gross profit	8,877	13,553	(4,676)	(34.50)
Operating expenses:				
Research and development	11,474	13,196	(1,722)	(13.05)
Sales and marketing	12,568	18,009	(5,441)	(30.21)
General and administrative	10,661	14,404	(3,743)	(25.99)
Goodwill impairment		2,453	(2,453)	(100.00)
Total operating expenses	34,703	48,062	(13,359)	(27.80)
Gain on sale of Instrument Business	6,929		6,929	
Loss from operations	(18,897)	(34,509)	(15,612)	(45.24)
Interest income	843	839	4	0.48
Interest expense	(2,254)	(1,993)	261	13.10
Loss on extinguishment of debt	(1,481)		1,481	
Other expense, net	(125)	(717)	(592)	(82.57)

Loss from continuing operations before income taxes	(21,914)	(36,380)	(14,466)	(39.76)
Income tax expense	152	7	145	2,071.43
Net loss from continuing operations	(22,066)	(36,387)	(14,321)	(39.36)
Discontinued operations:				
Gain from sale of discontinued operations, net of tax		954	(954)	(100.00)
Net income from discontinued operations		954	(954)	(100.00)
Net loss	$ (22,066)	$ (35,433)	$ (13,367)	(37.72)

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Products Revenue. Products revenue was $11.3 million in 2006 and $18.4 million in 2005. The $7.1 million or 39% decrease in products revenue from 2005 to 2006 was largely the result of a 38% decrease in revenue from sales of our ProteinChip Systems, accessories and software, as well as a 39% decrease in revenue from our arrays and consumables. The decrease in systems and related revenue was due to a 55% decrease in unit sales of ProteinChip Systems from 76 systems in 2005 to 34 systems in 2006 in part due to the asset sale of our Instrument Business to Bio-Rad. During the first half of 2006, products revenues trended down by about 10% from the prior year and dropped significantly following the announcement of the proposed transaction with Bio-Rad. The decrease in array and consumable sales was largely driven by lower unit sales due in part to significantly reduced new instrument placements, as new instrument placements typically included a significant initial purchase of consumables.

In the third quarter of 2005, we sold nine ProteinChip Systems to one customer for $601,000. We also entered into a product development agreement with this same customer, whereby the customer would develop for us a specific new product and we could pay the customer up to $500,000 based on the customer s attainment of specified development milestones. Under this agreement, we paid this customer $300,000 of development fees during 2005. This was recorded, following EITF 01-9, Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor s Products) , as a reduction to revenue, resulting in net revenue from this customer of approximately $301,000 in 2005. This constituted approximately 2% of products revenue and 1% of total revenue for 2005. No additional payment was made in 2006. With the divestiture of the Instrument Business to Bio-Rad, this product development agreement was transferred to Bio-Rad.

Services Revenue. Services revenue was $6.9 million in 2006 and $8.9 million in 2005. The $2.0 million or 22% decrease in services revenue from 2005 to 2006 was primarily due to fewer new instrument placements, which typically include an initial registration for one or more training classes, and the closing of the asset sale to Bio-Rad in the fourth quarter of 2006.

We expect that future revenues for our business will be affected by, among other things, our ability to develop and commercialize diagnostic tests, new product and application introductions, customer budgets, competitive conditions and government funding for research in our field. We expect limited revenues in 2007 until the new diagnostic tests are developed and launched.

Cost of Products Revenue. Cost of products revenue was $5.8 million in 2006 and $9.4 million in 2005. The $3.6 million or 38% decrease in cost of products revenue from 2005 to 2006 resulted from a decrease in unit sales of our ProteinChip Systems, accessories, software, arrays and other consumables. The decrease in gross margin of $3.5 million for products revenue was largely due to the aforementioned drop in unit sales. Gross margin as a percentage of sales for products revenue was relatively flat at 48.9% of sales in 2005 and 48.5% of sales in 2006.

Stock-based compensation expense related to employee stock options under SFAS No. 123 (revised), Share-Based Payment , or SFAS 123(R), in cost of products revenue was $144,000 in 2006. There was no deferred stock-based compensation expense in cost of products revenue for 2005.

Cost of Services Revenue. Cost of services revenue was $3.5 million in 2006 and $4.3 million in 2005. From 2006 to 2005, cost of services revenue decreased $0.8 million or 19% primarily due to the 22% decrease in services revenue. The gross margin for services revenue decreased from 51% in 2005 to 49% in 2006 due to the drop in services revenue.

We believe that gross profits for 2007 will be minimal until the new diagnostic tests are developed and successfully commercialized.

Research and Development Expenses. Research and development expenses were $11.5 million in 2006 and $13.2 million in 2005. From 2005 to 2006, research and development expenses decreased $1.7 million or 13% primarily due to a decrease of $2.4 million in salaries, payroll taxes and employee benefits due to transition to diagnostic testing and away from tools development following the asset sale to Bio-Rad. Materials and supplies used in the development of new products also decreased by $0.6 million, depreciation decreased by $0.1 million, travel expenses decreased by $0.1 million and consulting fees decreased by $0.1 million,

consistent with the scaling back of research programs related to our instrument platform. These decreases were partially offset by a $1.4 million increase in clinical collaboration expenses and a $0.3 million increase in stock-based compensation expense related to employee stock options under SFAS 123(R). Spending on diagnostics research under the strategic alliance with Quest Diagnostics was approximately $5.4 million in 2006 and $2.2 million in 2005.

Stock-based compensation expense related to employee stock options under SFAS 123(R) in research and development expenses was $337,000 in 2006. There was no deferred stock-based compensation expense in research and development expenses for 2005.

We expect research and development expenses to decline in 2007 relative to 2006 due to having fewer research and development employees in 2006 needed to support our research and development activities associated with developing and commercializing diagnostic tests as part of our strategic alliance with Quest Diagnostics, and discovering biomarkers that could potentially be developed into additional diagnostic products.

Sales and Marketing Expenses. Sales and marketing expenses were $12.6 million in 2006 and $18.0 million in 2005. From 2005 to 2006, sales and marketing expenses decreased $5.4 million or 30%, largely due to lower payroll-related costs as a result of a reduction in sales and marketing headcount from 72 people in 2005 to 6 people at the end of 2006 due to the asset sale of our Instrument Business to Bio-Rad. The primary components of the decrease in expense from 2005 were payroll and related costs of approximately $2.8 million, $0.9 million decrease in travel expenses and a $0.6 million decrease in field materials and supplies expense.

Stock-based compensation expense related to employee stock options under SFAS 123(R) in sales and marketing expenses was $321,000 in 2006. There was no deferred stock-based compensation expense in sales and marketing expenses for 2005.

We expect sales and marketing expenses to decrease in 2007 relative to 2006 as a result of a smaller sales force and reduced associated selling expenses until the launch of new diagnostic tests.

General and Administrative Expenses. General and administrative expenses were $10.7 million in 2006 and $14.4 million in 2005. From 2005 to 2006, general and administrative expenses decreased $3.7 million or 26%, largely driven by a $2.1 million reduction in payroll and related costs resulting from a reduction in headcount related expenses due to the asset sale to Bio-Rad. Outside legal fees decreased approximately $0.4 million due to decreased patent registration activity which were partially offset by legal fees related to defense of a SELDI patent. Other audit and accounting fees decreased $1.3 million as 2005 audit costs were much higher due to the restatement of earnings in 2005.

Stock-based compensation expense related to employee stock options under SFAS 123(R) in general and administrative expenses were $813,000 in 2006. There were no deferred stock-based compensation expenses in general and administrative expenses for 2005.

We expect general and administrative expenses to drop slightly in 2007 relative to 2006 due to lower headcount in the administration function which will be partially offset by the costs of performing a management assessment of compliance with Section 404 of the Sarbanes-Oxley Act of 2002.

Goodwill Impairment. We recorded goodwill principally as a result of our acquisition of BioSepra in 2001, the increases in our ownership of Ciphergen Biosystems KK in 2002 and 2004, and the acquisitions of Ciphergen Technologies, Inc. and IllumeSys Pacific, Inc. in 1997 and 1998. We performed annual impairment tests from 2002 through 2004 and determined that no impairment had occurred. The goodwill related to BioSepra was written off against the sale of the BioSepra business in 2004. Due to Ciphergen Biosystems KK s lower than expected operating

results and cash flows throughout 2005 and based on revised forecasted results, a goodwill impairment loss of $2.5 million was recognized in the fourth quarter of 2005. The fair value of Ciphergen Biosystems KK was estimated using expected discounted cash flows (see Notes 5 and 8 to our audited consolidated financial statements included elsewhere in this prospectus).

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Gain From Sale of Instrument Business, Net of Tax. The $6.9 million gain recognized in 2006 on the November 13, 2006, asset sale of our Instrument Business to Bio-Rad is summarized as follows (in thousands):

Net Proceeds	
Cash proceeds received	$ 19,000
Less: Transaction costs	(782)
	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)
Common stocks issued	3,611
	11,289
Gain on sale of Instrument Business to Bio-Rad	$ 6,929

We entered into a stock purchase agreement with Bio-Rad for the private sale of shares of our common stock to Bio-Rad for an aggregate purchase price of $3,000,000. The purchase price of $0.972 per share was based on the average closing price for the five days preceding the stock purchase agreement on August 14, 2006. For accounting purposes, the 3,086,420 shares purchased were valued at $1.17 per share, the closing price on November 13, 2006, the day the transaction closed. The resulting value of $3.611 million was allocated between common stock (3.086 million shares at $0.001 par value) and additional paid-in capital of $3.608 million. An additional $4.0 million of contingent cash consideration included $2.0 million, subject to certain adjustments, to be held in escrow as security for certain of our obligations for three years following the closing, and $2.0 million as a holdback amount to be held by Bio-Rad until the issuance of a reexamination certificate confirming a SELDI patent (see Notes 6 and 22 to our audited consolidated financial statements included elsewhere in this prospectus).

Loss on Extinguishment of Debt. The loss from extinguishment of debt represents the expensing of $868,000 of unamortized debt discount and $613,000 of unamortized prepaid offering costs related to the exchange of $27.5 million of our 4.5% Notes for $16.5 million of our 7.0% Notes and $11 million in cash (see Note 11 to our audited consolidated financial statements included elsewhere in this prospectus).

Interest and Other Income (Expense), Net. Interest income was $843,000 in 2006 and $839,000 in 2005. Interest income from money market and accounts remained flat between 2005 and 2006. Although money market account balances decreased from $28.0 million in 2005 to $17.7 million in 2006 this was offset by interest yield, which steadily increased from 2.9% in June 2005 to 5.9% in December 2006. Interest expense was $2.3 million in 2006 and $2.0 million in 2005. Interest expense increased $0.3 million from 2005 to 2006 primarily due to the increase in interest paid to Quest Diagnostics due to our outstanding loan balance from Quest Diagnostics increasing from

$2.5 million to $7.1 million from December 31, 2005, to December 31, 2006.

Other expense was $125,000 in 2006 and $717,000 in 2005. In 2006 other expense consisted primarily of $332,000 of amortization of issuance costs for the convertible senior notes partially offset by $81,000 for the return of a lease deposit. In 2005, other expense consisted primarily of $373,000 of expense for the

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amortization of issuance costs for the convertible senior notes and foreign exchange losses of approximately $232,000, largely due to the impact on the transaction losses from the decline of the U.S. dollar against the British pound and the Japanese yen.

Income Tax Expenses. Our provision for income taxes was due to current foreign income taxes, which were $152,000 and $7,000 for the years ended December 31, 2006 and 2005, respectively, including discontinued operations. Excluding discontinued operations, current foreign income taxes were an expense of $152,000 and $7,000 for the years ended December 31, 2006 and 2005, respectively.

We have incurred net losses since inception and consequently are not subject to corporate income taxes in the U.S. to the extent of our tax loss carryforwards. At December 31, 2006 we had net operating loss carryforwards of approximately $125.0 million for federal and $58.8 million for state tax purposes. If not utilized, these carryforwards will begin to expire beginning in 2009 for federal purposes and 2007 for state purposes. As of December 31, 2006, we had $2.9 million 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 approximately $4.4 million and $4.7 million for federal and state tax purposes, respectively. If not utilized, the federal research credit carryforwards will expire in various amounts beginning in 2011. 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 U.S. in which we operate. We have used net operating loss carryforwards to reduce our income tax liabilities in Japan and the United Kingdom. The 2005 and 2006 net loss can be carried forward for seven years.

Gain From Sale of BioSepra Business, Net of Tax. We received $1.0 million that was placed in an interest-bearing escrow account for one year and $21,000 of accrued interest related to the BioSepra business and treated the amount as an additional gain of $1,021,000 on the sale in 2005. This was partly offset by a $67,000 reduction of the gain on the sale of the BioSepra business for a post-closing adjustment in 2005, in accordance with the related asset purchase agreement, resulting in a net gain of $954,000 in 2005.

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Year Ended December 31, 2005 Compared to Year Ended December 31, 2004

The following table sets forth selected summary financial and operating data of Vermillion for the years ended December 31, 2005 and 2004:

	Year Ended December 31,		Increase (Decrease)	
	2005	2004	Amount	%
	(In thousands)			
Revenue:				
Products	$ 18,350	$ 31,378	$ (13,028)	(41.52)
Services	8,896	8,803	93	1.06
Total revenue	27,246	40,181	(12,935)	(32.19)
Cost of revenue:				
Products	9,372	11,199	(1,827)	(16.31)
Services	4,321	3,876	445	11.48
Total cost of revenue	13,693	15,075	(1,382)	(9.17)
Gross profit	13,553	25,106	(11,553)	(46.02)
Operating expenses:				
Research and development	13,196	19,268	(6,072)	(31.51)
Sales and marketing	18,009	26,019	(8,010)	(30.79)
General and administrative	14,404	14,136	268	1.90
Goodwill impairment	2,453		2,453	
Total operating expenses	48,062	59,423	(11,361)	(19.12)
Loss from operations	(34,509)	(34,317)	192	0.56
Interest income	839	505	334	66.14
Interest expense	(1,993)	(2,001)	(8)	(0.40)
Other expense, net	(717)	(649)	68	10.48
Loss from continuing operations before income taxes	(36,380)	(36,462)	(82)	(0.22)
Income tax expense	7	109	(102)	(93.58)
Net loss from continuing operations	(36,387)	(36,571)	(184)	(0.50)
Discontinued operations:				
Loss from discontinued operations, net of tax		(1,797)	(1,797)	(100.00)
Gain from sale of discontinued operations, net of tax	954	18,527	(17,573)	(94.85)
Net income from discontinued operations	954	16,730	(15,776)	(94.30)
Net loss	$ (35,433)	$ (19,841)	$ (15,592)	78.58

Products Revenue. Products revenue was $18.4 million in 2005 and $31.4 million in 2004. The $13.0 million or 42% decrease in products revenue from 2004 to 2005 was largely the result of a 54% decrease in revenue from sales of our ProteinChip Systems, accessories and software, as well as a 14% decrease in revenue from our arrays and consumables. The decrease in systems and related revenue was due to a 41% decrease in unit sales of ProteinChip Systems and a 22% decrease in average revenue per system sold due to increased discounting and incentives we offered to expedite orders, discounts offered to customers on trade-ins of their older model ProteinChip Systems for a new Series 4000, and the competitive environment. The decrease in array and consumable sales was largely driven by lower unit sales due in part to fewer new instrument placements, which typically include a significant initial purchase of consumables. In Japan, the strengthening of the U.S. dollar against the Japanese yen resulted in a decrease in products revenue of approximately $370,000.

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In the third quarter of 2005, we sold nine ProteinChip Systems to one customer for $601,000. We also entered into a product development agreement with this same customer, whereby the customer will develop a specific new product for us and we may pay the customer up to $500,000 based on the customer s attainment of specified development milestones. Under this agreement, we paid this customer $300,000 of development fees during 2005. This was recorded, following EITF 01-9, Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor s Products) , as a reduction to revenue, resulting in net revenue from this customer of approximately $301,000 in 2005. This constituted approximately 2% of products revenue and 1% of total revenue for 2005.

Services Revenue. Services revenue was $8.9 million in 2005 and $8.8 million in 2004. The $93,000 or 1% increase in services revenue from 2004 to 2005 was primarily due to a $313,000 increase in revenue from collaboration services handled through our Biomarker Discovery Center laboratories due to the completion of several large contracts in 2005, and from a $97,000 increase in revenue from maintenance contracts, driven by growth in our installed base. However, revenue from training and consulting services decreased $317,000 primarily due to fewer new instrument placements, which typically include an initial registration for one or more training classes.

Cost of Products Revenue. Cost of products revenue was $9.4 million in 2005 and $11.2 million in 2004. The $1.8 million or 16% decrease in cost of products revenue from 2004 to 2005 resulted from a decrease in unit sales of ProteinChip Systems, accessories, software, arrays and other consumables, as well as a $1.1 million decrease in the provision for excess and obsolete inventories in 2005 compared to 2004. We introduced our Series 4000 platform in 2004 and concurrently increased inventory reserves for older products. These decreases were partially offset by higher costs of materials recorded in 2005, compared to 2004 when a portion of sales included instruments with components previously charged to research and development. The gross margin for products revenue decreased from 64% in 2004 to 49% in 2005. The decrease in gross margin for products revenue was largely due to lower gross margins for arrays and consumables resulting from lower production volumes in 2005 compared to 2004, thus spreading our fixed manufacturing overhead costs over fewer units produced and eroding gross margin on products revenue by approximately 12% of products revenue. The decrease in gross margin from 2004 to 2005 was also due to lower gross margins for ProteinChip Systems as a result of increased discounting.

Deferred stock-based compensation expense in cost of products revenue was $0 in 2005 and $45,000 in 2004.

Cost of Services Revenue. Cost of services revenue was $4.3 million in 2005 and $3.9 million in 2004. From 2004 to 2005, cost of services revenue increased $445,000 or 11% primarily due to increased costs associated with paid projects performed by our Biomarker Discovery Center laboratories and customer training. The gross margin for services revenue decreased from 56% in 2004 to 51% in 2005 mainly due to lower gross margins realized on Biomarker Discovery Center contracts, which have costs that typically vary based on the complexity and difficulty of the work being undertaken, and lower gross margins on our training services.

Research and Development Expenses. Research and development expenses were $13.2 million in 2005 and $19.3 million in 2004. From 2004 to 2005, research and development expenses decreased $6.1 million or 32% primarily due to a decrease of $2.2 million in salaries, payroll taxes and employee benefits due to a 39% decline in research and development staff. Materials and supplies used in the development of new products also decreased by $1.9 million and consulting fees decreased by $1.0 million, consistent with the scaling back of research programs related to our instrument platform.

Deferred stock-based compensation expense in research and development expenses was $0 in 2005 and $37,000 in 2004.

Sales and Marketing Expenses. Sales and marketing expenses were $18.0 million in 2005 and $26.0 million in 2004. From 2004 to 2005, sales and marketing expenses decreased $8.0 million or 31%, largely due to lower payroll-related

costs as a result of a 40% decrease in the sales and marketing staff thereby decreasing payroll and related costs approximately $4.1 million. The reduction in our sales force also resulted in a $1.6 million decrease

in travel expenses and a $0.6 million decrease in ProteinChip Arrays and lab supplies used for customer demonstrations. The cost of advertising, trade shows and other promotional activities declined by approximately $1.2 million as 2004 expenses were unusually high in 2004 due to the launch of the Series 4000 ProteinChip System.

Deferred stock-based compensation expense in sales and marketing expenses was $0 in 2005 and $93,000 in 2004.

General and Administrative Expenses. General and administrative expenses were $14.4 million in 2005 and $14.1 million in 2004. From 2004 to 2005, general and administrative expenses increased $268,000 or 2%, largely driven by $679,000 in severance costs for two former executives, partly offset by a $142,000 reduction in payroll and related costs resulting from a 32% reduction in administrative staff, which occurred in the second half of 2005. Outside professional fees increased approximately $429,000 as a result of work done to assist us with our restatement of our second quarter 2005 financial statements. Other audit and accounting fees increased $321,000, largely the result of efforts to comply with Section 404 of the Sarbanes-Oxley Act of 2002. These increases were partially offset by decreases of $427,000 in stock-based compensation expense, $249,000 in costs of temporary help, $165,000 in travel expenses and $124,000 in the provision for bad debts.

Deferred stock-based compensation expense in general and administrative expenses was $0 in 2005 and $427,000 in 2004.

Goodwill Impairment. We recorded goodwill principally as a result of our acquisition of BioSepra in 2001, the increases in our ownership of Ciphergen Biosystems KK in 2002 and 2004, and the acquisitions of Ciphergen Technologies, Inc. and IllumeSys Pacific, Inc. in 1997 and 1998. We performed annual impairment tests from 2002 through 2004 and determined that no impairment had occurred. The goodwill related to BioSepra was written off against the sale of the BioSepra business in 2004. Due to Ciphergen Biosystems KK s lower than expected operating results and cash flows throughout 2005 and based on revised forecasted results, a goodwill impairment loss of $2.5 million was recognized in the fourth quarter of 2005. The fair value of Ciphergen Biosystems KK was estimated using expected discounted cash flows (see Notes 5 and 8 to our audited consolidated financial statements included elsewhere in this prospectus).

Interest and Other Income (Expense), Net. Interest income was $839,000 in 2005 and $505,000 in 2004. The increase of $334,000 from 2004 to 2005 was largely due to higher interest rates. Interest expense was $2.0 million in both 2005 and 2004.

Other expense was $717,000 in 2005 and $649,000 in 2004. In 2005, other expense consisted primarily of $373,000 of expense for the amortization of issuance costs for the convertible senior notes and foreign exchange losses of approximately $232,000, largely due to the impact on the transaction of losses from the decline of the U.S. dollar against the British pound and the Japanese yen. In 2004, other expense consisted mainly of $373,000 in expense associated with the amortization of issuance costs for the convertible senior notes. Subsequent to our acquisition of majority control of Ciphergen Biosystems KK on August 31, 2002 and prior to our acquisition of 100% control of Ciphergen Biosystems KK at the end of the first quarter of 2004, we attributed a share of this joint venture s income or losses to SC BioSciences (a subsidiary of Sumitomo Corporation) minority interest. For 2004, we attributed $0 of loss to minority interest, as cumulative losses attributable to the minority shareholder exceeded previous income.

Income Tax Expenses. Our provision for income taxes was due to current foreign income taxes, which were $7,000 and $172,000 for the years ended December 31, 2005 and 2004, respectively, including discontinued operations. Excluding discontinued operations, current foreign income taxes were an expense of $7,000, and $109,000, for the years ended December 31, 2005 and 2004, respectively.

Income (Loss) From Discontinued Operations, Net of Tax. Discontinued operations includes all revenue, cost of revenue, operating expenses, interest expense, other income (expense) and tax provisions related to our BioSepra business, which was sold to Pall Corporation on November 30, 2004. Loss from discontinued operations was $0 in 2005 and $1.8 million in 2004.

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The operating results of the BioSepra business for the eleven months ended November 30, 2004, are presented in the following table (in thousands):

Revenue	$ 8,395
Gross profit	4,921
Operating expenses	6,638
Operating income	(1,717)
Income (loss) before income taxes	(1,734)
Income tax provision	63
Income (loss) from discontinued operations, net of tax	(1,797)

BioSepra s business was characterized by a relatively low number of orders for large quantities of customer-specific products, often $250,000 to $1.5 million or more per order that were utilized and consumed by pharmaceutical customers to manufacture biological therapeutics. Filling these large orders entailed a lengthy and highly controlled manufacturing process at BioSepra, and customers typically ordered several years of supply to be manufactured at one time and provided to them in a few large deliveries for storage in environmentally-controlled facilities to minimize batch variability. BioSepra generally priced its products in Euros.

Gain From Sale of BioSepra Business, Net of Tax. The $18.5 million gain we recognized in 2004 on the sale of our BioSepra business is summarized as follows (in thousands):

Net proceeds:	
Cash proceeds received	$ 28,376
Less: Post-closing adjustment owed to buyer	(1,044)
Less: Transaction costs	(321)
	27,011
Cost basis:	
Accounts receivable, net, and other current assets	2,795
Inventories	5,294
Property, plant and equipment, net	6,081
Other tangible assets	210
Patents	210
Developed product technology	2,828
Goodwill	1,380
Accounts payable and accrued liabilities	(1,976)
Capital lease obligations	(2,978)
Other long-term liabilities	(629)
Cumulative translation adjustment	(4,731)
	8,484
Gain on sale of BioSepra business	$ 18,527

Liquidity and Capital Resources

From our inception through September 30, 2007, we have financed our operations principally with $229.3 million from the sales of products and services to customers and $183.0 million of net proceeds from debt and equity financings. This includes net proceeds of $92.4 million from our initial public offering on September 28, 2000; net proceeds of $26.9 million from our Series E Preferred Stock financing in March 2000; net proceeds of $15.0 million from the sale of 6,225,000 shares of our common stock and a warrant for 2,200,000 shares of our common stock to Quest Diagnostics on July 22, 2005; net proceeds of $18.2 million

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in connection with our sale of assets and liabilities of the Instrument Business and 3,086,420 shares of common stock to Bio-Rad on November 13, 2006; and net proceeds of $19.1 million from our private placement of 24,513,092 shares of our common stock and warrants to purchase an additional 19,610,470 shares of our common stock on August 29, 2007. In connection with the strategic alliance agreement dated July 22, 2005, Quest Diagnostics agreed to provide the Company with a $10.0 million secured line of credit (see Note 2 to our audited consolidated financial statements included elsewhere in this prospectus). As of September 30, 2007, we have drawn $10.0 million from this secured line of credit with Quest Diagnostics solely to fund certain development activities related to our 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. We also received net proceeds of $27.0 million from the sale of our BioSepra® business on November 24, 2004, and an additional $1.0 million held in an interest-bearing escrow account for one year after the sale and $21,000 of related interest on December 1, 2005. Subsequent to September 30, 2007, we received $2.0 million of sales proceeds that were withheld by Bio-Rad in connection with the sale of our Instrument Business which Bio-Rad paid to us on November 9, 2007 as a result of the USPTO s issuance to us of a reexamination certificate confirming the 022 Patent.

Cash and cash equivalents at September 30, 2007 were $19.5 million. Working capital (defined as current assets less current liabilities) at September 30, 2007 was $16.1 million. The increase in working capital for the nine months ended September 30, 2007 was principally due to the net proceeds of $19.1 million from our August 2007 private placement and proceeds from our secured line of credit with Quest Diagnostics, offset by funds used to finance operating losses of $18.0 million. Cash, cash equivalents and short-term investments at December 31, 2006 were $17.7 million, compared to $28.0 million at December 31, 2005. Working capital at December 31, 2006 was $13.0 million, compared to $27.1 million at December 31, 2005. The decrease in working capital was principally due to a net $10.3 million decrease in cash and investments to fund our operating losses of $22.1 million and $11.0 million of repayments on our 4.5% Notes, partially offset by cash receipts of $16.0 million for the sale of our Instrument Business to Bio-Rad, $4.6 million in loan proceeds from Quest Diagnostics, and $3.0 million in proceeds for the sale of common stock to Bio-Rad. In addition, there was a $3.2 million decrease in accounts receivable net of accounts receivable transferred to Bio-Rad, reflecting the decline in revenue from continuing operations in 2006 compared to 2005, and a $136,000 decrease in inventory net of inventory sold to Bio-Rad which resulted from our reducing purchases of raw materials as we generally no longer need inventory for sale until we obtain FDA approvals for the diagnostic tests currently under development. These decreases in working capital were partially offset by a $1.1 million decrease in accounts payable and accrued liabilities due to our cost-cutting measures and reduced inventory purchases, and a $1.2 million decrease in current deferred revenue consistent with our lower revenues. Cash, cash equivalents and short-term investments at December 31, 2005 were $28.0 million, compared to $37.6 million at December 31, 2004. Working capital at December 31, 2005 was $27.1 million, compared to $39.9 million at December 31, 2004. The decrease in working capital was principally due to a net $27.1 million decrease in cash and investments to fund our operating losses, partly offset by a $17.5 million cash increase resulting from the sale of our common stock to, and loans from, Quest Diagnostics. In addition, there was a $5.0 million decrease in accounts receivable, reflecting the decline in revenue from continuing operations in 2005 compared to 2004, and a $1.3 million decrease in inventory which resulted from our reducing and delaying raw materials purchases. These decreases were partially offset by a $1.2 million decrease in accrued liabilities due to our cost-cutting measures and reduced inventory purchases, and a $1.4 million decrease in current deferred revenue consistent with our lower revenues.

Net cash used in operating activities was $16.0 million for the nine months ended September 30, 2007, primarily as a result of the $18.0 million net loss reduced by $2.2 million of noncash expenses including the loss on the sale of assets and liabilities of our Instrument Business to Bio-Rad, depreciation and amortization, stock-based compensation and amortization of debt issuance costs and increased by $204,000 of cash usage from changes in operating assets and liabilities. Net cash used in operating activities was $20.4 million in 2006 compared to $22.9 million in 2005. Less cash was collected from customers in 2006 as compared to 2005 due primarily to a $9.0 million drop in sales in 2006 resulting in a $3.2 million net drop in accounts receivables and $136,000 in inventory after considering the transfer of

accounts receivable and inventory to Bio-Rad as part of the asset sale, partially offset by a combined decrease in accounts payable and deferred

revenue of $2.2 million. Net cash used in operating activities was $22.9 million in 2005 compared to $32.5 million in 2004. Less cash was collected from customers in 2005 as compared to 2004 due to $13.0 million in lower sales in 2005. Cash used in operating activities was mainly to fund payroll, inventory purchases and operating expenses. The decrease in cash collected was offset by an increase in interest income received in 2005 as compared to 2004 as a result of higher interest rates.

Net cash used in investing activities was $4.2 million for the nine months ended September 30, 2007, which resulted from purchases of short term investments and the acquisition of robotics machinery and other equipment for laboratory use and service of collaboration partner instruments. Net cash provided by investing activities was $16.5 million in 2006 compared to net cash used in investing activities of $3.5 million in 2005. Net cash provided by investing activities in 2006 primarily resulted from $16.0 million in proceeds from the asset sale of our Instrument Business to Bio-Rad and $2.2 million in maturities of short term investments partially offset by purchases of fixed assets of $589,000, asset sale transaction costs of $782,000, and $346,000 for a technology license related to our litigation which was settled in 2003. Net cash used in investing activities was $3.5 million in 2005 compared to net cash provided by investing activities of $34.0 million in 2004. Net cash used in investing activities in 2005 included property and equipment purchases of $2.8 million and payments of $587,000 for a technology license related to our litigation which was settled in 2003. We also paid $1.1 million to Pall Corporation for post-closing adjustments related to the sale of our BioSepra business, and we received $1.0 million plus $21,000 of accrued interest from an escrow account related to the sale of our BioSepra business. We anticipate spending approximately $750,000 in total capital expenditures in 2007 to support our clinical trials.

Net cash provided by financing activities was $22.1 million for the nine months ended September 30, 2007, which primarily resulted from the receipt of net proceeds of $19.1 million from the sale of 24,513,092 shares of our common stock and warrants to purchase 19,610,470 shares of our common stock to a group of investors and the receipt of $2.9 million in proceeds from the secured line of credit with Quest Diagnostics. Total long-term debt at September 30, 2007 was $28.6 million including the current portion, compared to $25.5 million at December 31, 2006. Net cash used in financing activities was $4.2 million in 2006 compared with net cash provided by financing activities in 2005 of $17.2 million in 2005. The decrease resulted primarily from $11.0 million for repayments of senior convertible debt partially offset by the receipt of $4.6 million in loans from Quest Diagnostics and the sale of $3.0 million of capital stock to Bio-Rad. Total long-term debt at December 31, 2006 was $25.5 million, compared to total long-term debt and capital lease obligations at December 31, 2005, of $31.5 million. Net cash provided by financing activities was $17.2 million in 2005 compared to $792,000 in 2004. The increase resulted primarily from $15.0 million in net proceeds from the sale of our common stock to Quest Diagnostics and the receipt of $2.5 million in loans from Quest Diagnostics. There was also a repayment of one stockholder loan in the aggregate principal amount of $349,000, and the issuance of common stock under our stock option and employee stock purchase plans of $350,000, offset by repayments of an equipment financing loan of $925,000 and the repayment of capital lease obligations of $24,000. Long-term debt and capital lease balances at December 31, 2005, totaled $31.5 million, compared to $29.4 million at December 31, 2004. At December 31, 2006, the Company had an accumulated deficit of $217.9 million.

We have incurred significant net losses and negative cash flows from operations since inception. At September 30, 2007, we had an accumulated deficit of $235.9 million. After completing the private placement on August 29, 2007, management believes that our current available resources will be sufficient to maintain current and planned operations through the next twelve months. We will, however, be required to raise additional capital at some point in the future. At such time as we require additional funding, we may seek to raise such additional funding from various sources, including the public equity market, private financings, sales of assets, collaborative arrangements and debt. If additional capital is raised through the issuance of 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 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

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to delay or reduce the scope of our operations, and we may not be able to pay off the 4.5% Notes and/or 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.

The following summarizes our contractual obligations at September 30, 2007, and the effect such obligations are expected to have on our liquidity and cash flow in future periods (in thousands).

	Total	Three Months Ended December 31, 2007	2008 to 2010	2011 to 2013	Thereafter
Loan from Quest Diagnostics(1)	$ 10,000	$	$ 10,000	$	$
Interest payable on loan from Quest Diagnostics(2)	2,251	206	2,045		
Convertible senior notes(3)	19,000		2,500	16,500	
Interest payable on convertible senior notes(2)	4,627	317	3,540	770	
Noncancelable collaboration obligations(4)	753	723	30		
Noncancelable operating lease obligations	3,656	951	2,705		
Purchase obligations(5)	6,398	1,688	4,710		
Total contractual obligations	$ 46,685	$ 3,885	$ 25,530	$ 17,270	$

(1) Principal amounts, not including interest.

(2) Based on outstanding principal balance and interest rate as of September 30, 2007.

(3) Excludes the beneficial conversion feature amounting to $79,000, less related amortization of $39,000.

(4) The following are non-cancelable collaboration obligations:

On October 13, 2006, we entered into a two-year research and collaboration agreement with The Ohio State University Research Foundation directed at discovery, purification, identification and/or validation of biomarkers related to thrombotic thrombocytopenic purpura and production of associated technology. Under the terms of the agreement, we will have exclusive rights to license discoveries made during the course of this collaboration. We will pay the noncancelable financial contribution in consideration for costs incurred by The Ohio State University Research Foundation specifically used in furtherance of this research program of $149,500 in total during the first 15 months of the agreement. As of September 30, 2007, we had a remaining noncancelable obligation of $60,000.

We extended our research collaboration agreement with The Johns Hopkins University School of Medicine directed to 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 through December 31, 2007. Under the extended research collaboration agreement, we have a noncancelable obligation to pay $150,000 through December 31, 2007. Additionally, under a separate patent license agreement with The Johns Hopkins University School of Medicine, we had a remaining noncancelable obligation of $55,000 for license fees as of September 30, 2007.

On December 11, 2006, we entered into a consulting agreement with PrecisionMed International, referred to herein as PrecisionMed, which was subsequently amended on April 5, 2007. Under the terms of the amended agreement, PrecisionMed will collect whole blood specimens from up to 1,000 research subjects for the purposes of our whole blood collection protocol for our OvaRI Assay clinical trial. The amended agreement provides 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 September 30, 2007, we had a minimum noncancelable obligation of $488,000.

Noncancelable collaboration obligations exclude amounts under an agreement with University College London and UCL BioMedica Plc, which is cancelable upon written notice.

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(5) On November 13, 2006, in conjunction with the asset sale of our Instrument Business to Bio-Rad, we also entered into a manufacture and supply agreement with Bio-Rad. Under the terms of the agreement, we will purchase a specified number of instruments and arrays during each of the first three years of the term of the agreement. As of September 30, 2007, we had an estimated noncancelable obligation of $6,398,000. These purchase obligations exclude $30,000 of license fees with National Cardiovascular Center, which are contingent upon the achievement of certain events.

Off Balance Sheet Arrangements

As of September 30, 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

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements. (see Note 1 to our audited consolidated financial statements included elsewhere in this prospectus.)

Revenue Recognition

Through November 13, 2006 we had derived our revenue from primarily two sources: (i) products revenue, which included systems, accessories, software licenses and consumables, and (ii) services and support revenue, which included Biomarker Discovery Center services, maintenance, training and consulting revenue. As a result of the asset sale to Bio-Rad, future revenues will be based on the sales of diagnostic tests once the first of these tests is approved by the FDA and commercialized. As described below, significant management judgments and estimates must be made and used in connection with the revenue recognized in any accounting period.

Through November 13, 2006 we had recognized revenue from the sales of systems, accessories, separately priced software products and consumables when realized or realizable and earned, which is when the following criteria are met:

persuasive evidence of an agreement exists;

the price is fixed or determinable;

the product has been delivered;

no significant obligations remain; and

collection of the receivable is reasonably assured.

For all sales prior to November 13, 2006, except for small amounts of consumables, we used a binding purchase order, contract or signed sales quotation as evidence of an arrangement. Sales through our distributors were evidenced by a master agreement governing the relationship together with binding purchase orders on a transaction-by-transaction basis.

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At the time of the transaction, we assessed whether the price was fixed and determinable and whether or not collection was reasonably assured. We assessed whether the price was fixed and determinable based on the payment terms associated with the transaction. If a significant portion of the payment was due after our normal payment terms, which are 30 to 90 days from invoice date in most countries, we generally treated the price as not being fixed and determinable. In these cases, we recognized revenue for the extended portions of the payment as they became due. We assessed collectibility based on a number of factors, including past transaction history with the customer and the creditworthiness of the customer. We did not request collateral from our customers. If we determined that collection of a payment was not reasonably assured, we deferred the revenue until the time collection became reasonably assured, which was generally upon receipt of cash. The majority of deferred revenue was sold to Bio-Rad as part of the asset sale of our Instrument Business. Delivery generally occurred when the product was delivered to a common carrier or when the customer received the product, depending on the nature of the arrangement. 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.

We generally included a standard 12-month warranty on our instruments and certain accessories in the form of a maintenance contract upon initial sale. We also sold separately priced maintenance (extended warranty) contracts, which were generally for 12 or 24 months following expiration of the initial warranty. We made no distinction between a standard warranty and a maintenance (extended warranty) contract, as coverage under both the standard and an extended maintenance contract is identical. Because we did not offer traditional warranties but enhanced them such that they were identical to our separately priced maintenance contracts, we believe it was appropriate to account for them the same way. 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. All warranty obligations were transferred to Bio-Rad on November 13, 2006 with the sale of our Instrument Business. For revenue from Biomarker Discovery Center contracts and other consulting contracts, if elements were specifically tied to a separate earnings process, then revenue related to an element was recognized when the specific performance obligation associated with that element was completed. When revenues for an element were not specifically tied to a separate earnings process, they were recognized ratably over the term of the agreement. Revenue from Biomarker Discovery Center services and other consulting contracts was recognized at the completion of key stages in the performance of the service as described in our agreement with the customer. Often, there was only a single element, namely delivery of a scientific report upon completion of our analysis of customer samples, in which case we recognized all the revenue upon the conclusion of the project when all deliverables had been provided to the customer. Revenue was deferred for fees received before earned. Our training was billed based on published course fees and we generally recognized revenue as the training was provided to the customer. On November 13, 2006, the Biomarker Discovery Centers and their related contracts were transferred to Bio-Rad as part of the asset sale. There has been no further revenue from the Biomarker Discovery Centers after the asset sale.

For revenue arrangements with multiple elements that were delivered at different points in time (for example, where we have delivered the hardware and software but were also obligated to provide services, maintenance and/or training), we 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 our control. When all these conditions were met, we recognized revenue on the delivered elements. If any one of these conditions was not met, we deferred the recognition of revenue until all these conditions were met or all elements had been delivered. Fair value for ongoing maintenance was based upon separate sales of renewals to other customers. Fair value for services, such as training or consulting, was based upon separate sales by us of those services to other customers.

Allowance for Doubtful Accounts

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. These reserves are determined by analyzing specific customer accounts that have known or potential collection issues, and reviewing the length of time receivables are outstanding and applying historical loss rates to the aging of the accounts receivable balances. If the financial conditions

of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances would be required.

Inventory Reserves

As of September 30, 2007, we had no inventory available for sale as a result of the asset sale to Bio-Rad. We will have limited inventories until we complete the development and commercialization of our diagnostic tests. Prior to the sale of the Instrument Business to Bio-Rad, we wrote down our inventory for estimated excess and obsolete inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand, market conditions and the release of new products that will supersede older ones. Such estimates were difficult to make under volatile economic conditions. Reviews for excess inventory were done on a quarterly basis and required reserve levels were calculated with reference to our projected ultimate usage of that inventory. In order to determine the ultimate usage, we took into account recent sales forecasts, historical experience, projected obsolescence and our current inventory levels.

Depreciation and Amortization

Property, plant and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization are computed for financial reporting purposes principally using the straight-line method over the following estimated useful lives: machinery and equipment, 3-5 years; demonstration equipment, two years; computer equipment, development systems used for collaborations and software, three years; furniture and fixtures, five years; buildings and leasehold improvements, the lesser of their economic life or the term of the underlying lease. The cost of repairs and maintenance is charged to operations as incurred. Gains and losses resulting from disposals of assets are reflected in the year of disposition.

Valuation of Long-Lived Assets Including Acquired Intangible Assets

We review long-lived assets, which include property, plant and equipment and acquired identifiable intangibles, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Impairment evaluations involve management estimates of the useful lives of the assets and the future cash flows they are expected to generate. An impairment loss is recognized when estimated undiscounted future cash flows expected to result from the use of the asset plus net proceeds expected from disposition of the asset (if any) are less than the carrying value of the asset. This approach also uses our estimates of future market growth, forecasted revenue and costs and appropriate discount rates. Actual useful lives, cash flows and other factors could be different from those estimated by management and this could have a material effect on our operating results and financial position. When impairment is identified, the carrying amount of the asset is reduced to its estimated fair value. Deterioration of our business for a significant product or in a particular geographic region in the future could also lead to impairment adjustments as such issues are identified. In connection with the November 13, 2006 sale of the Instrument Business, there are no longer any intangible assets recorded on our balance sheet as these intangible assets were associated with our Instrument Business sold to Bio-Rad.

Goodwill Impairment

We recorded goodwill principally as a result of our acquisitions of IllumeSys Pacific, Inc. in 1997, Ciphergen Technologies, Inc. in 1998 and BioSepra S.A. in 2001, and the increases in our ownership of Ciphergen Biosystems KK in 2002 and 2004. The goodwill related to BioSepra was written off against the gain on the sale of the BioSepra business in 2004. We perform goodwill impairment tests on an annual basis and more frequently when events and circumstances occur that indicate a possible impairment of goodwill. In determining whether there is an impairment of goodwill, we calculate the estimated fair value of the reporting unit in which the goodwill is recorded using a

discounted future cash flow method. We then compare the resulting fair value to the net book value of the reporting unit, including goodwill. If the net book value of a reporting unit exceeds its fair value, we measure the amount of the impairment loss by comparing the implied fair value of the reporting unit s goodwill with the carrying amount of that goodwill. To the extent that the carrying amount of a reporting unit s goodwill exceeds its implied fair value, we recognize a goodwill

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impairment loss. We performed annual impairment tests through 2004 and determined that no impairment had occurred. We performed an annual impairment test in 2005 and determined that goodwill of $2.5 million associated with our Japanese subsidiary had been impaired. (see Notes 5 and 8 to our audited consolidated financial statements included elsewhere in this prospectus.) The discounted future cash flow method used in the first step of our impairment test involves significant estimates including future cash inflows from estimated revenues, future cash outflows from estimated project costs and general and administrative costs, timing of collection and payment of various items, working capital levels, future growth rates and profit margins, as well as discount rate and terminal value assumptions. Although we believe the estimates and assumptions that we used in testing for impairment are reasonable, changes in any one of these assumptions could produce a significantly different result. In connection with the November 13, 2006 sale of the Instrument Business, there is no longer any goodwill recorded on our balance sheet as goodwill was associated with our Instrument Business and accordingly was written off.

Stock-Based Compensation

We have various stock option, stock purchase and incentive plans to reward employees and key executive officers of our company. Effective January 1, 2006, we adopted SFAS 123(R) using the modified prospective transition method. Under this new standard, our estimate of compensation expense requires a number of complex and subjective assumptions, including the price volatility of our common stock, employee exercise patterns (expected life of the options), future forfeitures and related tax effects. Prior to the adoption of SFAS 123(R), we accounted for stock option grants using the intrinsic value method, in accordance with APB Opinion No. 25, Accounting for Stock Issued to Employees, or APB 25, and accordingly, recognized no compensation expense for stock option grants.

Under the modified prospective approach, SFAS 123(R) applies to new awards and to awards that were outstanding on January 1, 2006 that are subsequently modified, repurchased or cancelled. Under the modified prospective approach, compensation cost recognized in 2006 includes compensation cost for all stock-based payments 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 123, and compensation cost for all stock-based payments granted subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS 123(R). Prior periods were not restated to reflect the impact of adopting the new standard. As a result of adopting SFAS 123(R) on January 1, 2006, our net loss and basic and diluted net loss per share for the year ended December 31, 2006 was $1.6 million and $0.04, respectively, higher than if we had continued to account for stock-based compensation under APB 25 for our stock option grants. We have a 100% valuation allowance recorded against our deferred tax assets. Therefore SFAS 123(R) had no effect on the income tax provision in the consolidated statement of operations or the consolidated statement of cash flows. There was no stock based compensation expense during fiscal year 2005. For fiscal year 2004, stock-based compensation expense of $602,000 was related to amortization of our deferred stock compensation expense from our initial public offering.

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 Statement of Financial Accounting Standards 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 FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes an Interpretation of FASB Statement No. 109, or FIN 48, which clarifies the accounting for income tax uncertainties that have been recognized in an enterprise s financial statements in accordance with

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SFAS No. 109, Accounting for Income Taxes. The cumulative effect of adopting FIN 48 on January 1, 2007, resulted in no liability under FIN 48 on the balance sheet. There are open statutes of limitation for taxing authorities to audit us for federal and state jurisdictions from the year 2003 through the current period. Since we had a full valuation on all the deferred tax assets, FIN 48 had no impact on our effective tax rate. We are evaluating the net operating loss carryforwards and research and development deferred tax assets to determine whether there is a limit due to prior year ownership changes. It is possible that a portion of these deferred tax assets may be limited in their use. We expect to complete the studies by the end of 2007.

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.

Recent Accounting Pronouncements

Fair Value Option for Financial Assets and Financial Liabilities

In February 2007, the FASB issued Statement of Financial Accounting Standards, or 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.

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to the increase or decrease in the amount of interest income we can earn on our money market accounts and investment portfolio, and to the increase or decrease in the amount of interest expense we must pay with respect to our secured line of credit with Quest Diagnostics. The primary objective of our investment activities is to preserve principal, maintain proper liquidity to meet operating needs and maximize yields. Our investment policy, which has been approved by the Board of Directors, specifies credit quality standards for our investments and limits the amount of credit exposure to any single issue, issuer or type of investment. We do not use or plan to use derivative financial instruments in our investment portfolio.

As of September 30, 2007, we had cash equivalents of $18.5 million held in money market accounts and short-term investments available for sale of $4.0 million invested in auction rate preferred securities with maturities of less than

90 days. Management believes that, in the near term, we will maintain our available funds in money market accounts or in short-term investments with original maturities at the date of purchase of less than 90 days. If market interest rates were to increase by 100 basis points, or 1.00%, over the interest rates at September 30, 2007, our annual interest income for the money market accounts would increase by $185,000 and the investment portfolio value would decrease by $37,000.

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As of September 30, 2007, we had an outstanding balance of $10.0 million on a secured line of credit with Quest Diagnostics. The secured line of credit with Quest Diagnostics is subject to a floating interest rate. The 4.5% Notes and the 7.0% Notes have a fixed interest rate and, therefore, are not subject to interest rate risk. If interest rates were to increase by 100 basis points, or 1.00%, our annual interest expense related to the secured line of credit with Quest Diagnostics would increase by $100,000.

Foreign Currency Exchange Risk

As a result of the sale of assets and liabilities of our protein research tools and collaborative services business to Bio-Rad, there is currently no foreign currency exchange risk related to our revenues. However, we have a foreign subsidiary, Ciphergen Biosystems KK, of which the functional currency is the Japanese yen. Accordingly, the accounts of this operation are translated from the Japanese yen to the United States dollar using the current exchange rate in effect at the balance sheet date for the balance sheet accounts, and using the average exchange rate during the period for revenue and expense accounts. The effects of translation are recorded to accumulated other comprehensive loss of stockholders deficit.

The accounts of all other foreign operations are remeasured to the United States dollar, which is the functional currency. 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 to interest and other expense, net in the consolidated statement of operations. The net tangible assets of our non-United States operations, excluding intercompany debt, were $1.2 million at September 30, 2007.

We did not enter into any forward contracts during the nine months ended September 30, 2007. Although we will continue to monitor our exposure to currency fluctuations, we cannot provide assurance that exchange rate fluctuations will not harm our business in the future.

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BUSINESS

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 in May 2000, we reincorporated in Delaware. We had our initial public offering on September 28, 2000. On November 13, 2006, we sold assets and liabilities of our Instrument Business to Bio-Rad in an asset sale transaction 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 .

Since the sale of assets and liabilities of our Instrument Business to Bio-Rad, we have dedicated ourselves to the discovery, development and commercialization of specialty diagnostic tests that provide physicians with information with which to manage their patients care and that improve patient outcomes. We use translational proteomics, which is the process of answering clinical questions by utilizing advanced protein separation tools to identify and resolve variants of specific biomarkers, developing assays, and commercializing tests.

Through collaborations with leading academic and research institutions, including The Johns Hopkins School of Medicine, The University of Texas M. D. Anderson Cancer Center, University College London, The University of Texas Medical Branch, The Katholieke Universiteit Leuven, The Ohio State University Research Foundation, and Stanford University, we plan to develop diagnostic tests in the fields of hematology/oncology, cardiovascular disease, and women s health. The clinical questions we are addressing include early disease detection, treatment response, monitoring of disease progression, prognosis and others. In July 2005, we entered into a strategic alliance agreement with Quest Diagnostics covering a three-year period during which the parties have agreed to develop and commercialize up to three diagnostic tests.

Our most established programs are in the field of 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 cases are diagnosed each year, with the majority in patients with late stage disease, where the cancer has spread beyond the ovary. Unfortunately, the prognosis is poor in these patients, leading to the high mortality from this disease. We believe that one unmet clinical need is a diagnostic test that can provide adequate predictive value to stratify patients with a pelvic mass into those with a high risk of invasive ovarian cancer versus those with a low risk. We believe that there are at least 5 million testing opportunities each year addressing this need. We have developed a panel of biomarkers we believe provides risk stratification information for ovarian cancer based on a series of studies involving over 2,500 clinical samples from more than five sites. In a cohort study we were able to show, in 525 consecutively sampled women, a significant increase in the positive predictive value using our marker 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 two-fold. We are undertaking a prospective clinical trial to support submission to the FDA for approval as an in vitro diagnostic test kit.

A second major program is a test intended to aid in the detection of PAD. This test, which is based on research done in collaboration with Stanford University, fills the unmet clinical need for a blood test that can be used as an adjunct to detect PAD, which affects 10 million Americans, but is under diagnosed. Accurate diagnosis of PAD permits aggressive lifestyle modification and therapeutic intervention that can decrease the risk of major adverse cardiovascular events. We reported in August the publication of a discovery of two blood markers for PAD in the peer-reviewed journal *Circulation,* which is published by the American Heart Association. We are currently performing clinical validation of this test, which will be commercialized with Quest Diagnostics under the terms of the strategic alliance agreement.

The Diagnostics Market Opportunity

The economics of health care demand improved allocation of resources. Improved allocation of resources can be derived through disease prevention, early detection of disease leading to early intervention, and from diagnostic tools that can triage patients to more appropriate therapy and intervention. According to the Jain PharmaBiotech report, the worldwide market for in vitro diagnostics in 2006 was approximately $28.9 billion.

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We have chosen to focus primarily in the areas of hematology/oncology, cardiovascular disease, 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 and risk stratification tests.

Our focus on proteomics enables us to address the market for diagnostic tests that simultaneously measure multiple protein biomarkers. 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. Conventional proteomic 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, using mass spectrometry, will allow us to create diagnostic tests with sufficient sensitivity and specificity to aid the physician considering treatment options for patients with complex diseases.

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 translational proteomic diagnostic tests.

The 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 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.

This has resulted in the validation by researchers of approximately 200 protein biomarkers that are being used in commercially available clinical diagnostic products.

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Limitations of Existing Diagnostic Approaches and Our Solution

The in vitro diagnostics 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 markers to diagnose and predict many diseases accurately. Our studies, particularly in ovarian cancer, have given us a better understanding of both the disease pathophysiology and the host response. By using multiple markers, we are better able to encompass the disease and host response heterogeneity. In addition, by examining specific analytes with greater resolution, for example, post-translational modifications, we believe we can improve the specificity of our diagnostic markers 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 therapy for such disease. Our goals are to:

- Develop high-value 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.

Our Solution

Problem	Our Solution
Heterogeneity of disease Poorly validated markers	Emphasis on multi-marker panels Expertise in study design incorporating internal and external validation Large multi-site studies
Protein post-translational modifications that reduce specificity of assays	Assay development using mass spectrometry to quantitate disease-specific forms

Addressing the heterogeneity of disease

Our strategy is to create a paradigm of diagnostics that is based on risk stratification, multiple-marker 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. A better understanding of heterogeneity of disease and human response is necessary for improved diagnosis and treatment of many diseases.

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Validation of markers 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 this as a starting point, we are able to design a study that includes 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 the 2004 Cancer Research paper describing the first three markers in the ovarian cancer panel, more than 600 specimen samples taken from five hospitals were analyzed. The samples were divided into sets for training and validation purposes. Each site was shipped the same sample set for operator training and proficiency development followed by shipments of the same sample set for validation. The validation sample sets were received and tested in separate test rounds. The first round of validation samples is followed by a second round of independent validation samples. Subsequently, we have analyzed more than 2,000 samples from five additional medical centers. We have examined over 300 samples in our breast cancer program and over 400 samples in our prostate cancer program. In analyzing the complex proteomics data, we take an agnostic view of statistical methodologies, choosing to use a variety of approaches and looking for concordance between approaches, taking the view that markers deemed significant by multiple statistical algorithms are more likely to reflect biological conditions rather than mathematical artifacts.

Exploiting the power of mass spectrometry to improve assay specificity

An important characteristic of proteins is that their functional activity is often modulated by changes in their structure. Conventional approaches to assay proteins have variable 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 exist. We have developed programs for biomarkers in which mass spectrometry provides an advantage over traditional assays in characterizing and quantitating disease markers. Mass spectrometry s advantages over traditional assay approaches in these instances is a result of 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 analyte, protein forms with a common epitope are not readily distinguished. A few exemplar proteins that are candidates for assay development using a mass spectromic approach include von Willebrand s factor, human chorionic gonadotropin, albumin, c-reactive protein, and serum amyloid A. One disease that we are specifically addressing is TTP, a hematologic disease that affects mostly women and is a result of a deficiency in the enzyme ADAMTS13. Current assays rely on unwieldy Western Blots, which are both low throughput and poorly quantitative. Our assay measures directly the product of the enzymatic reaction for ADAMTS13, and provides the level of 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.

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Creating and maintaining a multi-disease product pipeline

We plan to develop potential tests based on biomarkers discovered in our sponsored programs with academic collaborators, and also have the opportunity to in-license tests from an installed base of hundreds of academic SELDI customers. Our past strategy of selling our SELDI proteomics platform to researchers in academia, 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 pipeline. In addition, we have the opportunity to identify additional markers discovered on other platforms that complement our existing product pipeline.

We have entered into collaboration, research, and material transfer agreements with more than 16 companies and academic institutions to support our large-scale clinical studies, including ongoing studies as well as studies we plan to conduct in the future. Some of our major collaborations in the areas of cancer and women s health are described in greater detail here.

The Johns Hopkins University School of Medicine: Led by Dr. Daniel Chan, Director of the clinical laboratories, 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. The collaboration agreement with John Hopkins is effective through December 31, 2007.

The University of Texas M. D. Anderson Cancer Center: Led by Dr. Robert C. Bast, Jr., who discovered the tumor marker for 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 perform designated portions of the research.

University College London: Led by Professor Ian Jacobs, this collaboration provides us with access to the largest ovarian cancer screening trial in the world (UKCTOCS). This collaboration is aimed at ovarian and breast cancer. Pursuant to our collaborative research agreement with UCL, we provide research funding, ProteinChip Arrays and associated consumables, bioinformatics, software and data analysis and other research support. UCL provides clinical samples. Both parties perform designated portions of the research. UCL has granted us an option to acquire a royalty-bearing, exclusive, worldwide license to commercialize inventions resulting from the research in the field of diagnostics and therapeutics for cancer.

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.

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

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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.

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 thrombotic thrombocytopenic purpura, or 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 an enzyme called ADAMTS13. Under the terms of the research and collaboration agreement, we will have exclusive rights to license discoveries made during the course of this collaboration. We will fund a portion of the costs incurred by the University.

Together with our collaborators, we are currently conducting large-scale protein biomarker studies in the following areas: hematology/oncology, cardiovascular disease 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.

Disease Field	2005 Estimated Treatment Decisions in the United States	Specific Clinical Question	Product 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 PSA	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
		Distinguishing between PAD and CAD (coronary artery disease)	Initial discovery
Thrombotic thrombocytopenic Purpura	100,000	Diagnosis	Assay development(6)
Assisted reproductive technology	90,000	Prediction of likelihood of successful implantation	Initial clinical evaluation

(1) *Final clinical evaluation* means that a specific marker 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 marker 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 US Census estimates.

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

(6) *Assay development* means the process of creating reproducible and quantitative assays, as well as ascertaining pre-analytical variables that affect reproducibility such that the test can be run in a clinical laboratory.

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 cases are diagnosed each year, with the majority in patients with late stage disease, i.e., when the cancer has spread beyond the ovary. Unfortunately, the prognosis is poor in these patients, leading to the high mortality from this disease. While the diagnosis of ovarian cancer in its earliest stages has a profound positive impact on the likelihood of survival of the disease, another factor that predicts survival from ovarian cancer is the specialty training of the surgeon who operates on the patient with ovarian cancer, with patients being treated by the gynecologic oncologist having better outcomes than those 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. No blood test currently exists to address properly this clinical question, although CA125 is commonly used. CA125, 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, and can be elevated in diseases other than ovarian cancer, including benign ovarian tumors and endometriosis. These shortcomings limit CA125 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, University College London, and M. D. Anderson Cancer Center, reported the discovery of three markers that, when combined, provided higher diagnostic accuracy for early stage ovarian cancer than other markers, for example, CA125. The three markers that we reported in 2004 form the basis of an expanded panel of biomarkers that together have been demonstrated to provide risk stratification information in a series of studies involving over 2,500 clinical samples from five sites. Data presented at the annual meeting of the American Society of Clinical Oncology in June 2006 demonstrated the portability of this marker panel among different clinical groups, indicating its potential validity across various testing populations. The most recent data presented at the annual meeting of the Society of Gynecologic Oncology in March 2007 described results from a cohort study. We were able to show, in 525 consecutively sampled women, a significant increase in the positive predictive value using our marker panel over the baseline level. We are undertaking a prospective clinical trial to support submission to the FDA for approval as an in vitro diagnostic test. In addition, we are continuing to investigate the role of these markers, as well as discovering additional biomarkers, that may be used to identify early stage ovarian cancer and to predict recurrence and prognosis.

Peripheral arterial disease. This disease affects 12 million Americans and is under diagnosed and under treated. With the rising incidence of diabetes, the incidence of PAD, is expected to increase concomitantly. The absence of a good

blood test contributes to the under diagnosis of PAD. In collaboration with Stanford University, we have performed both an initial discovery study and a first validation study that has resulted in the identification of a novel biomarker for PAD. The results of these studies were published on-line in the journal *Circulation* in August 2007. Ongoing efforts are aimed at further validating this marker in combination

with additional cardiovascular biomarkers. Quest Diagnostics has accepted the PAD test as a development program under our 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. Under treatment can lead to increased mortality from the disease while over treatment 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 enzyme ADAMTS13, Mass spectrometry was used as a logical approach to develop an accurate and quantitative assay to measure this enzymatic activity. Final assay development is under way.

Prostate cancer. Approximately 250,000 men are expected to be diagnosed with prostate cancer in the United States each year, approximately 195,000 of whom will need to make critical decisions on whether or not to undergo local therapy, such as surgery or radiation, 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 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 with varying stages of breast cancer, benign disease, and healthy women, and 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 markers identified in the previous studies.

Assisted reproductive technology. There has been increased use of assisted reproductive technology, or ART, to facilitate pregnancies, either in women who are infertile or who have waited to have babies. Currently, it is difficult to predict which embryos will lead to viable fetuses and successful live births. Therefore, women may go through multiple cycles of induction and implantation and/or may have multiple embryos implanted. Implantation cycles are expensive, and multiple implantations often result in multiple gestations. Therefore a test that can improve the probability that an implanted embryo will result in a live birth will reduce overall costs associated with ART and may reduce the number of multiple gestations. SELDI-TOF-MS profiling of conditioned media derived from cultured embryos has revealed a series of proteins that may improve in discriminating between embryos that are more likely to successfully implant versus those that are not. These results are currently undergoing validation.

Commercialization

If we are successful at discovering biomarkers and panels of biomarkers that have diagnostic utility, our commercialization strategy includes partnering with other parties to assist in the development and commercialization of our initial tests. In July, 2005, we entered into a strategic alliance agreement with Quest Diagnostics covering a three-year period during which the parties have agreed to develop and commercialize up to three diagnostic tests. In connection with this strategic alliance in exchange for common stock and warrants to purchase additional common

stock, Quest Diagnostics invested $15.0 million in the Company and received a warrant to invest an additional $7.7 million. In addition, Quest Diagnostics agreed to loan us up to $10.0 million to pay certain costs and expenses related to the strategic alliance. This loan is forgivable based

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upon the achievement of certain milestones related to the development of diagnostic tests. If we fail to achieve these milestones, the outstanding loans will become due and payable in July 2010. In addition, Quest Diagnostics invested an additional $2.0 million in the Company and received an additional 2,380,952 shares of our common stock and warrants to purchase 1,904,761 shares of our common stock through a private placement on August 29, 2007.

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 laboratory test using the methodology covered by the relevant license obtained from our collaborator(s), e.g., a test for ovarian cancer covered by licenses from Johns Hopkins and the M. D. Anderson Cancer Center. ASRs are the raw materials which we will resell or make ourselves and which are utilized by clinical laboratories to develop and perform home brew laboratory tests in CLIA-regulated laboratories (i.e., laboratories regulated under the federal 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 which we expect to purchase from Bio-Rad.

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

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

Customers

We expect that Quest Diagnostics and future commercialization partners, reference laboratories, hospitals and medical clinics that perform diagnostic testing will be the primary users of future diagnostic products which we may develop. Pursuant to the manufacture and supply agreement with Bio-Rad, Bio-Rad has agreed to supply us with SELDI instruments and ProteinChip Arrays previously manufactured by us. If Bio-Rad develops new products using SELDI technology, Bio-Rad has agreed to supply those products to us to sell to our customers. We can also request that Bio-Rad develop and manufacture new products to written specifications and the parties will negotiate in good faith the terms of purchasing such products.

Except for Japan which accounted for 23%, 21% and 25% of our sales for the years ended December 31, 2006, 2005 and 2004, respectively, no single country represented more than 10% of our revenues for such periods.

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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 which are more effective or more 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 or our collaborators ability to develop and commercialize, or our customers ability to use, our or our collaborators diagnostic products.

We compete with companies in the U.S. 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 the products offered by us or our collaborators, such as analyte specific reagents or diagnostic test kits, that perform the same or similar purposes as our or our collaborators products. 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 use either 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. We believe a substantial portion of all sales of diagnostic products are made to a small number of clinical reference laboratories such as Quest Diagnostics and Laboratory Corporation of America. Therefore, we expect to rely on clinical reference laboratories for a substantial portion of our sales. Our inability to establish or maintain one or more of these laboratories as a customer could adversely affect our business, financial condition, and operating results.

Research and Development

Our research and development efforts towards developing novel high-value diagnostic tests focus on two synergistic activities. First, we are dedicated to developing new approaches to investigate the human proteome. Second, we utilize these new technologies to discover biomarkers that can address unmet clinical needs. A major area of our research and development activities centers around 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 The Johns Hopkins School of Medicine, The University of Texas M. D. Anderson Cancer Center and University College London, 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 maintain a strong focus in protein separation technologies, but will be intently focused on development (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

Clinical assay development using novel proteomics technologies.

These objectives will maintain our competitive edge in biomarker discovery abilities, and will be critical in our ability to improve on our current diagnostic tests under development as well as to develop and foster a pipeline of diagnostic tests. The new proteomic analysis tools that we have developed 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. Consequently, entities that are able to leverage novel protein separation tools will have an advantage in analyzing clinical samples to identify biomarkers for disease. 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 a level of throughput that permits running enough numbers of clinical samples to achieve statistical significance. These novel solutions are embodied in tools such as Equalizer Beads and multi-select and mini-select technologies. These tools have been applied to clinical samples that may be used to address diagnostic questions in hematology/oncology, women s health, and cardiovascular disease, as described above.

Properties

Our principal facility is located in Fremont, California. The following chart indicates, as of November 30, 2007, the facilities that we lease, the location and size of each facility and its designated use.

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	2008
Galveston, Texas	500 sq. ft.	Diagnostic test development laboratory	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 a view to reducing 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 November 30, 2007, our patent portfolio included 52 issued U.S. patents, 87 pending U.S. patent applications and numerous pending patent applications and issued patents outside the U.S. These patents and patent applications are directed to several areas of technology important to our business, including the core 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 2013 to 2019. Pursuant to the asset purchase agreement relating to the sale of our Instrument

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Business, Bio-Rad acquired certain proprietary rights used in the Instrument Business. At the close of the asset sale to Bio-Rad, 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 granted exclusive rights to commercialize the proprietary rights in the clinical diagnostics market during a five-year exclusivity period. 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 biomarkers developed using SELDI technology and related intellectual property. As of November 30, 2007, 39 of our patent applications are directed to biomarker inventions and five 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 are currently negotiating an extension of the term of our collaboration agreement with The Johns Hopkins School of Medicine 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), The University of Texas M. D. Anderson Cancer Center, University of Kentucky, The Ohio State University Research Foundation, McGill University (Canada), Eastern Virginia Medical School, Aaron Diamond AIDS Research Center, The University of Texas Medical Branch, Goteborg University (Sweden), University of Kuopio (Finland) and The Katholieke Universiteit Leuven (Belgium).

The rights to the core 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 Ciphergen, 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 sub-licenses 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 $10.0 million. Through December 31, 2006, we had paid or accrued a total of approximately $2.6 million in such royalties. In connection with the asset sale of our Instrument Business to Bio-Rad, we sublicensed to Bio-Rad certain rights to the license rights 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 we will retain non-exclusive rights in that field. Bio-Rad agreed to pay the royalties due to MAS under the license rights, either directly to us (to be paid to MAS) or directly to MAS, at Bio-Rad s option.

On July 10, 2007, we entered into a license and settlement agreement with Health Discovery Corporation pursuant to which we licensed more than 25 patents covering Health Discovery Corporation 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. The remaining $400,000 payable under the HDC Agreement is payable as follows: $100,000 three months following the date of the agreement, $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 settles all disputes between us and Health Discovery Corporation.

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Manufacturing

Since the completion of the asset sale to Bio-Rad, Bio-Rad has taken over our manufacturing operations and pursuant to the manufacture and supply agreement with Bio-Rad, Bio-Rad has agreed to manufacture and we have agreed to purchase from Bio-Rad the ProteinChip Systems and ProteinChip Arrays (collectively referred to herein as the Research Tools Products) required to support our diagnostics efforts. We have an annual obligation to purchase a specified number of these Research Tools Products for three years under our manufacture and supply agreement with Bio-Rad. We currently estimate our aggregate purchase obligation under this agreement to be $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. In the event that Bio-Rad is unable to provide the ProteinChip instruments, arrays and supplies as required, there is no guarantee that we will be able to find such a third party supplier, or that the cost of purchasing these items will be commercially reasonable. If we are not able to obtain the necessary ProteinChip instruments, arrays, and supplies, our ability to develop diagnostic products will be adversely affected.

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. During 2005, our quality control systems were enhanced in order to comply with FDA regulations. We believe we are prepared to fulfill our obligation to assure that such Research Tools Products are in compliance with the FDA s QSRs in 2007.

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. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. 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. In addition, claimants may sue us for injury or contamination that results from our use, or the use by third parties, of these materials, and our liability may exceed our total assets. Compliance with environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development or production efforts.

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. Although we believe that we are currently in compliance in all material respects with such federal, state and local laws, failure to comply could subject us to denial of the right to conduct business, fines, criminal penalties and other enforcement actions.

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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, Health Discovery Corporation 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. Health Discovery Corporation 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 July 10, 2007, we entered into a license and settlement agreement with Health Discovery Corporation, pursuant to which we licensed more than 25 patents covering Health Discovery Corporation 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. The remaining $400,000 payable under the HDC Agreement is payable as follows: $100,000 three months following the date of the agreement, $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 settles all disputes between us and Health Discovery Corporation.

On September 17, 2007, we were served with a complaint filed in the Superior Court of California for the County of Santa Clara naming us and Bio-Rad as defendants and MAS as plaintiff. The complaint 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 sale of assets and liabilities of our Instrument Business to Bio-Rad, 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. On November 14, 2007, we filed a petition to compel MAS to arbitrate its claims with the Court. 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.

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Generally, certain categories of medical devices, a category that may be deemed to include potential future products based upon the ProteinChip platform, may require FDA 510(k), or 510(k) de novo clearance or pre-market approval. 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. Active ingredients (known as ASRs) that are sold to laboratories for use in tests developed in house by clinical laboratories generally do not require FDA approval or clearance. ASRs generally do not require FDA clearance or pre-market approval if they are (1) sold to clinical laboratories certified by the government to perform high complexity testing, (2) manufactured in compliance with the FDA s QSRs, and (3) labeled in accordance with FDA requirements, 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 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 state of the law 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. The commercialization of our products and services could be affected by being delayed, halted or prevented. We cannot be sure that tests based upon the ProteinChip platform, or a combination of reagents, will not require FDA 510(k), 510(k) de novo clearance or FDA pre-market approval.

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 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) or 510(k) de novo, or a FDA pre-market approval, known as a PMA. Some of our potential future clinical products may require a 510(k) or 510(k) de novo, 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 U.S. 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 further 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. There can be no assurance that we will be able to meet the FDA s requirements or receive any necessary approval or clearance.

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 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, it can issue a 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. Failure to comply with regulatory requirements or any adverse regulatory action could have a material adverse effect on us.

Any customers using our products for clinical use in the U.S. may be regulated under CLIA. CLIA is intended to ensure the quality and reliability of clinical laboratories in the U.S. 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. We cannot assure you that the CLIA regulations and future administrative interpretations of CLIA will not have a material adverse impact on us by limiting the potential market for our potential future products. Medical device laws and regulations are also in effect in many of the countries in which we may do business outside the U.S. 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. Medical device laws and regulations are also in effect in some states in which we do business. There can be no assurance that we will obtain regulatory approvals in such countries or that we will not incur significant costs in obtaining or maintaining foreign regulatory approvals. In addition, certain of our products which have not yet been cleared or approved for domestic commercial distribution may be subject to FDA export restrictions.

Employees

As of September 30, 2007, we had 30 full-time employees worldwide, including 5 in sales and marketing, 12 in research and development and 13 in general and administrative departments. We also had an additional 12 individuals engaged as independent contractors. None of our employees are covered by a collective

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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.

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.

Information About Vermillion

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.

In addition, the reports we file with the SEC are available at the company website, www.vermillion.com, under Investor Relations. 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 and positions of the current directors and executive officers of the Company and their ages:

Name	Age	Position
Gail S. Page	52	Director, President and Chief Executive Officer
Eric T. Fung, M.D., Ph.D.	37	Vice President of Medical and Clinical Affairs and Chief Scientific Officer
Qun Zhou	39	Corporate Controller and Interim Chief Financial Officer
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	60	Director
Rajen K. Dalal	54	Director
John A. Young	75	Director
Judy Bruner	49	Director
Michael J. Callaghan	54	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 and diagnostics industry. She 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 of Medical and Clinical Affairs 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 eleven years of accounting and corporate finance experience and earned her Masters of Business Administration from Boston College.

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. He 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. He became one of our directors in 2005. From 2001 to 2003, Mr. Burns was a co-founder and 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, 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 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 our 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.

Judy Bruner is Executive Vice President, Administration and Chief Financial Officer of SanDisk Corporation. She became one of our directors in 2003 and is also chairman of our Audit Committee. She

joined SanDisk in June 2004 after serving on their board of directors for two years. Ms. Bruner served as Senior Vice President and Chief Financial Officer of palmOne, Inc. from September 1999 through June 2004. Previously, Ms. Bruner held a succession of financial management positions at 3Com Corporation from 1988 to 1999. Ms. Bruner was Controller and Chief Financial Officer at Ridge Computers, Inc. from 1984 to 1988, and she held a variety of financial positions at Hewlett-Packard Company from 1980 to 1984. Ms. Bruner holds a B.A. in economics from the University of California, Los Angeles and an M.B.A. from Santa Clara University.

Michael J. Callaghan was an employee of MDS Capital Corp. from 1991 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 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 2009 are Judy Bruner and Gail S. Page.

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

Committees

The Board has the following three committees:

audit;

executive compensation; and

corporate governance and nominating.

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 Judy Bruner 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 in accordance with the current Nasdaq Stock Market s director

independence and listing standards. The Board of Directors has determined that Ms. Bruner qualifies as an audit committee financial expert as defined under Item 401(h) of Regulation S-K. The 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 7 meetings during fiscal 2006, including six meetings with 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 10A-3(b)(1) of the Exchange Act and in accordance with the current Nasdaq Stock Market s director independence and listing standards. Its principal responsibility is to administer our stock plans and to set the salaries and incentive compensation, including stock option grants, for the Company s President and Chief Executive Officer and senior executive officers. The Compensation Committee held three meetings during fiscal 2006.

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 10A-3(b)(1) of the Exchange Act and in accordance with the current Nasdaq Stock Market s director independence and 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 2006.

The Nominating and Governance Committee approves all nominees for membership on the Board of Director, 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.

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

The Nominating and Governance Committee assists the Board of Directors in identifying qualified persons to serve as directors of the Company. The Nominating and Governance Committee evaluates all proposed director nominees, evaluates incumbent directors before recommending re-nomination, and recommends all approved candidates to the Board of Directors for appointment or nomination to Company stockholders. The Nominating and Governance Committee selects as candidates to the Board of Directors 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.

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Board Meetings

The Board of Directors held a total of 9 meetings during the fiscal year ended December 31, 2006. Throughout fiscal year 2006, all directors attended greater than 75% of the aggregate of all meetings of the Board of Directors and the committees of the Board of Directors upon which such directors served.

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 (or to members of a Board committee, 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.

The Nominating and Governance Committee has not established a procedure for considering nominees for director nominated by the Company s stockholders. The Board of Directors believes that our independent 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.

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.

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 Securities Exchange Act of 1934, as amended requires our executive officers and directors, and persons who own more than ten percent (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 greater than ten percent stockholders are required by SEC regulation to furnish us with copies of all Section 16(a) forms they file. We believe all of our executive officers and directors complied with all applicable filing requirements during the fiscal year ended December 31, 2006.

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 2006 compensation program and related decisions.

Executive Officers During 2006

Except for Stephen T. Lundy, who joined the Company in May 2007 and Qun Zhou, who was appointed as Interim Chief Financial Officer in November 2007, all of the executive officers named in the management

table above served in such capacities during 2006. In addition, James P. Merryweather, Ph.D., served as Executive Vice President, Sales and Marketing until his resignation in January 2007, 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 Dr. Merryweather s, Mr. Sullivan s and Ms. Young s respective business experience.

James P. Merryweather, Ph.D., age 57, joined the Company in March 2005 as Executive Vice President, Pharmaceutical Corporate Development and from December 2005 to January 2007, served as Executive Vice President, Sales and Marketing. Prior to joining the Company, Dr. Merryweather spent five years at Incyte Corporation, most recently as Executive Vice President of Business Development and Commercial Operations. Prior to joining Incyte, he was at Millennium Pharmaceuticals as Vice President, Program Management. Prior to joining Millennium, he spent 15 years at Chiron Corporation in a variety of roles ranging from Senior Scientist to Director of Project Management. Dr. Merryweather has spent over 20 years in the biotechnology industry in senior positions in research and development, program management and business development. Dr. Merryweather graduated with a B.S. in chemistry from Northern Illinois University and a Ph.D. in biochemistry from Washington State University. On January 11, 2007, Dr. Merryweather resigned from the Company.

William C. Sullivan, age 60, joined the Company in February 2004, as Vice President, Diagnostics Operations and from January 2006 until November 2007, he served as 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 he joined us, Mr. Sullivan was a medical device consultant since 2001. 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 Diagnostics). Prior to joining Nichols, he was Vice President, Operations at Dianet Med from 1997 to 1998. From 1989 to 1997, Mr. Sullivan 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. On November 2, 2007, Mr. Sullivan resigned from the Company.

Debra A. Young, age 41, joined the Company as its Vice President of Finance and Chief Financial Officer in November 2006 from ViOptix, Inc., where she served as Chief Financial Officer 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, 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 named executive officer compensation program 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.

Elements of Executive Compensation Program

The essential elements of the company s compensation program include the following:

Overall average base salaries targeted at the 50th percentile of the companies with whom we compete for labor talent.

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Overall average base compensation at a higher target for superior performers.

A benefits package that meets personal needs and is equal to or better than those with whom we compete for talent.

Monetary and non-monetary incentive plans that motivate employees toward achieving and exceeding our business goals.

The specific elements of compensation for our NEOs are salary, annual bonus and equity incentive compensation.

Performance to be Rewarded

The Compensation Committee has designed and implemented compensation programs for named executives to reward them for sustaining our financial and operating performance and leadership excellence, to align their interests with those of our shareowners and to encourage them to remain with the company for long and productive careers. Most of our compensation elements simultaneously fulfill one or more performance, alignment and/or retention objectives.

Base salary and annual bonus are designed to reward annual achievements and be commensurate with the executive s scope of responsibilities, demonstrated leadership abilities, and management experience and effectiveness. Our other elements of compensation focus on motivating and challenging the executive to achieve superior, longer-term, sustained results.

Method for Determining Amounts

In deciding on the type and amount of compensation for each executive, the Compensation Committee seeks to align the interests of the NEOs with those of our shareholders. In making compensation decisions, the Compensation Committee reviews the performance of the company and carefully evaluates an executive s performance during the year against established goals, leadership qualities, operational performance, business responsibilities, career with the company, current compensation arrangements and long-term potential to enhance shareowner value. The types and relative importance of specific financial and other business objectives vary among the company s NEOs depending on their positions and the particular operations or functions for which they are responsible. 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 that takes into account an evaluation of the compensation paid by our competitors. The executive compensation program is designed to be flexible in order to respond to an evolving business environment. The Compensation Committee formal and informal compensation surveys of companies of similar size and market segment with which we compete to benchmark compensation of NEOs.

The Compensation 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. During 2006, the Compensation Committee received general information about executive compensation from a contract human resources consultant (Doug Testorff, referred to herein as the Human Resources Consultant).

The Compensation Committee has primary responsibility for assisting the Board of Directors in developing and evaluating potential candidates for executive positions, including the Chief Executive Officer, or CEO. As part of this

responsibility, the Committee oversees the design, development and implementation of the compensation program for the CEO and the other named executives. The Compensation Committee evaluates the performance of the CEO and determines CEO compensation in light of the goals and objectives of the compensation program. The CEO (with the assistance of the Human Resources Consultant) and the Compensation Committee assess the performance of the other named executives and determine their compensation, based on initial recommendations from the CEO. Other than the general Human Resources Consultant,

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neither the company nor the Compensation Committee has any contractual arrangement with any compensation consultant who has a role in determining or recommending the amount or form of senior executive or director compensation.

The Compensation Committee annually reviews and approves stock option grants for the CEO and other NEOs. Grants are based on individual contribution and performance in achieving our business objectives, as well as our overall performance. Individual grants also take into account the positions and particular operations or functions for which the NEO is responsible. Stock option grants for NEOs adhere to the same procedural policies as stock option grants for all employees of the Company, as established by the Board of Directors. The exercise price is the current price of our common stock on the day the grant is approved by the Board of Directors. Stock option grants vest over a four-year period and the options expire 10 years from the date the Board of Directors grants the options. The CEO and other NEOs receive stock option grants at time of hire, and annually thereafter, as recommended by the Compensation Committee to the Board of Directors. Amounts are determined by comparing the level of equity-based compensation is awarded to executives of competing companies, along with consideration for attracting, retaining and motivating the executive officers. We do not maintain specific stock ownership guidelines, and do not currently have a policy for recovering awards or payments if we are required to restate corporate financials.

Impact of Tax and Accounting

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

Employment Agreements

The CEO has a current employment agreement which also contains severance and change of control provisions. No other NEO has an employment, severance or change of control agreement. Our NEOs serve at the will of the Board of Directors, which allows the Board of Directors to exercise discretion regarding their service of employment.

The Compensation Committee has primary responsibility for assisting the Board of Directors in developing and evaluating potential candidates for executive positions, including the CEO. As part of this responsibility, the Compensation Committee oversees the design, development and implementation of the compensation program for the CEO and the other NEOs. The Compensation Committee evaluates the performance of the CEO and determines CEO compensation in light of the goals and objectives of the compensation program. The CEO (with the assistance of the Human Resources Consultant) and the Compensation Committee assess the performance of the other NEOs and determine their compensation, based on initial recommendations from the CEO. Other than the Human Resources Consultant, neither the company nor the Compensation Committee has any contractual arrangement with any compensation consultant who has a role in determining or recommending the amount or form of senior executive or director compensation.

Compensation for the Named Executives in 2006

The specific compensation decisions made for each of the NEOs for 2006 reflect the performance of the Company against key financial, strategic and operational goals for the year.

Gail S. Page was appointed President and CEO, effective December 31, 2005, with an annual base salary of $350,000. No increase in Ms. Page s base salary was implemented in 2006. James P. Merryweather, Ph.D., was hired as Senior Vice President of Sales and Marketing on January 15, 2005. No increase in Dr. Merryweather s base salary was

implemented in 2006. William C. Sullivan, Vice President of Corporate Operations received an annual salary increase of $20,400, effective March 1, 2006. Debra A. Young was hired as Vice President of Finance and Chief Financial Officer on November 2, 2006. No salary increase was implemented for Ms. Young during 2006. Eric T. Fung, M.D., Ph.D., Vice President of Clinical and Medical

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Affairs and Chief Scientific Officer, received an annual salary increase of $14,500 effective March 1, 2006. On April 27, 2007 the Compensation Committee met and increased base salaries as noted below:

Named Executive Officer	Title	12/31/2006 Base Salary	12/31/2007 Expected Base Salary
Gail S. Page	President & CEO	$ 350,000	$ 364,000
James P. Merryweather, Ph.D.	Sr. VP, Sales & Marketing	$ 245,000	(1)
William C. Sullivan	VP, Corporate Operations	$ 218,000	(2)
Debra A. Young	VP, Finance & CFO	$ 220,000	(3)
Eric T. Fung, M.D., Ph.D.	VP, Medical and Clinical Affairs and Chief Scientific Officer	$ 200,000	$ 220,000

(1) Dr. Merryweather resigned from the Company in January 2007.
(2) Mr. Sullivan resigned from the Company in November 2007.
(3) Ms. Young resigned from the Company in November 2007.

The Compensation Committee recommended and the Board of Directors approved the following 2006 management incentive bonuses which were paid in 2007:

Named Executive Officer	Title	2006 Management Incentive Bonus
Gail S. Page	President & CEO	$ 140,000
James P. Merryweather, Ph.D.	Sr. VP, Sales & Marketing	$ 58,800
William C. Sullivan	VP, Corporate Operations	$ 34,900
Debra A. Young	VP, Finance & CFO	$ 7,300
Eric T. Fung, M.D., Ph.D.	VP, Medical and Clinical Affairs and Chief Scientific Officer	$ 32,000

Due to certain business circumstances occurring in 2006, the Compensation Committee also recommended and the Board of Directors approved a one time $50,000 bonus to be awarded to the CEO and retention bonuses be awarded to the other NEOs. The retention bonus agreements were implemented to enhance the financial incentive and encouragement for select executives to remain with the Company through June 7, 2007. The bonus amounts were distributed to the participants upon execution of the agreements in 2006.

Named Executive Officer	Title	2006 Retention Bonus
James P. Merryweather, Ph.D.	Sr. VP, Sales & Marketing	$ 50,000
William C. Sullivan	VP, Corporate Operations	$ 50,000
Eric T. Fung, M.D., Ph.D.	VP, Medical and Clinical Affairs and Chief Scientific Officer	$ 50,000

In 2006, the Compensation Committee recommended and the Board of Directors approved three classes of stock option grants: (1) on-going incentive stock option grants (Page, Merryweather and Sullivan); (2) new-hire stock option grants (Young); and, (3) retention based stock option grants (Page, Merryweather and Sullivan).

The 2006 on-going incentive stock option grants to NEOs were based on individual contribution and performance in achieving our business objectives, as well as our overall performance. The on-going incentive stock option grant program for NEOs was the same as for employees of the Company. On-going incentive stock option grants had a grant date of June 7, 2006, (the date the grant was approved by the Board of Directors), at an option price of $1.20 (which represented the fair value of our shares on that date). The options vest over a four-year period, with 1/48 of the total number of options granted vesting each full month of

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employment of the NEO. On April 27, 2007 the Compensation Committee met and approved stock options grants to NEOs as noted below:

Named Executive Officer	Title	2006 Incentive Stock Option Grants (NEOs)	2007 Incentive Stock Option Grants
Gail S. Page	President & CEO	125,000	360,000
James P. Merryweather, Ph.D.(1)	Sr. VP, Sales & Marketing	25,000	
William C. Sullivan(2)	VP, Corporate Operations	25,000	70,000
Debra A. Young(3)	VP, Finance and CFO		100,000
Eric T. Fung, M.D., Ph.D.	VP, Medical and Clinical Affairs and Chief Scientific Officer	75,000	240,000

(1) Dr. Merryweather resigned from the Company in January 2007, at which time his options stopped vesting.
(2) Mr. Sullivan resigned from the Company in November 2007, at which time his options stopped vesting.
(3) Ms. Young resigned from the Company in November 2007, at which time her options stopped vesting.

Debra A. Young was hired on November 2, 2006, to become Vice President of Finance and Chief Financial Officer. In 2006, the Compensation Committee recommended and the Board of Directors approved a new hire stock option grant in the amount of 125,000 options for Ms. Young. The options vest over a four-year period: 25% on the one-year anniversary of employment start date, and 1/36th of the remainder for each full month of employment thereafter. Ms. Young resigned from the Company in November 2007, at which time her options stopped vesting.

Named Executive Officer	Title	2006 New Hire Stock Option Grants (NEOs)
Debra A. Young	VP, Finance & CFO	125,000

Due to certain business circumstances occurring in 2006, the Compensation Committee also recommended and the Board of Directors approved retention stock option incentives be awarded to the CEO and other NEOs. The retention stock options had a grant date of June 7, 2006, (the date the grant was approved by the Board of Directors), at an option price of $1.20. The options vest over a four-year period, with 1/48 of the total number of options granted vesting each full month of employment of the NEO. Dr. Merryweather resigned from the Company in January 2007 and Mr. Sullivan resigned from the Company in November 2007.

Named Executive Officer	Title	2006 Retention Stock Option Grants (NEOs)
Gail S. Page	President & CEO	125,000
James P. Merryweather, Ph.D.	Sr. VP, Sales & Marketing	75,000

William C. Sullivan	VP, Corporate Operations	50,000

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Summary Compensation Table

Name and Principal Position	Year	Salary $	Bonus $	Option Awards(1) $	All Other Compensation $	Total $
Gail S. Page(2) President, Chief Executive Officer and Director	2006	$ 350,000	$ 190,000	$ 311,724	$ 27,113(4)	$ 878,837
Debra A. Young(2)(3) Chief Financial Officer and Vice President of Finance	2006	$ 35,833	$ 7,333	$ 5,843	$	$ 49,009
Three Highest Paid Executives (other than CEO and CFO) by Total Comp						
James P. Merryweather, Ph.D.(2) Former Executive Vice President, Sales and Marketing	2006	$ 245,000	$ 108,800	$ 125,183	$	$ 478,983
William C. Sullivan(2) Vice President, Corporate Operations	2006	$ 214,600	$ 84,900	$ 21,622	$	$ 321,122
Eric T. Fung, M.D., Ph.D.(2) Vice President, Medical and Clinical Affairs and Chief Scientific Officer	2006	$ 197,583	$ 82,000	$ 49,990	$	$ 329,573
Executives who left in 2006 whose Total Comp was more than any of above:						
William E. Rich Former President, Chief Executive Officer and Director	2006	$ 378,340	$	$	$	$ 378,340
Martin L. Verhoef Former Executive Vice President	2006	$ 271,743	$	$	$	$ 271,743
Matthew J. Hogan Former Sr. Vice President and Chief Financial Officer	2006	$ 210,547	$	$ 33,664	$	$ 244,211
Daniel M. Caserza Former Vice President and Corporate Controller	2006	$ 96,283	$	$ 21,739	$	$ 118,022

(1) The amounts under Option Awards reflect the dollar amount recognized for financial statement reporting purposes for the fiscal year ended December 31, 2006, in accordance with FAS 123(R) of awards and may include amounts from awards granted in and prior to 2006. The assumptions and method for valuing stock options are set forth in the notes to our audited consolidated financial statements included elsewhere in this prospectus.

(2) NEOs

(3) Debra A. Young was hired on November 2, 2006.

(4) Other compensation represents automobile lease and automobile expenses.

Employment and Severance Agreements

We entered into an employment agreement, dated August 24, 2000, with William E. Rich, Ph.D., our former President and CEO. The agreement provided that if his employment terminated other than voluntarily or for Cause or there was a Constructive Termination, Dr. Rich would continue to receive his salary and normal employee benefits for a period of 12 months. Additionally, his stock options would continue to vest for 24 months. The agreement also provided that immediately prior to any Change in Control in the Company, the vesting schedule for his held options would be accelerated by one year. Likewise, the agreement provided that if the Company was acquired within 12 months after Dr. Rich s employment was terminated or constructively terminated without cause, Dr. Rich would receive severance pay and normal employee benefits for a period of 12 months and all of the options granted to him would immediately vest.

On December 31, 2005, we entered into a retirement agreement with William E. Rich, Ph.D., our former CEO, whereby Dr. Rich would continue to provide consulting services to us for one year following his

retirement. This retirement agreement superseded Dr. Rich s employment agreement dated August 24, 2000. In consideration for consulting services, Dr. Rich would receive $30,000 per month during the term of the consulting period, as well as health benefits, use of a company car and reimbursement for costs of a cell phone. Additionally, the vesting of stock options granted to Dr. Rich while he was an employee was accelerated by two years, and all remaining unvested options were canceled. Dr. Rich s consulting period terminated on December 31, 2006. Dr. Rich s vested options may be exercised up to one year following the end of his consultancy period.

We entered into an employment agreement, dated January 15, 2005, with James P. Merryweather, Ph.D., our former Executive President of Sales and Marketing. The agreement provided that if his employment terminated other than voluntarily or for Cause or there is a Constructive Termination, Dr. Merryweather would continue to receive his salary and medical benefits for a period of 12 months. The agreement also provided that if the Company is acquired and within 12 months afterwards Dr. Merryweather s employment is terminated or constructively terminated without cause, he would receive severance pay and medical benefits for a period of 12 months and all of the options granted to him would immediately vest. Dr. Merryweather s employment terminated on January 5, 2007, on which date his stock options stopped vesting.

On January 5, 2007, we entered into a consulting agreement, dated January 5, 2007 with James P. Merryweather, Ph.D., our former Executive President of Sales and Marketing whereby Dr. Merryweather continued to provide consulting services to us two days per week for up to six months following his resignation. Dr. Merryweather also agreed not to compete with the Company or solicit the services of our employees for six months following his resignation and executed a general release of claims in favor of the Company. This consulting agreement superseded Dr. Merryweather s employment agreement dated January 15, 2005. In consideration for consulting services, Dr. Merryweather received $20,417 per month and medical benefits during the term of his consulting period which ended on June 30, 2007.

On February 2, 2006, we entered into a severance and release agreement with Martin L. Verhoef, our former Executive Vice President, whereby Mr. Verhoef would continue to receive $21,667 per month plus health benefits for 12 months following the termination of his employment, effective December 30, 2005. The period during which Mr. Verhoef s vested stock options as of his termination date could be exercised was extended to June 30, 2006. Mr. Verhoef s employment agreement dated January 8, 2004 was also terminated effective as of December 30, 2005, after which his options vested pursuant to the terms of the agreement.

We entered into a consulting agreement, dated March 22, 2006, with Matthew J. Hogan, our former Senior Vice President and Chief Financial Officer, whereby Mr. Hogan would continue to provide consulting services to the Company three days per week for up to six months following his resignation. Mr. Hogan also agreed not to compete with the Company or solicit the services of our employees and executed a general release of claims in favor of the Company. In consideration, Mr. Hogan continued to receive compensation at his then-current base rate of pay ($20,417 per month) during the term of the consulting period. Stock options granted to Mr. Hogan while he was an employee continued to vest while he served as a consultant. Mr. Hogan s consulting period terminated on September 10, 2006.

We entered into an employment agreement, dated December 31, 2005, with Gail S. Page, President and Chief Executive Officer. The agreement provides that if her employment terminates other than voluntarily or for Cause or there was a Constructive Termination, Ms. Page will continue to receive her salary and medical benefits for a period of 12 months. The agreement also provides that if the Company was acquired and within 12 months afterwards Ms. Page s employment is terminated or constructively terminated without cause, she will receive severance pay of her current salary ($364,000 in 2007) and medical benefits for a period of 12 months and all of the options granted to her will immediately vest.

We entered into an employment agreement, dated November 6, 2006, with Debra A. Young, Vice President of Finance and Chief Financial Officer. The agreement provided that if her employment terminated other than voluntarily or for Cause or there is a Constructive Termination, Ms. Young would continue to receive her salary and medical benefits for a period of six months. The agreement also provided that if the Company was acquired and within 12 months afterwards Ms. Young s employment was terminated or constructively terminated without cause or resignation for good reason within 12 months of a change of

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control transaction, she would receive severance pay and medical benefits for a period of six months and all of the options granted to her will immediately vest. Ms. Young s employment terminated on November 1, 2007, on which date her stock options stopped vesting. Ms. Young entered into a Separation Agreement and Release with the Company pursuant to which she received an amount equal to six months of her base salary and the Company agreed to continue her health and dental coverage through April 2008.

Summary Table. The following table sets forth, for each of our equity-based compensation plans, the number of shares of our common stock subject to outstanding options and rights, the weighted-average exercise price of outstanding options, and the number of shares available for future award grants as of December 31, 2006.

		Estimated Future Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of Stock or Units	All Other Option Awards: Number of Securities Underlying Options	Exercise or Base Price of Option Awards	Grant Date Fair Value of Option Awards	Repriced or Materially Modified Options and SARs
Name	**Grant Date**	**Threshold ($)(1)**	**Target ($)**	**Maximum ($)(1)**	**Threshold (#)(2)**	**Target (#)(2)**	**Maximum (#)(2)**	**(#)**	**(#)**	**($/Sh)**	**($/Sh)(3)**	**($/Sh)**
Gail S. Page(1) President, Chief Executive Officer and Director	2006		$ 175,000						250,000	$ 1.20	$ 225,750	
Debra A. Young(2) Chief Financial Officer and Vice President of Finance	2006		$ 55,000						125,000	$ 1.01	$ 95,000	
Three Highest Paid Executives												
James P. Merryweather, Ph.D. Former Executive Vice President, Sales and Marketing	2006		$ 73,500						100,000	$ 1.20	$ 90,300	
William C. Sullivan Vice President, Corporate Operations	2006		$ 43,600						75,000	$ 1.20	$ 67,725	
Eric T. Fung, M.D., Ph.D. Vice President, Medical and Clinical	2006		$ 40,000						75,000	$ 1.20	$ 67,725	

Affairs and Chief
Scientific Officer

(1) The Target Bonus is based on a percentage of annual base salary and was reviewed by the Compensation Committee prior to payout in 2007 and prorated based on Company performance and time of service.

(2) The Company has no equity based incentive award program.

(3) The grant date fair value is the amount the Company would expense in its financial statements over the awards service period in accordance with FAS 123(R) from awards granted in 2006.

Equity Compensation Plan Table

Plan Category	Number of Shares of Common Stock to be Issued Upon Exercise of Outstanding Options and Rights	Weighted-Average Exercise Price of Outstanding Options and Rights	Number of Shares of Common Stock Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Shares Reflected in the First Column)
Equity compensation plans approved by security holders	4,794,739(1)	$ 3.59(2)	2,900,176(3)
Equity compensation plans not approved by security holders			
Total	4,794,739	3.59	2,900,176

(1) Includes outstanding stock options for 421,820 shares under the 1993 Plan and 4,343,995 shares under the 2000 Plan. Also includes 28,924 shares after giving effect to estimated purchases under the Employee

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Stock Purchase Plan, or ESPP, for the purchase period that will end on May 1, 2007 based on participant contributions through December 31, 2006.

(2) December 31, 2006 Weighted Average Exercise Price for shares outstanding is $3.61. Including the 28,924 estimated ESPP shares for the purchase period that will end on May 1, 2007 based on participant contributions through December 31, 2006, with an estimated per share price of $0.89 (based upon November 1, 2006 close price of $1.05 multiplied by 85%), the adjusted weighted average becomes $3.59.

(3) Includes 2,730,176 shares for the 2000 Plan. On January 1 of each year during the term of the 2000 Plan, the total number of shares available for award purposes under the 2000 Plan will increase by the lesser of (i) 2,150,000 shares, (ii) 5% of the outstanding shares of common stock on the last day of the immediately preceding fiscal year, or (iii) an amount determined by the Board of Directors. The aggregate number of shares available for issuance under the 2000 Plan increased by 1,300,000 shares on January 1, 2006. Also includes 170,000 shares made available for sale under the ESPP. On January 1 of each year during the term of the ESPP, the total number of shares available for sale under the ESPP will increase by the lesser of (i) 430,000 shares, (ii) 1% of the outstanding shares of common stock on the last day of the immediately preceding fiscal year, or (iii) an amount determined by the Board of Directors.

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The following table provides information with respect to the outstanding stock options for the NEOs as of December 31, 2006.

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Options Exercise Price ($)	Option Expiration Date
Gail S. Page	21,574		$ 9.27	1/5/2014
	83,333	41,667	$ 2.19	8/3/2015
	36,528		$ 9.27	1/5/2014
	15,625	109,375	$ 1.20	6/4/2016
	15,625	109,375	$ 1.20	6/4/2016
	191,898		$ 9.27	1/5/2014
	91,666	8,334	$ 2.96	2/7/2015
	99,999	300,001	$ 0.90	12/18/2015
Debra A. Young		125,000	$ 1.01	10/30/2016
William C. Sullivan	250	750	$ 3.70	9/14/2014
	2,000	2,000	$ 3.70	9/14/2014
	23,337		$ 8.53	2/16/2014
	6,666	13,334	$ 1.80	4/4/2015
	6,666	3,334	$ 2.19	8/3/2015
	38,169		$ 8.53	2/16/2014
	3,125	21,875	$ 1.20	6/4/2016
	6,250	43,750	$ 1.20	6/4/2016
	28,494		$ 8.53	2/16/2014
	3,750	3,750	$ 0.90	12/18/2015
James P. Merryweather, Ph.D.	61,333	98,667	$ 2.85	3/9/2015
	3,125	19,208	$ 1.20	6/6/2016
	458	11,541	$ 1.20	6/6/2016
	8,917	54,084	$ 1.20	6/6/2016
		2,667	$ 1.20	6/6/2016
	5,000	5,000	$ 0.90	12/19/2015
Eric T. Fung, M.D., Ph.D.	4,300		$ 3.4880	5/3/2010
	599		$ 6.3800	6/7/2011
	5,401		$ 6.3800	6/7/2011
	917		$ 5.6000	11/8/2011
	4,083		$ 5.6000	11/8/2011
	3,500		$ 4.5300	6/5/2012
	1,500		$ 4.5300	6/6/2012
	8,500		$ 4.3500	2/12/2013
	6,500		$ 4.3500	2/13/2013
	5,000		$ 9.6000	6/4/2013
	5,000		$ 9.6000	6/5/2013

	6,667		$ 8.6400	4/1/2014
	13,333		$ 8.6400	4/1/2014
	4,560		$ 7.4700	6/2/2014
	14,277		$ 7.4700	6/3/2014
	6,163		$ 7.4700	6/2/2014
	501	3,501	$ 3.7000	9/15/2014
	3,999	1,999	$ 3.7000	9/15/2014
	10,000	20,000	$ 1.8000	4/5/2015
	13,333	6,667	$ 2.1900	8/4/2015
		1	$ 0.9000	12/19/2015
	4,999	5,000	$ 0.9000	12/19/2015
	3,125	21,875	$ 1.2000	6/6/2016
	6,250	43,750	$ 1.2000	6/6/2016
Totals	886,295	1,076,505		

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Stock Option Exercises

There were no stock option exercises by NEOs in 2006.

Director Compensation

During 2002, the Board of Directors approved a compensation system for outside directors and in 2003 this compensation system was revised. Pursuant to this system, each new outside director shall be granted, on the date of the first meeting of the Board of Directors which he or she attends, an option to purchase 25,000 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 12,500 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: (i) payment in the amount of $5,000 paid quarterly as long as such person continues to act as a director, or (ii) 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 approximately equal to $20,000. Also, on the date of each annual meeting of stockholders, the Chairman of the Board of Directors will receive an annual grant of an option to purchase 10,000 shares of our common stock, vesting monthly over a 12-month period. During fiscal 2005, the Board of Directors 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 150,000 shares, which vests monthly over 24 months. The Chairman of the Audit Committee receives an additional option to purchase 5,000 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 Chairman of the Board of Directors, each receive an additional option to purchase 2,500 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 of Directors or committee meeting. Directors who are also the Company s officers or employees are not compensated for attending Board of Directors or committee meetings.

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

Name	Fees Earned or Paid in Cash ($)	Stock Awards	Option Awards(1)	Non-equity Incentive Plan Compensation ($)	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation ($)	Total ($)
Judy Bruner	$ 20,000		$ 28,880				$ 48,880
John A, Young	$ 20,000		$ 13,976				$ 33,976
Michael J. Callaghan	$ 20,000		$ 8,692				$ 28,692
Rajen K. Dalal	$ 20,000		$ 10,269				$ 30,269
James S. Burns	$ 20,000		$ 17,961				$ 37,961
James L. Rathmann	$ 20,000		$ 75,562				$ 95,562
Kenneth J. Conway	$ 20,000		$				$ 20,000

Wendell Wierenga	$ 8,440	$ 8,440

(1) The amounts under Option Awards reflect the dollar amount recognized for financial statement reporting purposes for the fiscal year ended December 31, 2006, 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 notes to our audited consolidated financial statements included elsewhere in this prospectus.

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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 the common stock as of November 30, 2007, 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 current Director of the Company, (iii) each Named Executive Officer and (iv) the Named 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 November 30, 2007, 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) 63,801,971 shares of common stock outstanding as of November 30, 2007, 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 November 30, 2007.

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	4,021,145	6.30%
Highbridge International LLC(1)(3) c/o Highbridge Capital Management LLC 9 West 57th Street, 27th Floor New York, NY 10019	5,476,190	8.58%
Ironwood Investment Management(1) 21 Custom House Street, Suite 240 Boston, MA 02110	3,960,134	6.21%
OppenheimerFunds, Inc.(1)(4) 6803 South Tucson Way Centennial, CO 80112	4,761,904	7.46%
Phronesis Partners, L.P.(1)(5) 180 E. Broad Street #1704 Columbus, OH 43215	10,561,106	15.60%
Quest Diagnostics Incorporated(1)(6)	12,710,713	18.72%

1290 Wall Street West
Lyndhurst, NJ 07071

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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:		
Judy Bruner(7) SanDisk Corporation 601 McCarthy Boulevard Milpitas, CA 95035	143,250	*
James S. Burns(8) Entremed, Inc. 9640 Medical Center Drive Rockville, MD 20850	83,750	*
Michael J. Callaghan(9) 1770 Green Street, Apt. 502 San Francisco, CA 94123	166,450	*
Kenneth J. Conway(10) Starfire Venture 15 Eagles Nest Scituate, MA 02066	70,875	*
Rajen K. Dalal(11) Avir, Inc. 2463 Faber Place Palo Alto, CA 94303	130,500	*
James L. Rathmann(1)(12) Falcon Technology Partners 102 Atlee Circle Berwyn, PA 19312	4,739,927	7.39%
John A. Young(13) Page Mill Investors 167 S. San Antonio Road, Suite 7 Los Altos, CA 94022-3055	423,790	*
Eric T. Fung, M.D., Ph.D.(14)	235,754	*
Stephen T. Lundy		*
Gail S. Page(15)	878,609	1.36%
Qun Zhou(16)	3,962	*
All Directors and Named Executive Officers as a Group	7,043,317	10.63%

* 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 1,428,571 shares issuable upon the exercise of warrants which are not exercisable within 60 days of November 30, 2007 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 4,380,952 shares issuable upon the exercise of warrants and 5,550,000 shares issuable upon conversion of 7.0% Notes which are not exercisable within 60 days of November 30, 2007 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

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.

(4) Includes (i) 7,900 shares owned by Baring Global Opportunities Fund, (ii) 31,300 shares owned by OFI Institutional Global Opportunities Fund, (iii) 4,343,500 shares owned by Oppenheimer Global Opportunities Fund, (iv) 25,100 shares owned by Russell Alpha Global Opportunities Fund and (v) 354,104 shares owned by Russell Global Opportunities Fund. Excludes (i) 6,320 shares issuable upon the exercise of warrants owned by Baring Global Opportunity Fund, (ii) 25,040 shares issuable upon the exercise of warrants owned by OFI Institutional Global Opportunities Fund, (iii) 3,474,800 shares issuable upon the exercise of warrants owned by Oppenheimer Global Opportunities Fund, (iv) 20,080 shares issuable upon the exercise of warrants owned by Russell Alpha Global Opportunities Fund and (v) 283,283 shares issuable upon the exercise of warrants owned by Russell Global Opportunities Fund, in each case, which are not exercisable within 60 days of November 30, 2007 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 3,895,428 shares issuable upon the exercise of warrants which are exercisable within 60 days of November 30, 2007. 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 4,104,761 shares issuable pursuant to warrants exercisable within 60 days of November 30, 2007. Quest Diagnostics is a publicly-held company. Quest Diagnostics 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.

(7) Includes 143,250 shares issuable upon exercise of options exercisable within 60 days of November 30, 2007.

(8) Includes 83,750 shares issuable upon exercise of options exercisable within 60 days of November 30, 2007.

(9) Includes 149,450 shares issuable upon exercise of options exercisable within 60 days of November 30, 2007. 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. or during a period of notice following termination of his employment. Such period of notice has not yet been determined. Mr. Callaghan disclaims beneficial ownership of all shares and options.

(10) Includes 68,875 shares issuable upon exercise of options exercisable within 60 days of November 30, 2007.

(11) Includes 130,500 shares issuable upon exercise of options exercisable within 60 days of November 30, 2007.

(12) Includes (i) 348,050 shares issuable upon exercise of options exercisable within 60 days of November 30, 2007 and (ii) 4,021,145 shares owned by Falcon Technology Partners, L.P. Excludes 1,428,571 shares owned by Falcon Technology Partners issuable upon the exercise of warrants which are not exercisable within 60 days of

November 30, 2007 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 139,440 shares held in family trusts and 284,350 shares issuable upon exercise of options exercisable within 60 days of November 30, 2007. 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 218,150 shares issuable upon exercise of options exercisable within 60 days of November 30, 2007.

(15) Includes 849,789 shares issuable upon exercise of options exercisable within 60 days of November 30, 2007.

(16) Includes 1,462 shares issuable upon exercise of options exercisable within 60 days of November 30, 2007.

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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 based upon information they have provided to us on or about August 29, 2007. 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 November 30, 2007, 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 24,513,092 shares of our common stock and warrants to purchase an additional 19,610,470 shares of our common stock. We also issued 921,000 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 $340,000 in financial advisory fees and two warrants to purchase 100,000 shares of our common stock each (one warrant was issued in April 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 sale of our Instrument Business to Bio-Rad in November 2006 and received $250,000 as compensation for such services. Frank Kee Colen, one of the selling stockholders, is a managing director 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 placement and the shares of our common stock underlying the warrants issued in the private placement are being registered hereunder except for 2,380,952 shares and 1,904,761 shares underlying the warrants issued to Quest Diagnostics in such private placement.

We are also registering up to 3,176,420 shares of our common stock, including 90,000 shares of our common stock issuable upon the exercise of warrants, all of which are being offered for resale for the accounts

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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 90,000 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.

3,086,420 shares of common stock issued to Bio-Rad in connection with the sale of our Instrument Business to Bio-Rad 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	7,900	*	7,900	6,320		
Bio-Rad Laboratories, Inc.(5) 1000 Alfred Nobel Drive Hercules, CA 94547	3,086,420	4.84%	3,086,420			
Frank Kee Colen(6) 50 Riverside Drive New York, NY 10024	243,000	*	120,000	96,000	27,000	*
Falcon Technology Partners, L.P.(7) 102 Atlee Circle Berwyn, PA 19312	4,021,145	6.30%	1,785,714	1,428,571	2,235,431	3.43%
Fort Mason Master, L.P.(8) 580 California Street, Suite 1925 San Francisco, CA 94104	2,963,565	4.59%	2,235,953	1,788,762		
Fort Mason Partners, L.P.(9) 580 California Street, Suite 1925 San Francisco, CA 94104	261,000	*	145,000	116,000		
Highbridge International LLC(10) c/o Highbridge Capital Management LLC 9 West 57th Street 27th Floor New York, NY 10019	5,476,190	8.58%	5,476,190	4,380,952	3,579,706	4.99%
Iroquois Master Fund Ltd.(11)	2,142,856	3.31%	1,190,476	952,380		

641 Lexington Avenue New York, NY 10022				
OFI Institutional Global Opportunities Fund(12) 6803 South Tucson Way Centennial, CO 80112	31,300	*	31,300	25,040
Oppenheimer Global Opportunities Fund(13) 6803 South Tucson Way Centennial, CO 80112	4,343,500	6.81%	4,343,500	3,474,800

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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)
Oppenheimer & Co. Inc.(14) 125 Broad Street New York, NY 10004	1,011,900	1.56%		1,011,000	900	*
Phronesis Partners, L.P.(15) 180 E. Broad Street #1704 Columbus, OH 43215	10,561,106	15.60%	4,869,285	3,895,428	1,796,393	2.74%
Rockmore Investment Master Fund Ltd.(16) c/o Rockmore Capital, LLC 150 E. 58th Street New York, NY 10155	2,142,856	3.31%	1,190,476	952,380		
Russell Alpha Global Opportunities Fund(17) 6803 South Tucson Way Centennial, CO 80112	25,100	*	25,100	20,080		
Russell Global Opportunities Fund(18) 6803 South Tucson Way Centennial, CO 80112	354,104	*	354,104	283,283		
David I. J. Wang(19) 7575 Pelican Bay Blvd. Suite 1902 Naples, FL 34108	1,342,855	2.10%	357,142	285,713	700,000	1.09%

* Represents beneficial ownership of less than 1%.

(1) Based on 63,801,971 shares of our common stock outstanding as of November 30, 2007.

(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 6,320 shares issuable upon the exercise of warrants which are not exercisable within 60 days of November 30, 2007 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 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.

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(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 123,000 shares issuable upon the exercise of warrants exercisable within 60 days of November 30, 2007. Total shares beneficially owned after offering includes 27,000 shares issuable upon conversion of warrants which are exercisable within 60 days of November 30, 2007. Frank Kee Colen is a managing director of Oppenheimer & Co. Inc. which is a broker dealer. Frank Kee 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.

(7) Total shares beneficially owned before offering excludes 1,428,571 shares issuable upon the exercise of warrants which are not exercisable within 60 days of November 30, 2007 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.

(8) Total shares beneficially owned before offering includes 727,612 shares issuable upon the exercise of warrants which are exercisable within 60 days of November 30, 2007 and excludes 1,061,150 shares issuable upon the exercise of warrants which are not exercisable within 60 days of November 30, 2007 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. 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.

(9) Total shares beneficially owned before offering includes 116,000 shares issuable upon the exercise of warrants which are exercisable within 60 days of November 30, 2007. 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.

(10) Total shares beneficially owned before offering excludes 4,380,952 shares issuable upon the exercise of warrants and 5,550,000 shares issuable upon conversion of 7.0% Notes which are not exercisable within 60 days of November 30, 2007 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 3,579,706 shares issuable upon conversion of 7.0% Notes which are exercisable within 60 days of November 30, 2007. Total shares beneficially owned after offering excludes 1,970,294 shares issuable upon conversion of 7.0% Notes which are not exercisable within 60 days of November 30, 2007 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.

(11) Total shares beneficially owned before offering includes 952,380 shares issuable upon exercise of warrants exercisable within 60 days of November 30, 2007. 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.

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(12) Total shares beneficially owned before offering excludes 25,040 shares issuable upon the exercise of warrants which are not exercisable within 60 days of November 30, 2007 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 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.

(13) Total shares beneficially owned before offering excludes 3,474,800 shares issuable upon the exercise of warrants which are not exercisable within 60 days of November 30, 2007 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.

(14) Total shares beneficially owned before offering includes 1,011,900 shares issuable upon the exercise of warrants exercisable within 60 days of November 30, 2007, 900 of which are held by Oppenheimer & Co. Inc. Pool. Total shares beneficially owned after offering includes 900 shares issuable upon the exercise of warrants held by Oppenheimer & Co. Inc. Pool which are exercisable within 60 days of November 30, 2007. 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 921,000 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. 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.

(15) Total shares beneficially owned before offering includes 3,895,428 shares issuable upon the exercise of warrants exercisable within 60 days of November 30, 2007. 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.

(16) Total shares beneficially owned before offering includes 952,350 shares issuable upon the exercise of warrants exercisable within 60 days of November 30, 2007. 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 owned by Rockmore Master Fund and, as of November 30, 2007, Mr. Bruce T. Bernstein and Mr. Brian Daly, as officers of Rockmore Capital, are responsible for the portfolio management decisions

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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.

(17) Total shares beneficially owned before offering excludes 20,080 shares issuable upon the exercise of warrants which are not exercisable within 60 days of November 30, 2007 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.

(18) Total shares beneficially owned before offering excludes 283,283 shares issuable upon the exercise of warrants which are not exercisable within 60 days of November 30, 2007 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.

(19) Total shares beneficially owned before offering includes 285,713 shares issuable upon the exercise of warrants exercisable within 60 days of November 30, 2007.

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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, 2006, 2005 and 2004, 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 Compensation Discussion and Analysis 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 sale to Bio-Rad of our Instrument Business, 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, Bio-Rad paid us approximately $16.0 million in cash at the closing of the transaction. An additional $4.0 million of contingent cash consideration included $2.0 million, subject to certain adjustments, to be held in escrow as security for certain obligations of the Company for three years following the closing, and $2.0 million as a holdback amount to be held by Bio-Rad until the issuance of a reexamination certificate confirming a SELDI patent. The USPTO issued the reexamination certificate and on November 9, 2007, we received the $2.0 million withheld by Bio-Rad. We also entered into a number of ancillary agreements, as set forth in greater detail below.

Subsequent to the sale of our Instrument Business to Bio-Rad, both the Company and Bio-Rad recognized business activities on behalf of each other. During the year ended December 31, 2006, we recorded a payable to Bio-Rad of $1.5 million for accounts receivable we collected on behalf of Bio-Rad and $8,000 for invoices processed by Bio-Rad on our behalf. During the year ended December 31, 2006, we recorded receivables from Bio-Rad of $174,000 for invoices we processed on behalf of Bio-Rad, $200,000 for sales taxes on the sale of assets and $154,000 for unbilled receivables from Bio-Rad. As of September 30, 2007, we owed Bio-Rad $20,000 for accounts receivable we collected on behalf of Bio-Rad and Bio-Rad owed us $83,000 of invoices processed and paid by us on behalf of Bio-Rad. Subsequent to September 30, 2007, we made no payments related to the accounts receivable owed to Bio-Rad, and made no collections related to the $83,000 owed by Bio-Rad. Additionally, for the nine months ended September 30, 2007, we recorded a charge of $382,000 related to a post closing adjustment resulting from the sale of our Instrument Business to Bio-Rad.

Sublicense Agreement

In connection with the sale of our Instrument Business to Bio-Rad, 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 core 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 Ciphergen, 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

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which the cumulative payments to MAS have reached $10.0 million. Through December 31, 2006, we had paid or accrued a total of approximately $2.6 million in such royalties. Under our sublicense agreement with Bio-Rad, Bio-Rad agreed to pay the royalties due to MAS under the license rights, either directly to Vermillion (to be paid to MAS) or directly to MAS, at Bio-Rad s option.

Cross-License Agreement

In connection with the sale of our Instrument Business to Bio-Rad, 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, which market is comprised of clinical diagnostics developers, commercial clinical laboratories, our collaborators, home users of clinical diagnostic assays, and physician s office users of clinical diagnostic assays, 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 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.

Manufacture and Supply Agreement

Since the sale of our Instrument Business to Bio-Rad, Bio-Rad has taken over our manufacturing operations. In connection with the asset 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. During each of the first three years of the agreement, Bio-Rad has an obligation to manufacture and deliver, and we have an obligation to purchase, minimum quantities of Research Tools Products. We estimate that our aggregate obligation under this agreement to be $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 did not make any purchases

under this agreement for the year ended December 31, 2006 and made purchases totaling an aggregate of $212,000 under this agreement during the nine months ended September 30, 2007. As of September 30, 2007, we had a remaining purchase obligation for the twelve months ending November 12, 2007 of approximately $1,688,000.

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Transition Services Agreement

In order to allocate support services between Bio-Rad and our remaining business following the asset 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 year ended December 31, 2006, and for the nine months ended September 30, 2007, the amount of services provided by each party pursuant to the transition services agreement were:

	Year Ended December 31, 2006	Nine Months Ended September 30, 2007
	(In thousands)	
Services Provided by Vermillion to Bio-Rad	$ 66	$ 107
Services Provided by Bio-Rad to Vermillion	$ 52	$ 65

Sublease

In connection with the Bio-Rad asset 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.

We recognized $204,000 and $1.2 million in base rent and $25,000 and $315,000 in other rental expenses under the sublease with Bio-Rad during the year ended December 31, 2006 and the nine months ended September 30, 2007, respectively. 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 master lease.

Stock Purchase Agreement

In connection with the sale of the Instrument Business to Bio-Rad, we also entered into a stock purchase agreement with Bio-Rad pursuant to which we issued and sold 3,086,420 shares of our common stock to Bio-Rad for an aggregate purchase price of $3.0 million. The purchase price of $0.972 per share was based on the average closing price for the five days preceding the stock purchase agreement on August 14, 2006. For accounting purposes, the

3,086,420 shares purchased were valued at $1.17 per share, the closing price on November 13, 2006, the day the transaction closed. 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 U.K. Employees

In connection with the sale of our Instrument Business to Bio-Rad, 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

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United Kingdom in the six-month period immediately following the sale. On May 4, 2007, Bio-Rad delivered a claim for indemnification under the agreement for $307,455, which was paid out of the escrow fund established pursuant to the asset purchase agreement and related escrow agreement.

Relationship with Quest Diagnostics

Strategic Alliance Agreement

Quest Diagnostics is a significant stockholder of the Company. On July 22, 2005, we entered into a strategic alliance agreement with Quest Diagnostics covering a period ending on the later of (i) the three-year anniversary of the agreement or (ii) the date on which Quest Diagnostics has commercialized three diagnostic tests based on our proprietary SELDI ProteinChip technology. Pursuant to the agreement, Quest Diagnostics will have the non-exclusive right to commercialize each test on a worldwide basis, with exclusive commercialization rights in territories where Quest Diagnostics 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 Diagnostics will pay royalties to us based on fees earned by Quest Diagnostics for applicable diagnostic services, and we will pay royalties to Quest Diagnostics based on our revenue from applicable diagnostic products. To date, no such royalties have been earned by either party. Quest Diagnostics and the Company have also agreed to enter into a supply agreement under which we will sell instruments and consumable supplies to Quest Diagnostics (to be used for performing diagnostic services) which we will purchase from Bio-Rad under our manufacture and supply agreement.

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

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

Credit Agreement

Pursuant to a credit agreement dated July 22, 2005, Quest Diagnostics has also agreed to loan us up to $10.0 million with interest accrued at the prime rate plus 0.5% and paid monthly, solely to fund certain development activities related to the strategic alliance. We may make borrowings in monthly increments of up to approximately $417,000 on the last day of each month during the first two years of the strategic alliance. At September 30, 2007, such borrowings amounted to $10.0 million plus accrued interest of $70,000. This loan, collateralized by certain intellectual property of

the Company, will be forgiven based on our achievement of certain milestones related to development, regulatory approval and commercialization of certain diagnostic tests. Should we fail to achieve these milestones, the outstanding principal amount of any such loans will become due and payable on July 22, 2010. From the inception of the strategic alliance through September 30,

2007, we had spent $10.0 million of the loan proceeds on in-house research and development, as well as collaborations with others, directed towards achieving the milestones.

2005 Stock Purchase Agreement

In addition, pursuant to a stock purchase agreement, dated July 22, 2005, for an aggregate purchase price of approximately $15.0 million, Quest Diagnostics purchased 6,225,000 shares of our common stock and a warrant having a term of five years to purchase up to an additional 2,200,000 shares for $3.50 per share. The warrant was valued at approximately $2.2 million based on the fair value as determined by a Black-Scholes model using the following assumptions: risk-free interest rate, 4.04%; expected life, five years; expected volatility, 69%. The stock purchase agreement also provided certain registration rights whereby Quest Diagnostics may demand that we register their shares under the Securities Act, or, if we file another registration statement under the Securities Act, Quest Diagnostics may elect to include their shares in that registration, subject to various conditions. On January 12, 2006, the warrant with Quest Diagnostics 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 20% of the total number of outstanding shares of our common stock, provided that Quest Diagnostics 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 Diagnostics would not own more than 19.9% of our common stock. In connection with the closing of our private placement on August 29, 2007, the warrant was further amended to reduce the exercise price to $2.50 per share and extend the expiration date from July 22, 2010 to July 22, 2011.

Amendment to Shareholder Rights Plan

In connection with the stock purchase agreement with Quest Diagnostics, we also amended our shareholder rights agreement dated March 20, 2002, between us and Wells Fargo Bank, N.A., as Rights Agent. As more fully described in the shareholder rights agreement, the holders of our common stock are given rights to acquire additional shares of our preferred stock upon the occurrence of specified events. The amendment removes the applicability of such purchase rights with respect to the purchase, sale and issuance of the shares of common stock and the warrant held by Quest Diagnostics.

2007 Securities Purchase Agreement

On August 29, 2007, Quest Diagnostics purchased an additional 2,380,952 shares of our common stock and additional warrants to purchase 1,904,761 shares of our common stock in a private placement. The aggregate purchase price for the securities was $2.0 million. The related purchase agreement provided for certain registration rights whereby the investors, including Quest Diagnostics, 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 Diagnostics 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 Diagnostics would be deemed registrable securities under the registration rights provisions of the 2005 stock purchase agreement with Quest Diagnostics, and (ii) Quest Diagnostics waived their registration rights with respect to such shares under the 2007 securities purchase agreement.

Loans Made Prior to Initial Public Offering Relating to Stock Options

Prior to the Company s initial public offering in 2000, the Company made loans evidenced by promissory notes to certain of its former officers and directors in connection with the early exercise of options. These full recourse notes had five-year terms, were collateralized by the underlying stock and other personal assets, and

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became due immediately upon termination of employment of the borrower. The following table sets forth certain information with respect to each of the promissory notes:

Name	Position	Date of Loan	Interest Rate	Principal Amount	Accrued Interest	Total
Daniel M. Caserza	Former Vice President and Corporate Controller	September 8, 2000	6.22%	$ 30,000	$ 9,000	$ 39,000
David A. DeNola	Former Vice President Biosystems Division Operations	September 27, 2000	6.22%	$ 150,000	$ 43,000	$ 193,000
Robert M. Maurer	Former Vice President, Business Development	September 18, 2000	6.22%	$ 300,000	$ 78,000	$ 378,000
William E. Rich, Ph.D.	Former President and Chief Executive Officer	September 1, 1999	6.00%	$ 48,000	$ 15,000	$ 63,000
		September 15, 1999	5.82%	$ 78,000	$ 24,000	$ 102,000
		March 8, 2000	6.80%	$ 300,000	$ 117,000	$ 417,000
John Storella	Former Vice President, Intellectual Property Affairs	September 27, 2000	6.22%	$ 112,000	$ 33,000	$ 145,000

In December 2004, Daniel M. Caserza, Vice President and Corporate Controller, repaid his note related to the early exercise of a stock option, totaling $39,000, including interest. In September and December 2004, David A. DeNola, our former Vice President, Biosystems Division Operations, repaid his note related to the early exercise of a stock option, totaling $193,000, including interest. In March and September 2004, Robert M. Maurer, our former Vice President, Business Development, repaid his note related to the early exercise of a stock option, totaling $378,000, including interest. In June 2004 and March 2005, William E. Rich, Ph.D., our former President and CEO, repaid his remaining three notes related to the early exercise of stock options, totaling $582,000, including interest. At various times prior to the maturity date of September 27, 2005, John R. Storella, our former Vice President, Intellectual Property Affairs, made payments against his note related to the early exercise of stock options, totaling $145,000, including interest, which repaid the note in full. All of the aforementioned note repayments were made at or prior to the maturity dates.

Other Relationships

On August 29, 2007, Falcon Technology Partners, L.P. purchased 1,785,714 shares of our common stock and warrants to purchase 1,428,571 shares of our common stock in a private placement. The aggregate purchase price for the securities was $1.5 million. 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 in August 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 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.

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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 November 30, 2007, we were authorized to issue up to 150,000,000 shares of common stock and 5,000,000 shares of preferred stock under our Second Amended and Restated Certificate of Incorporation.

Common Stock

As of November 30, 2007, there were 63,801,971 shares of common stock outstanding, 5,669,958 shares of common stock issuable upon the exercise of outstanding stock options, 22,931,470 shares of common stock issuable upon the exercise of warrants to purchase common stock, 272,082 shares of common stock issuable upon the conversion of the 4.5% Notes and 8,250,000 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 November 30, 2007, 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 November 15, 2007, warrants to purchase 22,931,470 shares of common stock at exercise prices ranging from $0.925 to $2.50 were outstanding, with a weighted exercise price of $1.079 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 November 15, 2007 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 500 shares per $1,000 aggregate principal amount of notes, which is equal to a conversion price of $2.00 per share. Notwithstanding the foregoing, any holder of 7.0% Notes who (together with such holder s affiliates) owns more than $10.0 million 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 108.8329 shares per $1,000 principal amount of 4.5% Notes, which is equal to a conversion price of $9.19 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) 22,132,140 shares of our common stock and 18,626,709 shares of our common stock issuable upon the exercise of warrants issued in a private placement that closed on August 29, 2007, (ii) 3,086,420 shares of our common stock issued to Bio-Rad in connection with the sale of our Instrument Business to Bio-Rad in November 2006 and (iii) 90,000 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.

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

In connection with the sale of our Instrument Business to Bio-Rad, 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 statements 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 Second 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 Second 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 financial statements as of December 31, 2006 and December 31, 2005 and for each of the three years in the period ended December 31, 2006 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.

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Vermillion, Inc. and Subsidiaries

Consolidated Balance Sheets

	September 30, 2007	December 31, 2006
	(Dollars in thousands, except share and par value amounts) (Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 19,498	$ 17,711
Short-term investments, at fair value	4,000	
Accounts receivable, net of allowance for doubtful accounts of $- and $2, respectively		29
Prepaid expenses and other current assets	1,101	2,300
Total current assets	24,599	20,040
Property, plant and equipment, net	1,613	2,260
Other assets	655	716
Total assets	$ 26,867	$ 23,016
LIABILITIES AND STOCKHOLDERS DEFICIT		
Current liabilities:		
Accounts payable	$ 2,177	$ 2,401
Accrued liabilities	3,863	4,600
Deferred revenue	31	45
Current portion of convertible senior notes, net of discounts	2,460	
Total current liabilities	8,531	7,046
Long-term debt owed to related party	10,000	7,083
Convertible senior notes, net of discount	16,150	18,428
Other liabilities	278	360
Total liabilities	34,959	32,917
Commitments and contingencies (Note 8)		
Stockholders deficit:		
Preferred stock, $0.001 par value, 5,000,000 shares authorized, none issued and outstanding at September 30, 2007, and December 31, 2006		
Common stock, $0.001 par value, 150,000,000 and 80,000,000 shares authorized at September 30, 2007, and December 31, 2006, respectively; 63,776,934 and 39,220,437 shares issued and outstanding at September 30,	64	39

2007, and December 31, 2006, respectively				
Additional paid-in capital		227,796		207,991
Accumulated deficit		(235,850)		(217,860)
Accumulated other comprehensive loss		(102)		(71)
Total stockholders deficit		(8,092)		(9,901)
Total liabilities and stockholders deficit	$	26,867	$	23,016

See accompanying notes to consolidated financial statements.

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Vermillion, Inc. and Subsidiaries

Consolidated Statements of Operations

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2007	2006	2007	2006
	(Dollars in thousands, except share and per share amounts) (Unaudited)			
Revenue:				
Products	$	$ 2,697	$	$ 10,702
Services		1,965	21	6,297
Total revenue		4,662	21	16,999
Cost of revenue:				
Products		1,571		5,714
Services		910	15	3,118
Total cost of revenue		2,481	15	8,832
Gross profit		2,181	6	8,167
Operating expenses:				
Research and development	2,182	2,914	6,297	8,780
Sales and marketing	516	3,204	1,440	10,652
General and administrative	2,090	2,541	8,626	7,549
Total operating expenses	4,788	8,659	16,363	26,981
Loss on sale of instrument business			(382)	
Loss from operations	(4,788)	(6,478)	(16,739)	(18,814)
Interest income	169	190	458	654
Interest expense	(596)	(592)	(1,727)	(1,691)
Other income (expense), net	95	(116)	17	(174)
Loss before income taxes	(5,120)	(6,996)	(17,991)	(20,025)
Income tax benefit (expense)	3	(20)	1	(190)
Net loss	$ (5,117)	$ (7,016)	$ (17,990)	$ (20,215)
Loss per share basic and diluted	$ (0.11)	$ (0.19)	$ (0.43)	$ (0.56)
Shares used to compute basic and diluted loss per common share	48,056,582	36,075,163	42,214,245	36,041,625

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

	Common Stock		Additional Paid-In	Accumulated	Accumulated Other Comprehensive	Total Stockholders Equity	Comprehensive
	Shares	Amount	Capital	Deficit	Loss(1)	(Deficit)	Loss
	(Dollars in thousands, except share and per share amounts) (Unaudited)						
Balance at December 31, 2005	35,998,881	$ 36	$ 202,485	$ (195,794)	$ (204)	$ 6,523	
Net loss				(20,215)		(20,215)	$ (20,215)
Foreign currency translation adjustment					128	128	128
Comprehensive loss							$ (20,087)
Common stock shares issued in connection with:							
Exercise of stock options	1,670		2			2	
Employee stock purchase plan	75,886		100			100	
Stock compensation charge			1,338			1,338	
Balance at September 30, 2006	36,076,437	$ 36	$ 203,925	$ (216,009)	$ (76)	$ (12,124)	
Balance at December 31, 2006	39,220,437	$ 39	$ 207,991	$ (217,860)	$ (71)	$ (9,901)	
Net loss				(17,990)		(17,990)	$ (17,990)
Foreign currency translation adjustment					(31)	(31)	(31)
Comprehensive loss							$ (18,021)
Common stock shares issued in connection with:							
Exercise of stock options	20,312		24			24	
Employee stock purchase plan	23,093		21			21	

Private offering, net of issuance costs and registration fees	24,513,092	25	19,076			19,101
Stock compensation charge			684			684
Balance at September 30, 2007	63,776,934	$ 64	$ 227,796	$ (235,850)	$ (102)	$ (8,092)

(1) Accumulated Other Comprehensive Loss arises solely from foreign currency cumulative translation adjustment.

See accompanying notes to consolidated financial statements.

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Vermillion, Inc. and Subsidiaries

Consolidated Statements of Cash Flows

	Nine Months Ended September 30,	
	2007	2006
	(Dollars in thousands) (Unaudited)	
Cash flows from operating activities:		
Net loss	$ (17,990)	$ (20,215)
Adjustments to reconcile net loss to net cash used in operating activities:		
Loss on sale of instrument business	382	
Depreciation and amortization	882	3,551
Stock-based compensation expense	684	1,338
Amortization of debt discount associated with beneficial conversion feature of convertible senior notes	182	399
Amortization of debt issuance costs	54	279
Accrued investment income		(5)
Changes in operating assets and liabilities:		
Decrease in accounts receivable	29	1,898
Decrease (increase) in prepaid expenses and other current assets	848	(779)
Decrease in inventories		1,445
Decrease in other assets	19	95
Decrease in accounts payable and accrued liabilities	(1,004)	(2,317)
Decrease in deferred revenue	(14)	(760)
Decrease in other liabilities	(82)	(187)
Net cash used in operating activities	(16,010)	(15,258)
Cash flows from investing activities:		
Purchase of property, plant and equipment	(235)	(881)
Maturities of short-term investment		2,245
Purchases of short-term investment	(4,000)	
Payment for license related to litigation settlement		(346)
Net cash provided by (used in) investing activities	(4,235)	1,018
Cash flows from financing activities:		
Proceeds from exercises of stock options	24	
Proceeds from purchase of common stock by employee stock purchase plan	21	100
Proceeds from private offering of common stock and common stock warrants, net of issuance costs and registration fees	19,101	
Proceeds from secured line of credit with Quest Diagnostics Incorporated	2,917	3,749
Principal payments on capital lease obligations		(13)
Repayments of long-term debt		(376)

Net cash provided by financing activities	22,063	3,460
Effect of exchange rate changes on cash and cash equivalents	(31)	66
Net increase (decrease) in cash and cash equivalents	1,787	(10,714)
Cash and cash equivalents, beginning of period	17,711	25,738
Cash and cash equivalents, end of period	$ 19,498	$ 15,024
Supplemental disclosure of cash flow information:		
Cash paid during the period for:		
Interest	$ 1,603	$ 1,595
Income taxes	197	7
Noncash investing and financing activities:		
Transfer of fixed assets to inventory	$	$ 100
Acquisition of property and equipment under capital leases		1

See accompanying notes to consolidated financial statements.

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements
(Unaudited)

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

The Company

At the annual stockholders meeting on June 29, 2007, the stockholders approved an amendment to the Certificate of Incorporation to change the name of the company from Ciphergen Biosystems, Inc. to Vermillion, Inc. (Vermillion ; Vermillion and its wholly-owned subsidiaries are collectively referred to as the Company). The name change represented the transition of the Company from its historical roots as a proteomics research products business to a specialty diagnostic testing business. On August 21, 2007, the Company amended its Certificate of Incorporation to reflect the name change.

Prior to the November 13, 2006, sale of assets and liabilities of the Company s protein research products and collaborative services business (the Instrument Business) to Bio-Rad Laboratories, Inc. (Bio-Rad), the Company developed, manufactured and sold ProteinChip Systems for life science 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 pharmaceutical companies, biotechnology companies, academic research laboratories 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. As a result of the sale of assets and liabilities of the Company s Instrument Business to Bio-Rad on November 13, 2006, the Company does not expect to generate substantial revenues until certain diagnostic tests are cleared by the United States Food and Drug Administration (the FDA) and commercialized.

Since the sale of assets and liabilities of the Company s Instrument Business to Bio-Rad, the Company has dedicated itself to the discovery, development and commercialization of specialty diagnostic tests that provide physicians with information with which to manage their patients care and to improve patient outcomes. The Company uses translational proteomics, which is the process of answering clinical questions by utilizing advanced protein separation methods, to identify and resolve variants of specific biomarkers, develop assays and commercialize diagnostic tests.

The Company has incurred significant net losses and negative cash flows from operations since inception. At September 30, 2007, the Company had an accumulated deficit of $235,850,000. After completing the private placement sale of securities on August 29, 2007, management (we , us or our) believes the Company s current availab resources will be sufficient to maintain current and planned operations through the next twelve months. The Company will, however, be required to raise additional capital at some point in the future. At such time the Company requires additional funding, the Company may seek to raise such additional funding from various 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, we may be unable to execute our business plan, the Company could be required to delay or reduce the scope of its operations, and the Company

may not be able to pay off the convertible senior notes if and when they come due.

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

Basis of Presentation

The unaudited consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) for interim financial statements and the instructions to Form 10-Q pursuant to Rule 10-01, *Interim Financial Statements*, of Regulation S-X promulgated by the Securities and Exchange Commission (the SEC). Accordingly, the unaudited consolidated financial statements do not include all of the disclosures required by GAAP for complete financial statements. The December 31, 2006, consolidated balance sheet was derived from audited consolidated financial statements, but does not include all disclosures required by GAAP. The unaudited consolidated financial statements should be read in conjunction with the audited consolidated financial statements and accompanying notes contained in the Company s Annual Report on Form 10-K for the fiscal year ended December 31, 2006, filed with the SEC on April 2, 2007.

In the opinion of management, the unaudited consolidated financial statements contain all adjustments consisting only of a normal and recurring nature, which are considered necessary for a fair presentation of the financial condition and results of operations for such periods. The accompanying unaudited consolidated financial statements include the accounts of the Company. All intercompany transactions have been eliminated in consolidation. The results of operations for the interim periods shown herein are not necessarily indicative of operating results for the entire year or any other future interim period.

Use of Estimates in Preparation of Financial Statements

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimated results.

Income Taxes

On January 1, 2007, the Company adopted Financial Accounting Standards Board (the 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 cumulative effect of adopting FIN 48 on January 1, 2007, resulted in no liability under FIN 48 on the balance sheet. There are open statutes of limitations for taxing authorities to audit the Company for federal and state jurisdictions from the year 2003 through the current period. Since the Company had a full valuation on all the deferred tax assets, FIN 48 had no impact on the Company s effective tax rate. The Company is evaluating the net operating loss carryforwards, and research and development deferred tax assets to determine whether there is a limit due to prior year ownership changes. It is possible that a portion of these deferred tax assets may be limited in their use. The Company expects to complete the studies by the end of 2007.

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 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.

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

2. Recent Accounting Pronouncements

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.

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 Diagnostics Incorporated (Quest) entered into a strategic alliance agreement, which focuses on commercializing up to three assays 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.

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 $3,000,000 for three applications that allows a licensed laboratory test to be commercialized; (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 $4,000,000 for two subsequent commercialization of diagnostic test kits. 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 September 30, 2007, and December 31, 2006,

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

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 September 30, 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.

4. Short-Term Investments

Short-term investments available-for-sale are carried at fair value based on quoted market prices. The Company has no unrealized holding gains or losses based on the market value of the auction rate preferred securities at September 30, 2007. Short-term investments available-for-sale consist of the following at September 30, 2007 (in thousands):

	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Market Value
Auction rate preferred securities	$ 4,000	$	$	$ 4,000

The scheduled maturity dates for short-term investments available for sale at September 30, 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
Auction rate preferred securities	$ 4,000	$	$	$	$ 4,000

5. Receivables from and Payables to Bio-Rad

In connection with the sale of assets and liabilities of the Company s Instrument Business on November 13, 2006, Bio-Rad withheld $2,000,000 from the sales proceeds until the issuance of a reexamination certificate confirming United States Patent No. 6,734,022 (the 022 Patent). If the United States Patent and Trademark Office (the USPTO) does not issue a reexamination certificate confirming the patentability of all of the claims as originally issued in the 022 Patent, or claims of equivalent scope, the Company will not be entitled to receive the $2,000,000 withheld by Bio-Rad. The 022 Patent is directed to a fundamental process of SELDI that involves capturing an analyte from a sample on the surface of a mass spectrometry probe derivatized with an affinity reagent, applying matrix and detecting the captured analyte by laser desorption mass spectrometry. In March 2007, the USPTO issued a final office action in the reexamination, rejecting all of the claims of the 022 Patent. Although the office action was designated final , Vermillion, under the USPTO rules, advocated the outstanding rejections and the patentability of the claimed invention with the patent examiners on March 30, 2007, and April 11, 2007. In addition, on April 18, 2007,

Vermillion filed a response to the final office action with the USPTO. On June 28, 2007, the USPTO sent to Vermillion a notice of intent to issue a reexamination certificate of the 022 Patent (see further discussion in Note 13 Subsequent Event).

Subsequent to the sale of assets and liabilities of the Company s Instrument Business to Bio-Rad on November 13, 2006, both the Company and Bio-Rad recognized business activities on behalf of each other. As of September 30, 2007, the Company owed Bio-Rad $20,000 for accounts receivable the Company collected on behalf of Bio-Rad. Similarly, Bio-Rad owed the Company $128,000, which consisted of $83,000 of invoices processed and paid by the Company on behalf of Bio-Rad and $45,000 for Bio-Rad s portion of expenses related to facilities shared by the Company. Subsequent to September 30, 2007, the Company made no payments towards the $20,000 owed to Bio-Rad, and collected $45,000 related to the $128,000 owed by Bio-Rad. 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

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

$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. Subsequent to December 31, 2006, the Company paid the $1,571,000 owed to Bio-Rad, and collected the $619,000 owed by Bio-Rad. Additionally, for the nine months ended September 30, 2007, the Company recorded a charge of $382,000 related to a post-closing adjustment resulting from the sale of assets and liabilities of the Company s Instrument Business to Bio-Rad.

Additionally, as of September 30, 2007, the Company owed Bio-Rad $192,000 for laboratory supplies. Subsequent to September 30, 2007, the Company paid $160,000 related to the $192,000 owed to Bio-Rad.

6. Warranties and Maintenance Contracts

Prior to the sale of assets and liabilities of the Company s Instrument Business to Bio-Rad on November 13, 2006, 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 were generally for 12 or 24 months, upon expiration of the initial 12-month warranty. Coverage under both the standard and extended maintenance contracts was 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 were recognized as incurred.

For the three and nine months ended September 30, 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 three and nine months ended September 30, 2006, were as follows (in thousands):

	Three Months Ended September 30, 2006	Nine Months Ended September 30, 2006
Balance at beginning of period	$ 2,748	$ 2,831
Add: Costs incurred for maintenance contracts	509	1,687
Revenue deferred for maintenance contracts	851	3,067
Less: Settlements made under maintenance contracts	(509)	(1,687)
Revenue recognized for maintenance contracts	(1,138)	(3,437)
Balance at end of period	$ 2,461	$ 2,461

7. Long-Term Debt

7.00% Convertible Senior Notes Due 2011

On November 15, 2006, the Company closed the sale of $16,500,000 of convertible senior notes due September 1, 2011 (the New 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 New Notes. Fees paid on behalf of debt holders included the fair value of two warrants issued to underwriters to purchase a total of 200,000 shares of common stock at $1.26 per share. The warrant was valued at approximately $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% volatility rate. Interest on the New 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 New Notes were sold pursuant to separate exchange and redemption agreements between the Company and each of Highbridge International LLC, Deerfield International Limited, Deerfield Partners, L.P., Bruce Funds, Inc. and

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

Professional Life & Casualty, each holders of the Company s existing 4.50% convertible senior notes due September 1, 2008 (the Old Notes), pursuant to which holders of an aggregate of $27,500,000 of the Old Notes agreed to exchange and redeem their Old Notes for an aggregate of $16,500,000 in aggregate principal amount of the New Notes and $11,000,000 in cash, plus accrued and unpaid interest on the Old 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 Old Notes were charged to expense as loss on extinguishment of debt. Offering costs and debt discount related to the New Notes will be amortized to interest expense using the effective interest method. Amortization expense in 2006 for the New Notes was $15,000.

The Company issued the New Notes pursuant to an indenture, dated November 15, 2006, between the Company and U.S. Bank National Association, as Trustee. Following the Closing, $2,500,000 in aggregate principal amount of the Old Notes remain outstanding.

The New Notes are unsecured senior indebtedness of the Company and bear interest at the rate of 7.00% per annum, which may be reduced to 4.00% per annum if the Company receives approval or clearance for commercial sale of any of its ovarian cancer tests by the FDA. Interest is payable on March 1 and September 1 of each year, commencing March 1, 2007. The effective interest rate is 7.13% per annum.

The New 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 the Company s common stock at a conversion price of $2.00 per share, equivalent to a conversion rate equal to 500 shares of common stock per $1,000 principal of the New 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 New Notes to be converted divided by $1,000 and multiplied by the applicable number of shares of common stock based upon the Company s share prices as of the change of control date. Specifically, as the New Notes approach their redemption date of September 2009, as discussed below, the make-whole payment decreases. The Company is not required to make a make-whole payment if the Company s stock price is less than $1.20 or greater than $8.00 as of the date of the change in control. The make-whole premium associated with the New Note sets a maximum additional 15,000,001 shares that may be issued on conversion (909.091 shares per $1,000 principal amount of New Notes).

If a holder converts all or any portion of their New 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 New Note so converted an amount in cash equal to the difference of (i) the amount of all interest that the Company would be required to pay on such New Note from the date of the indenture through October 31, 2008, and (ii) the amount of interest actually paid on such New Note by the Company prior to the time of conversion.

Holders of the New Notes have the option to require the Company to repurchase the New Notes under certain circumstances, including at any time after September 1, 2009, if the Company has not received approval or clearance for commercial sale of any of its ovarian cancer test by the FDA. The Company may redeem the New 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 New 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. The 8,250,000 shares that could be issued if all New Notes were converted into common stock have not been included in the calculation of loss per share, as these potential common shares are antidilutive. Upon a change of control, each holder of the New Notes may require the

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

Company to repurchase some or all of the New Notes at specified redemption prices, plus accrued and unpaid interest. The debenture contains a put option that entitles the holder to require the Company to redeem the New Note at a price equal to 105.0% of the principal balance upon a change in control of the Company.

The Company identified the guaranteed interest payment for any conversion of any New 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 New Note by a holder prior to October 31, 2008, is based upon certain factors including the Company s stock price, the time value of money and the likelihood holders would convert within the next two years. However, due to the Company s current stock price at the date of New Note issuance and through December 31, 2006, 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 New 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 the Company s common stock shares and the presence of certain anti-takeover provisions in the bylaws of the Company, 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 on December 31, 2006.

The Company and the investors entered into a registration rights agreement in which the Company agrees to make reasonable best efforts to file a shelf registration and keep it effective permitting the New Note holders to sell the New Notes or the underlying common stock shares. In the circumstance of a failed registration, the Company 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 New 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 New Notes in the aggregate.

The Company evaluated the Liquidated Damages according to guidance under FASB Staff Position No. Emerging Issues Task Force (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 account 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 December 31, 2006. Therefore a contingent liability under the registration payment arrangement was not recognized.

The New Notes and common stock issuable upon conversion of the New Notes were registered with the SEC on Form S-3 on December 15, 2006, and at December 31, 2006, all New Notes remained issued and outstanding

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

8. Commitments and Contingent Liabilities

Commitments

On November 17, 2000, the Company originally entered into a five-year research collaboration agreement with The Johns Hopkins University School of Medicine (JHU), which expired on November 30, 2005. The research collaboration agreement 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. Since the expiration on November 30, 2005, the Company had extended the research collaboration agreement with JHU on a quarterly basis. Most recently, on September 26, 2007, the Company extended the research collaboration agreement with JHU through December 31, 2007, while continuing to negotiate a renewal collaboration agreement. Under the renewal collaboration agreement, it is anticipated that Vermillion will have an obligation to provide additional noncancelable collaboration funding of $600,000 for 2007 in addition to $73,000 owed for 2006. Under an extended research collaboration agreement with an expiration date of December 31, 2006, Vermillion had an outstanding obligation to pay $305,000. Subsequently, under an extended research collaboration agreement with an expiration date of March 31, 2007, the outstanding 2006 obligation of $305,000 was reduced to $73,000 during the three months ended March 31, 2007. For the nine months ended September 30, 2007, Vermillion paid $373,000 of collaboration expenses and as of September 30, 2007, Vermillion accrued $150,000 for collaboration expenses to JHU. Collaboration costs related to this agreement were $150,000 and $218,000 for the three and nine months ended September 30, 2007, respectively, which reflects the $232,000 reduction in collaboration costs resulting from the extended collaboration agreement through September 30, 2007. Collaboration costs related to this agreement were $241,000 and $723,000 for the three and nine months ended September 30, 2006, respectively.

On September 22, 2005, the Company entered into a two year collaborative research agreement with University College London and UCL Biomedica Plc (together, UCL), which expired on September 30, 2007. The collaborative research agreement was directed at the utilization of Vermillion s suite of proteomic solutions (Deep Proteome, Pattern Track Process and ProteinChip System) 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. Additionally, Vermillion had an obligation to contribute $2,131,000 in cash and $652,000 in the form of Vermillion equipment, software, arrays and consumable supplies as mutually agreed, valued at Vermillion s list selling price, to cover part of the costs incurred by UCL specifically for this research program. $1,065,000 of the cash obligation was to be paid in the first year of the agreement and is noncancelable. The remaining $1,066,000 was to be paid in the second year of the agreement and was cancelable with three months advance notice. As of September 30, 2007, the Company had made cash contributions of $1,603,000 and accrued $567,000 related to this agreement. Additionally, the Company provided at its cost $112,000, or $546,000 valued at Vermillion s list selling price, of equipment, software, arrays and consumable supplies. Collaboration costs, which are included in research and development expenses, related to this agreement were $285,000 and $832,000 for the three and nine months ended September 30, 2007, respectively, and $272,000 and $798,000 for the three and nine months ended September 30, 2006, respectively.

On October 4, 2006, the Company 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 terms of the agreement,

Vermillion will have exclusive rights to license discoveries made during the course of this collaboration. Vermillion will contribute 45,000 or $61,000 per year to fund sample collection at the Katholieke Universiteit Leuven from patients undergoing evaluation of a persistent pelvic mass who will undergo surgical intervention. The first year contribution of 45,000 or $61,000 is noncancelable. As of September 30, 2007, the Company has paid $61,000 related to this agreement. Collaboration costs related to

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

this agreement were $15,000 and $61,000 for the three and nine months ended September 30, 2007, respectively.

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 (OSURF) 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 will pay a total of $150,000 in noncancelable financial contributions to OSURF in consideration for costs incurred specifically for this research program. There is no financial contribution obligation for the remaining initial term of the agreement. As of September 30, 2007, the Company has paid $94,000 and accrued $34,000 related to this agreement. Collaboration costs related to this agreement were $90,000 for the nine months ended September 30, 2007. The Company did not incur collaboration costs related to this agreement during the three months ended September 30, 2007.

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 will collect whole blood specimens from up to 1,000 research subjects for the purposes of Vermillion s whole blood collection protocol for its OvaRI Assay clinical trial. The amended agreement provides 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 September 30, 2007, Vermillion has paid a total of $1,103,000, including travel expenses of $50,000, and accrued $329,000 related to this amended agreement. These costs, which are included in research and development expenses, related to this agreement were $488,000 and $1,288,000 for the three and nine months ended September 30, 2007, 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 our 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 September 30, 2007, Vermillion has paid $20,000 related to the execution of this agreement.

In conjunction with the sale of assets and liabilities of the Company s Instrument Business on November 13, 2006, Vermillion also entered into a manufacture and supply agreement with Bio-Rad. 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 cost to be $63,000 per system and $20 per array. As of September 30, 2007, the Company had purchased and expensed $212,000 of arrays.

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

Contingent Liabilities

On September 17, 2007, Vermillion was served with a complaint filed in the Superior Court of California for the County of Santa Clara naming Vermillion and Bio-Rad as defendants and Molecular Analytical Systems (MAS) as plaintiff. The complaint 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 sale of assets and liabilities of the Company s Instrument Business to Bio-Rad, 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. Given the early stage of this action, we cannot predict the ultimate outcome of this matter at this time.

On June 26, 2006, Health Discovery Corporation 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 of Vermillion s ProteinChip Systems infringes on three of its United States patents. Health Discovery Corporation 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 Health Discovery Corporation (the HDC Agreement) pursuant to which it licensed more than 25 patents covering Health Discovery Corporation s support vector machine technology for use with 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 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 $200,000 to Health Discovery Corporation upon entry into the agreement on July 10, 2007. The remaining $400,000 under the HDC agreement is payable as follows: $100,000 three months following the date of the agreement, $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 nine months ended September 30, 2007. The HDC Agreement settles all disputes between Vermillion and Health Discovery Corporation.

9. Common Stock

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.

Private Placement Sale

On August 29, 2007 (the Closing Date), Vermillion completed a private placement sale of 24,513,092 shares of its common stock and warrants to purchase up to an additional 19,610,470 shares of its common stock with an exercise price of $0.925 per share and expiration date of August 29, 2012, to a group of new and existing investors for $20,591,000 in gross proceeds. The net proceeds of the transaction will be used for general working capital needs. Existing investors included affiliates of the Company, who purchased 9,642,856 shares of common stock and warrants to purchase up to an additional 7,714,284 shares of common

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

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 $3.50 per share to $2.50 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 921,000 shares of Vermillion s common stock with an exercise price of $0.925 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. 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	0.00%	0.00%
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, and is currently under review by the SEC. The Company considers the likelihood of the Registration Statement not being declared effective within the prescribed timeframe and 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

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

payment arrangement. As of September 30, 2007, the Company has incurred costs of $290,000 in connection with the registration of these securities, which is reflected as a reduction to additional paid-in capital.

NASDAQ Listing Requirements Compliance Notification

On August 15, 2007, Vermillion was notified by NASDAQ Listing Qualifications that it did not comply with Marketplace Rule 4310(c)(3) for continue inclusion, and as required by Marketplace Rule 4310(c)(8)(C), Vermillion had 30 days, or until September 14, 2007, to regain compliance. Marketplace Rule 4310(c)(3) requires Vermillion 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. Subsequently, on September 14, 2007, NASDAQ Listing Qualifications notified Vermillion it had regained compliance with Marketplace Rule 4310(c)(3) with the market value of Vermillion common stock exceeding $35,000,000 for 10 consecutive business days

Additionally, on September 6, 2007, Vermillion was notified by NASDAQ Listing Qualifications that Vermillion s 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), Vermillion had 180 days, or until March 4, 2008, to regain compliance. To regain compliance, the bid price of Vermillion s common stock must close at $1.00 per share or more for a minimum of 10 consecutive business days.

10. Stock-Based Compensation

Options for 233,500 shares were granted with an exercise price of $1.02, and options for 1,667,700 shares were granted with an average exercise price of $1.26 during the three and nine months ended September 30, 2007, respectively. The allocation of stock-based compensation expense by functional area for the three and nine months ended September 30, 2007 and 2006, was as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2007	2006	2007	2006
Cost of products revenue	$	$ 46	$ 1	$ 140
Research and development	52	79	129	273
Sales and marketing	20	66	66	252
General and administrative	166	223	488	673
Total	$ 238	$ 414	$ 684	$ 1,338

11. Loss Per Share

Basic loss per share is calculated using the weighted average number of common shares outstanding during the period. Because the Company is in a net loss position, diluted loss per share is calculated using the weighted average number of common shares outstanding and excludes the effects of 37,440,001 and 12,173,606 potential common shares as of September 30, 2007 and 2006, respectively, that are antidilutive. Potential common shares include common shares issuable upon conversion of all convertible senior notes, common stock issuable under the Company s 2000 Employee Stock Purchase Plan, and incremental shares of common stock issuable upon the exercise of outstanding stock options and warrants.

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Vermillion, Inc. and Subsidiaries

Notes to Consolidated Financial Statements (Continued)

12. Segment Information and Geographic Data

As a result of the sale of assets and liabilities of the Company s Instrument Business to Bio-Rad on November 13, 2006, management has determined that the Company operates one reportable segment, specialty diagnostic tests. Prior to November 13, 2006, the Company operated one reportable segment, which was the protein research products and collaborative services business.

Prior to November 13, 2006, the Company sold most of its products and services directly to customers in North America, Western Europe and Japan, and through distributors in other parts of Europe, 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 three and nine months ended September 30, 2007 and 2006 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2007	2006	2007	2006
United States	$	$ 1,393	$ 21	$ 4,706
Canada		300		926
Europe		1,652		6,651
Asia-Pacific		1,317		4,716
Total	$	$ 4,662	$ 21	$ 16,999

Sales to customers in Japan represented 25.1% and 24.0% of revenue for the three and nine months ended September 30, 2006. Additionally, sales to customers in the United Kingdom represented 7.7% and 10.3% of revenue for the three and nine months ended September 30, 2006. No other country outside the United States accounted for 10% or more of total revenue during these periods.

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 September 30, 2007, and December 31, 2006, were as follows (in thousands):

	September 30, 2007	December 31, 2006
United States	$ 1,607	$ 2,244
Europe	6	16
Total	$ 1,613	$ 2,260

13. Subsequent Event

On October 23, 2007, the USPTO issued a reexamination certificate of the 022 Patent to Vermillion. Accordingly, the Company has submitted the 022 Patent reexamination certificate to Bio-Rad in order to claim the $2,000,000 withheld from the sales proceeds. On November 9, 2007, the Company received from Bio-Rad the $2,000,000 withheld from the sales proceeds.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders
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. (formerly known as Ciphergen Biosystems, Inc.) and its subsidiaries at December 31, 2006 and 2005, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2006 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements and financial statement schedule 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 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.

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for stock-based compensation in 2006.

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, CA
April 2, 2007

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VERMILLION, INC.

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2006	2005
	(In thousands, except share and per share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 17,711	$ 25,738
Short-term investment		2,240
Accounts receivable, net of allowance for doubtful accounts of $2 and $238 respectively	29	5,828
Prepaid expenses and other current assets	2,300	1,746
Inventories		5,594
Total current assets	20,040	41,146
Property, plant and equipment, net	2,260	7,320
Goodwill		76
Other intangible assets, net		2,417
Other long-term assets	716	1,852
Total assets	$ 23,016	$ 52,811
LIABILITIES AND STOCKHOLDERS (DEFICIT) EQUITY		
Current liabilities:		
Accounts payable	$ 2,401	$ 3,188
Accrued liabilities	4,600	6,298
Deferred revenue	45	4,132
Current portion of capital lease obligations		21
Current portion of equipment financing loan		377
Total current liabilities	7,046	14,016
Deferred revenue		508
Capital lease obligations, net of current portion		28
Long-term debt owed to a related party	7,083	2,500
Convertible senior notes, net of discount	18,428	28,586
Other long term liabilities	360	650
Total liabilities	32,916	46,288
Stockholders (deficit) equity:		
Common stock, $0.001 par value Authorized: 80,000,000 shares at December 31, 2006 and 2005	39	36

Issued and outstanding: 39,220,437 shares and 35,998,881 shares at December 31, 2006 and 2005 respectively		
Additional paid-in capital	207,991	202,485
Accumulated other comprehensive loss	(71)	(204)
Accumulated deficit	(217,860)	(195,794)
Total stockholders (deficit) equity	(9,901)	6,523
Total liabilities and stockholders (deficit) equity	$ 23,016	$ 52,811

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

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VERMILLION, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2006	2005	2004
	(In thousands, except per share data)		
Revenue:			
Products	$ 11,292	$ 18,350	$ 31,378
Services	6,923	8,896	8,803
Total revenue	18,215	27,246	40,181
Cost of revenue:			
Products	5,818	9,372	11,199
Services	3,520	4,321	3,876
Total cost of revenue	9,338	13,693	15,075
Gross profit	8,877	13,553	25,106
Operating expenses:			
Research and development	11,474	13,196	19,268
Sales and marketing	12,568	18,009	26,019
General and administrative	10,661	14,404	14,136
Goodwill Impairment		2,453	
Total operating expenses	34,703	48,062	59,423
Gain on sale of instrument business	(6,929)		
Loss from operations	(18,897)	(34,509)	(34,317)
Interest income	843	839	505
Interest expense	(2,254)	(1,993)	(2,001)
Loss on extinguishment of debt	(1,481)		
Other expense, net	(125)	(717)	(649)
Loss from continuing operations before income taxes	(21,914)	(36,380)	(36,462)
Income tax provision from continuing operations	152	7	109
Net loss from continuing operations	(22,066)	(36,387)	(36,571)
Discontinued operations:			
Loss from discontinued operations, net of tax			(1,797)
Gain from sale of discontinued operations, net of tax		954	18,527

Net income from discontinued operations		954	16,730
Net loss	$ (22,066)	$ (35,433)	(19,841)
Net income (loss) per share, basic and diluted:			
Net loss per share from continuing operations	$ (0.61)	$ (1.13)	$ (1.25)
Net income per share from discontinued operations		0.03	0.57
Net loss per share	$ (0.61)	$ (1.10)	$ (0.68)
Shares used in computing net income (loss) per share	36,465	32,321	29,244

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

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VERMILLION, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS (DEFICIT) EQUITY

	Shares	Amount	Additional Paid-In Capital	Notes Receivable Rom Stockholders	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total
				(In thousands)				
Balances, January 1, 2004	29,080	$ 29	$ 186,043	$ (1,093)	$ (725)	$ 4,158	$ (140,520)	$ 47,892
Comprehensive loss:								
Net loss							(19,841)	(19,841)
Change in unrealized loss on marketable securities						7		7
Foreign currency translation adjustment						829		829
Foreign currency translation gain realized upon sale of BioSepra						(4,731)		(4,731)
Total comprehensive loss								(23,736)
Stock options exercised	88		329					329
Sale of common stock under employee stock purchase plan	306		887					887
Repurchase of common stock	(1)		(3)					(3)
Deferred stock-based compensation			(123)		123			
Amortization of deferred stock-based compensation					602			602
Repayment of notes receivable from stockholders				744				744
Balances, December 31, 2004	29,473	29	187,133	(349)		263	(160,361)	26,715
Comprehensive loss:								
Net loss							(35,433)	(35,433)
Foreign currency translation adjustment						(467)		(467)
Total comprehensive loss								(35,900)
Stock options exercised	12		14					14
Sale of common stock under employee stock	264	1	335					336

purchase plan								
Sale of stock and warrant to Quest Diagnostics	6,225	6	14,948					14,954
Issuance of common stock to Company officer	25		55					55
Repayment of notes receivable from stockholders				349				349
Balances, December 31, 2005	35,999	36	202,485			(204)	(195,794)	6,523
Comprehensive loss:								
Net Loss							(22,066)	(22,066)
Foreign currency translation adjustment						133		133
Total comprehensive loss								(21,933)
Stock options exercised	25		12					12
Sale of common stock under employee stock purchase plan	110		131					131
Warrants issued to Oppenheimer			140					140
Sale of common stock to Bio-Rad	3,086	3	3,608					3,611
Stock-based compensation			1,615					1,615
Balances, December 31, 2006	39,220	$ 39	$ 207,991	$	$	$ (71)	$ (217,860)	$ (9,901)

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

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VERMILLION, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2006	2005	2004
	(In thousands)		
Cash flows from operating activities:			
Net loss	$ (22,066)	$ (35,433)	$ (19,841)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	4,082	5,463	6,960
Goodwill impairment		2,453	
Stock-based compensation expense related to employee stock options and ESPP	1,615		
Deferred stock-based compensation expense			602
Common stock issued to Company officer as compensation		55	
Loss on extinguishment of debt	1,481		
Amortization of debt discount associated with beneficial conversion feature of convertible senior notes	488	535	536
Amortization of debt issuance costs	332	373	373
Accrued investment income	(5)	(65)	(64)
Interest accrued on notes receivable from related parties		(6)	(66)
Loss on retirement of fixed assets	35	242	208
Provision for bad debts	66	25	214
Losses on write-down of inventory	130	594	1,843
Gain from sale of instrument business to Bio-Rad	(6,929)		
Gain from sale of BioSepra business		(954)	(18,527)
Changes in operating assets and liabilities, net of assets sold and liabilities relieved:			
Accounts receivable	3,207	4,729	2,267
Prepaid expenses and other current assets	(647)	193	572
Inventories	136	900	(4,949)
Other long-term assets	145	(43)	(10)
Accounts payable and accrued liabilities	(1,075)	(257)	(2,827)
Deferred revenue	(1,174)	(1,702)	4
Other long-term liabilities	(260)	1	247
Net cash used in operating activities	(20,439)	(22,897)	(32,458)
Cash flows from investing activities:			
Purchase of property, plant and equipment	(589)	(2,837)	(4,568)
Proceeds from capital lease financing to reimburse previous cash outlays to purchase facility improvements			601
Maturities of short-term investments	2,245		11,261
Short-term investments sold prior to maturity			850
Payment for license related to litigation settlement	(346)	(587)	(1,038)
		(1,111)	

Payment to Pall Corporation for post-closing adjustments related to sale of BioSepra business			
Increase in goodwill from BioSepra acquisition due to income tax settlement			(203)
Purchase of Ciphergen Biosystems KK common stock			(1,000)
Proceeds from the sale of instrument business to Bio-Rad, net of transaction costs	15,218		
Proceeds from sale of BioSepra business, net of transaction costs		1,021	28,055
Net cash provided by (used in) investing activities	16,528	(3,514)	33,958
Cash flows from financing activities:			
Sale of common stock to Bio-Rad	3,000		
Issuance of common stock to Quest Diagnostics		14,954	
Proceeds from loan from Quest Diagnostics	4,583	2,500	
Repurchase of common stock			(3)
Proceeds from exercises of stock options	12	14	329
Proceeds from issuance of common stock under employee stock purchase plan	130	336	887
Repayment of notes receivables from stockholder		349	744
Principal payments on capital lease obligations	(37)	(24)	(376)
Debt discount and issuance costs of convertible senior notes	(479)		
Repayments of convertible senior notes	(11,000)		
Repayments of long-term debt	(377)	(925)	(789)
Net cash provided by (used in) financing activities	(4,168)	17,204	792
Effect of exchange rate changes	52	(447)	247
Net increase (decrease) in cash and cash equivalents	(8,027)	(9,654)	2,539
Cash and cash equivalents, beginning of year	25,738	35,392	32,853
Cash and cash equivalents, end of year	$ 17,711	$ 25,738	35,392
Supplemental cash flow information:			
Cash paid for interest	$ 1,732	$ 783	1,593
Cash paid for income taxes	227	44	2,135
Supplemental schedule of non-cash investing and financing activities:			
Acquisition of property and equipment under capital leases		40	21
Transfer of fixed assets to (from) inventory	(793)	283	446

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

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Summary of Significant Accounting Policies

The Company

Vermillion, Inc. (formerly known as Ciphergen Biosystems, Inc.) and subsidiaries (the Company or Vermillion) is dedicated to the discovery, development and commercialization of specialty diagnostic tests that provide physicians with information with which to manage their patients care and that improve patient outcomes. We intend to use translational proteomics, which is the process of answering clinical questions by utilizing advanced protein separation tools to identify and resolve variants of specific biomarkers, developing assays, and commercializing tests.

Prior to the November 13, 2006 sale of our protein research tools and collaborative services business (instrument business) to Bio-Rad, Vermillion developed, manufactured and sold ProteinChip® Systems for life science research. This core technology, which was patented, is 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. As a result of the sale of the instruments business to Bio-Rad, Vermillion did not record any sales subsequent to November 13, 2006 and will not generate substantial revenues until certain diagnostic tests are approved by the FDA and commercialized.

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, 2006, the Company had an accumulated deficit of $217.9 million. Management believes that currently available resources together with existing debt facilities 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 sources, including the public equity market, private financings, sales of assets, collaborative arrangements and debt. If additional capital is raised through the issuance of 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, it 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 Vermillion is unable to obtain financing on acceptable terms, it may be unable to execute its business plan, it 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, its reliance on external funding either from loans or equity, raise substantial doubt about the Company s ability to continue as a going concern.

Basis of Presentation

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America and include the accounts of the Company and its subsidiaries. All intercompany transactions have been eliminated in consolidation. BioSepra S.A. was a wholly-owned subsidiary and was consolidated through November 30, 2004, at which time the Company sold

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

BioSepra S.A., along with other assets related to its process chromatography business. The BioSepra business is reflected as a discontinued operation in the statement of operations.

Use of Estimates

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

Certain Risks and Uncertainties

The success of the Company depends on management s ability to anticipate and to respond quickly and adequately to technological developments in its industry, changes in customer requirements and changes in industry standards. Any significant delays in the development or introduction of new products or services could have a material adverse effect on the Company s business and operating results.

The Company licenses certain technologies that will be used in products that are under development. An inability to retain such technology licenses could result in a material adverse effect to the Company. Additionally, some of the raw materials and components used in its products are from single-source suppliers. If the Company is unable to obtain such raw materials and components, its financial condition and operating results could be significantly impacted.

Cash and Cash Equivalents

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

Investments

Management determines the appropriate classification of the Company s investments in marketable debt securities at the time of purchase, and re-evaluates this designation at each balance sheet date. At December 31, 2005, the Company classified all marketable securities as available-for-sale and carried them at fair value with unrealized gains or losses related to these securities included as a component of other comprehensive income (loss) until realized. At December 31, 2006, the Company did not have any investments in marketable debt securities. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income. Realized gains and losses are determined using the specific identification method. The cost of securities sold is based on the specific identification method.

The Company s short-term investment at December 31, 2005 consisted of an investment in a fixed rate annuity. The annuity is not within the scope of SFAS 115, Accounting for Certain Investments in Debt and Equity Securities. However, fair value approximates its carrying value due to its short maturity. In February 2006, the Company liquidated this investment.

The Company s investment objectives include the preservation of invested funds and liquidity of investments that is sufficient to meet cash flow requirements. Cash, cash equivalents and investments in debt securities are with high credit-quality financial institutions, commercial companies and government agencies in order to limit the amount of credit exposure.

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Fair Value of Financial Instruments

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/orestimation methodologies may be material to the estimated fair value amounts. The carrying amounts of certain of the Company s financial instruments including cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximated fair value due to their short maturities. The carrying value of the capital leases approximated their fair value based on the borrowing rates currently available to the Company for loans with similar terms. The carrying value of the equipment financing loan and the long-term debt from the credit facility provided by Quest Diagnostics approximated their fair values based on discounting the future cash flows using applicable spreads to approximate current interest rates available to the Company. Convertible senior notes have an estimated fair value based on quoted market prices. The fair value of the convertible senior notes as compared to their book value was as follows (in thousands):

	December 31, 2006		December 31, 2005	
	Book Value	Fair Value	Book Value	Fair Value
4.5% Convertible senior notes due 9/1/08	$ 2,427	$ 1,456	$ 28,586	$ 21,600
7.0% Convertible senior notes due 9/1/11	$ 16,001	$ 13,201	$	$
	$ 18,428	$ 14,657	$ 28,586	$ 21,600

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 debt securities and accounts receivable. Most of the Company s cash and cash equivalents as of December 31, 2006 were deposited with financial institutions in the U.S. and exceeded federally insured amounts. The Company also maintains cash deposits with banks in Western Europe, Canada, China and Japan. The Company has not experienced any losses on its deposits of cash and cash equivalents. At December 31, 2006, the Company did not have any investments in marketable debt securities. At December 31, 2005, the Company had $2.2 million of investments in marketable debt securities.

The Company s accounts receivable are derived from sales made to customers located in North America, Europe and Asia. 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 collectibility of accounts receivable. No customer accounted for 10% or more of revenue in 2004, 2005 or 2006.

Inventories

Inventories are 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. Depreciation and amortization are computed for financial reporting purposes principally using the straight-line

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

method over the following estimated useful lives: machinery and equipment, 3-5 years; demonstration equipment, 2 years; computer equipment, development systems used for collaborations and software, 3 years; furniture and fixtures, 5 years; buildings and leasehold improvements, the lesser of their economic life or the term of the underlying lease. The cost of repairs and maintenance is charged to operations as incurred. Gains and losses resulting from disposals of assets are reflected in the year of disposition.

Goodwill and Other Intangible Assets

Goodwill represented the excess of the purchase price over the estimated fair value of the tangible and intangible net assets acquired in the Company s acquisitions of IllumeSys Pacific, Inc. in 1997, Ciphergen Technologies, Inc. in 1998 and Ciphergen Biosystems KK in 2002 and 2004. Goodwill is reviewed for impairment at least annually and in the interim whenever events or changes in circumstances indicate that the carrying amount of goodwill may be impaired. In determining whether there is an impairment of goodwill, the estimated fair value of the reporting unit in which the goodwill is recorded is calculated using a discounted future cash flow method. The resulting fair value is then compared to the net book value of the reporting unit, including goodwill. If the net book value of a reporting unit exceeds its fair value, the amount of the impairment loss is measured by comparing the implied fair value of the reporting unit s goodwill with the 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. In connection with the November 13, 2006 sale of the instrument business to Bio-Rad, the remaining carrying amount of goodwill of $76,000 was written off.

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. In connection with the November 13, 2006 sale of the instrument business, there are no longer any intangible assets recorded on our balance sheet as the intangible assets were associated with the instrument business sold to Bio-Rad.

Long-lived Assets

Long-lived assets, such as property, plant and equipment and purchased intangible assets, are reviewed for impairment when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Recoverability is measured by comparison of an asset group s carrying amount to future net undiscounted cash flows the asset group is expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the projected discounted future net cash flows arising from the assets. As of December 31, 2006, the Company believes no such impairment existed. Other long-term assets consist primarily of the offering costs of the convertible senior notes and security deposits for the Company s leased facilities.

Revenue Recognition

Revenue from product sales, including systems, accessories and consumables is recognized upon product shipment, provided no significant obligations remain and collection of the receivables was reasonably assured. Revenue from shipping and handling is generally recognized upon product shipment, based on the amount billed to customers for

shipping and handling. The related cost of shipping and handling is included in cost of revenue upon product shipment.

Revenue from sales of separately priced software products is recognized when realized or realizable and earned, which is when the following criteria are met:

persuasive evidence of an agreement exists,

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

the price is fixed or determinable,

the product has been delivered,

no significant obligations remain, and

collection of the receivable is deemed probable.

The Company generally includes 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 is 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. In connection with the November 13, 2006 sale of the instrument business, Bio-Rad assumed the rights and obligations under the warranty obligation and maintenance contracts.

For revenue from Biomarker Discovery Center contracts and other consulting contracts, if elements were specifically tied to a separate earnings process, then revenue related to an element was recognized when the specific performance obligation associated with that element was completed. When revenues for an element were not specifically tied to a separate earnings process, they were recognized ratably over the term of the agreement. Revenue from Biomarker Discovery Center services and other consulting contracts were recognized at the completion of key stages in the performance of the service as described in Vermillion s agreement with the customer. Often there was only a single element, namely delivery of a scientific report upon completion of Vermillion s analysis of customer samples, in which case the Company recognized all the revenue upon the conclusion of the project when all deliverables have been provided to the customer. Revenue was deferred for fees received before earned. Vermillion s training was billed based on published course fees and the Company generally recognizes revenue as the training is provided to the customer. BioMarker Discovery contracts and other consulting contracts were transferred to Bio-Rad as part of the sale of the instrument business.

For revenue arrangements with multiple elements that are delivered at different points in time (for example, where Vermillion has delivered the hardware and software but is also obligated to provide services, maintenance and/or training), the Company evaluated whether the delivered elements have 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 recognizes revenue on the delivered elements. If any one of these conditions is 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 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 expenditures are charged to operations 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 consultants and outside service providers. 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.

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Advertising Costs

The Company expenses advertising costs as incurred. Advertising costs were $87,000 in 2006, $285,000 in 2005, and $665,000 in 2004.

Stock-based Compensation

Effective January 1, 2006, the Company adopted SFAS No. 123 (revised), Share-Based Payment (SFAS 123(R)), using the modified prospective transition method. Under this new standard, the Company s estimate of compensation expense requires a number of complex and subjective assumptions, including the price volatility of Vermillion s common stock, employee exercise patterns (expected life of the options), future forfeitures and related tax effects. Prior to the adoption of SFAS 123(R), the Company accounted for stock option grants using the intrinsic value method, in accordance with APB Opinion No. 25, Accounting for Stock Issued to Employees (APB 25), and accordingly, recognized no compensation expense for stock option grants.

Under the modified prospective approach, SFAS 123(R) applies to new awards and to awards that were outstanding on January 1, 2006 that are subsequently modified, repurchased or cancelled. Under the modified prospective approach, compensation cost recognized in 2006 includes compensation cost for all stock-based payments 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 123, and compensation cost for all stock-based payments granted subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS 123(R). Prior periods were not restated to reflect the impact of adopting the new standard.

The value of each option grant was estimated on the date of grant using the Black-Scholes option pricing model in 2006, 2005 and 2004 with the following weighted assumptions:

	Stock Option Plan			Employee Stock Purchase Plan		
	2006	**2005**	**2004**	**2006**	**2005**	**2004**
Assumptions:						
Risk-free interest rate	4.8%	4.1%	3.2%	5.0%	3.5%	1.9%
Expected life	6.1 years	5 years	5 years	0.5 year	0.5 year	0.5 year
Expected volatility	86%	90%	93%	85%	90%	93%
Expected dividend yield						
Weighted average fair values:						
Exercise price less than market price	$	$	$	$ 0.63	$ 0.71	$ 1.43
Exercise price equal to market price	$ 0.90	$ 1.21	$ 5.56	$	$	$
Exercise price greater than market price	$	$	$	$	$	$

The expected term of stock options represents the weighted-average period the stock options are expected to remain outstanding and is based on the observed and expected time to post-vesting exercise and post-vesting cancellations of options by employees. Upon the adoption of SFAS 123(R), 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 123(R) and SAB No. 107. Prior to January 1, 2006, the Company used the historical volatility. The selection of the blended volatility approach was based upon the Company s assessment that blended volatility is more representative of future stock price trends than just using historical or peer group volatility. The risk-free interest rate assumption is based upon observed interest rates appropriate for the term

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

of the Company s stock options. The expected dividend assumption is based on the Company s history and expectation of dividend payouts.

The stock-based compensation expense recognized in the consolidated statements of operations for the year ended December 31, 2006 is based on awards ultimately expected to vest and has been reduced for estimated forfeitures. SFAS 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures were estimated based on historical experience. In the Company s pro forma information required under SFAS 123(R)for the periods prior to January 1, 2006, the Company accounted for forfeitures as they occurred.

As a result of adopting SFAS 123(R), the Company s net loss, and basic and diluted loss per share for the year ended December 31, 2006 would have been $1.6 million and $0.04 per share higher, respectively, than if it had continued to account for stock-based compensation under APB Opinion No. 25. The Company has a 100% valuation allowance recorded against its deferred tax assets. Therefore SFAS 123(R) had no effect on the income tax provision in the consolidated statement of operations or the consolidated statement of cash flows. Stock-based compensation expense by type of award for the years ended December 31, 2006, 2005 and 2004 are as follows (in thousands):

	Years Ended December 31,		
	2006	2005	2004
Stock-based compensation expense by type of award:			
Employee stock options & employee stock purchases	$ 1,615	$	$
Amortization of deferred stock-based compensation			602
Total stock-based compensation	$ 1,615	$	$ 602

Prior to 2006, the Company accounted for its stock-based employee compensation arrangements using the intrinsic value method of accounting. 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. The following table illustrates the effect on the Company s net loss and net loss per share had compensation expense for stock-based compensation been determined in accordance with SFAS 123 for these prior periods as follows (in thousands, except per share amounts):

	2005	2004
Net loss as reported	$ (35,433)	$ (19,841)
Add: Employee stock-based compensation expense in reported net income, net of tax		621
Less: Employee stock-based compensation expense determined under the fair value method, net of tax	(5,725)	(6,369)

Pro forma net loss	$ (41,158)	$ (25,589)
Basic and diluted net loss per share:		
As reported	$ (1.10)	$ (0.68)
Pro forma	$ (1.27)	$ (0.88)

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 enacted tax rates in effect for the year in which the differences are expected to

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

affect taxable income. A valuation allowance is established when necessary to reduce deferred tax assets to the amounts expected to be realized.

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 U.S. 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 directly into a separate component of stockholders equity under the caption Accumulated other comprehensive loss.

The functional currency of BioSepra S.A. was the Euro. Upon the completion of the sale of BioSepra on November 30, 2004, the cumulative translation adjustment relating to BioSepra was included in the determination of the gain on the sale.

The functional currency of all other non-U.S. operations is the U.S. dollar. Accordingly, all monetary assets and liabilities of these foreign operations are translated into U.S. 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 U.S. 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 or loss in the statement of operations, and were not material for all years presented.

Recent Accounting Pronouncements

In July 2006, the FASB issued FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes an Interpretation of FASB Statement No. 109 (FIN 48), which clarifies the accounting for uncertainty in tax positions. This Interpretation requires that we recognize in our financial statements the impact of a tax position if that position is more likely than not of being sustained on audit, based on the technical merits of the position. The provisions of FIN 48 are effective as of the beginning of The Company s 2007 fiscal year, with the cumulative effect, if any, of the change in accounting principle recorded as an adjustment to opening retained earnings. The Company is currently evaluating the impact of adopting FIN 48 on its consolidated financial statements.

In September 2006, the FASB issued SFAS No. 157, Fair Value Measurements (SFAS 157). SFAS 157 defines fair value, establishes a framework for measuring fair value in accordance with generally accepted accounting principles and expands disclosures about fair value measurements. The provisions of SFAS 157 are effective for fiscal years beginning after November 15, 2007. The Company is currently evaluating the impact, if any, of the adoption of SFAS 157 will have on its consolidated financial statements.

In September 2006, the SEC issued Staff Accounting Bulletin No. 108 (SAB 108) in order to eliminate the diversity of practice surrounding how public companies quantify financial statement misstatements. Traditionally, there have been two widely-recognized methods for quantifying the effects of financial statement misstatements: the roll-over method and the iron curtain method. The roll-over method focuses primarily on the impact of a misstatement on the income statement, including the reversing effect of prior period misstatements; but its use can lead to the accumulation of misstatements in the balance sheet. The iron-curtain method, on the other hand, focuses primarily on the effect of

correcting the period-end balance sheet with less emphasis on the reversing effects of prior period errors on the income statement. The Company currently uses the iron-curtain method for quantifying identified financial statement misstatements. In SAB 108, the SEC staff established an approach that requires quantification of financial statement misstatements based on the effects of the misstatements on each of our financial statements and the related financial statement disclosures. This model is commonly referred to as a dual approach because it requires

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

quantification of errors under both the iron curtain and the roll-over methods. SAB 108 permits existing public companies to initially apply its provisions either by (i) restating prior financial statements as if the dual approach had always been used or (ii) recording the cumulative effect of initially applying the dual approach as adjustments to the carrying values of assets and liabilities as of the beginning of the current fiscal year with an offsetting adjustment to the opening balance of retained earnings in the year of adoption. Use of the cumulative effect transition method requires detailed disclosure of the nature and amount of each individual error being corrected through the cumulative adjustment and how and when it arose. The provisions of SAB 108 must be applied to annual financial statements no later than the first fiscal year ending after November 15, 2006. Upon adoption, there was no impact on the Company s consolidated financial statements or related disclosures.

2. Strategic Alliance with Quest Diagnostics

On July 22, 2005, the Company entered into a strategic alliance agreement with Quest Diagnostics covering a three year period during which the parties will strive to develop and commercialize up to three diagnostic tests. Pursuant to the agreement, Quest Diagnostics will have the non-exclusive right to commercialize these tests on a worldwide basis, with exclusive commercialization rights in territories where Quest Diagnostics 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 Diagnostics will pay royalties to Vermillion based on fees earned by Quest Diagnostics for applicable diagnostics services, and Vermillion will pay royalties to Quest Diagnostics based on Vermillion s revenue from applicable diagnostics products. To date, no such royalties have been earned by either party. Quest Diagnostics and Vermillion have also entered into a supply agreement under which Vermillion will sell instruments and consumable supplies to Quest Diagnostics to be used for performing diagnostics services which Vermillion will purchase from Bio-Rad under its manufacturing and supply agreement (see Note 12, Commitments and Contingencies). In addition, for an aggregate purchase price of $15 million, Quest Diagnostics purchased 6,225,000 shares of Vermillion s common stock, or approximately 17.4% of shares outstanding after the transaction, and a warrant having a term of five years to purchase up to an additional 2,200,000 shares for $3.50 per share. The warrant was valued at approximately $2.2 million based on the fair value as determined by a Black-Scholes model using the following assumptions: risk-free interest rate, 4.04%; expected life, 5 years; expected volatility 69%. Quest Diagnostics also agreed to loan Vermillion up to $10 million with interest accrued at the prime rate plus 0.5% and paid monthly, solely to fund certain development activities related to the strategic alliance. Borrowings may be made by Vermillion in monthly increments of up to approximately $417,000 on the last day of each month during the first two years of the strategic alliance, and at December 31, 2006, such borrowings amounted to $7.1 million. This loan, collateralized by certain intellectual property of Vermillion, will be forgiven based on Vermillion s achievement of certain milestones related to development, regulatory approval and commercialization of certain diagnostic tests. Should the Company fail to achieve these milestones, the outstanding principal amount of any such loans will become due and payable on July 22, 2010. From the inception of the strategic alliance through December 31, 2006, the Company had spent approximately $7.1 million of the loan proceeds on in-house research and development, as well as collaborations with others, directed towards achieving the milestones.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. Inventories, Net (in thousands)

	December 31, 2006	2005
Raw materials	$	$ 1,775
Work in progress		1,241
Finished goods		2,578
	$	$ 5,594

As a result of the sale of the instrument business to Bio-Rad, the company has no inventory as of December 31, 2006.

4. Property, Plant and Equipment, Net (in thousands)

	December 31, 2006	2005
Machinery and equipment	$ 3,853	$ 11,760
Demonstration equipment	649	3,505
Leasehold improvements	2,753	3,669
Computers and equipment	720	1,778
Furniture and fixtures	197	827
	8,172	21,539
Less: Accumulated depreciation and amortization	(5,912)	(14,219)
	$ 2,260	$ 7,320

Property, plant and equipment included $0 and $183 of machinery and equipment under capital leases at December 31, 2006 and 2005, respectively. Accumulated amortization of assets under capital leases totaled $0 and $136 at December 31, 2006 and 2005, respectively.

The Company had no construction in progress at December 31, 2006 and 2005.

Depreciation expense for property, plant and equipment was $3,175 in 2006, $4,253 in 2005, and $4,741 in 2004.

5. Purchase of Additional Ownership Interest in Ciphergen Biosystems KK

In January 1999, the Company formed Ciphergen Biosystems KK as a joint venture with Sumitomo Corporation to distribute the Company s products in Japan. On March 23, 2004, the Company acquired Sumitomo s remaining interest in Ciphergen Biosystems KK, bringing its total ownership to 100%. The Company paid $1.0 million in cash. Acquisition costs were immaterial. The acquisition was accounted for using the purchase method of accounting.

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The total purchase price was allocated to the estimated fair value of assets acquired and liabilities assumed as follows (in thousands):

Tangible net assets acquired:	
Accounts receivable, net, and other current assets	$ 1,804
Inventories	218
Property and equipment	281
Other tangible assets	101
Accounts payable and accrued liabilities, including working capital loans	(2,221)
Capital lease obligations	(18)
	165
Excess of purchase price over net assets acquired	835
	$ 1,000

The amount of the purchase price in excess of the net assets acquired was recorded as goodwill. We performed annual impairment tests through 2004 and determined that no impairment had occurred. Due to Ciphergen Biosystems KK s lower than expected operating results and cash flows throughout 2005 and based on revised forecasted results, a goodwill impairment loss of $2.5 million was recorded in the fourth quarter of 2005. The fair value of Ciphergen Biosystems KK was estimated using expected discounted cash flows.

6. Gain on Sale of Instrument Business

On November 13, 2006, Vermillion completed the sale to Bio-Rad Laboratories, Inc. (Bio-Rad) of the Company s protein research tools and collaborative services business (the instrument business), which includes the Company s SELDI technology, ProteinChip (R) arrays and accompanying software through an asset sale transaction (the Asset Sale). Pursuant to the terms of the Asset Sale entered into with Bio-Rad on August 14, 2006, Bio-Rad paid the Company approximately $16 million in cash at the closing of the transaction. An additional $4.0 million of contingent cash consideration includes $2.0 million, subject to certain adjustments, to be held in escrow as security for certain obligations of the Company for three years following the closing, and $2.0 million as a holdback amount to be held by Bio-Rad until the issuance of a re-examination certificate confirming a SELDI patent. (See Note 22 Subsequent Events, of the Notes to Consolidated Financial Statements).

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The $6.9 million gain recognized in 2006 on sale of the instrument business to Bio-Rad is summarized as follows (in thousands):

Net Proceeds	
Cash proceeds received	$ 19,000
Less: Transaction costs	(782)
	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)
Common stock issued	3,611
	11,289
Gain on sale of Instrument Business	$ 6,929

On November 13, 2006, Bio-Rad and Vermillion entered into a Stock Purchase Agreement (the Purchase Agreement) for the private sale of shares of the Company s common stock to Bio-Rad for an aggregate purchase price of $3,000,000. The Purchase Agreement also provides for certain registration rights such that if the Company files a registration statement under the Securities Act of 1933, as amended, Bio-Rad may elect to include its shares in that registration, subject to various conditions. The purchase price of $0.972 per share was based on the average closing price for the 5 days preceding the Agreement on August 14, 2006. For accounting purposes, the 3,086,420 shares purchased are valued at $1.17 per share, the closing price on November 13, 2006, the day the transaction closed. The resulting value of $3.611 million is allocated between common stock (3.1 million shares at $0.001 par value) and additional paid-in capital of $3.6 million.

Subsequent to the November 13, 2006 completion of the Asset Sale, both Vermillion and Bio-Rad recognized business activities on behalf of each party. As of December 31, 2006, Vermillion owed to Bio-Rad a total of $1,571,000, which consisted of $1,511,000 of accounts receivable Vermillion collected which belonged to Bio-Rad, $8,000 of operating expense invoices processed by Bio-Rad and reimbursable by Vermillion to Bio-Rad, and $52,000 of other unbilled receivables from Bio-Rad. Similarly, Bio-Rad owed to Vermillion a total of $619,000, which consisted of $174,000 of operating expense invoices processed by Vermillion and reimbursable by Bio-Rad to Vermillion, $200,000 of sales taxes on the sale of assets, and $245,000 of unbilled receivables from Bio-Rad.

7. Discontinued Operation-Sale of BioSepra Business

On November 30, 2004, Vermillion completed the sale to Pall Corporation of its wholly-owned French subsidiary, BioSepra S.A., along with selected other assets (together the BioSepra business). The sale of the BioSepra business generated net proceeds of approximately $27.0 million. An additional $1.0 million was placed in an interest-bearing escrow account for one year, after which that amount plus $21,000 of accrued interest was paid to Vermillion and treated as an additional gain of $1,021,000 in 2005. This was partly offset

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

by a $67,000 reduction of the gain on the sale of the BioSepra business for a post-closing adjustment in 2005, in accordance with the Asset Purchase Agreement, resulting in a net gain of $954,000 in 2005. The Company recognized an $18.5 million gain of $1,021,000 on this sale in 2004, summarized as follows (in thousands):

Net proceeds:	
Cash proceeds received	$ 28,376
Less: Post-closing adjustment owed to buyer, paid in 2005	(1,044)
Less: Transaction costs	(321)
	27,011
Cost basis:	
Accounts receivable, net, and other current assets	2,795
Inventories	5,294
Property, plant and equipment, net	6,081
Other tangible assets	210
Patents	210
Developed product technology	2,828
Goodwill	1,380
Accounts payable and accrued liabilities	(1,976)
Capital lease obligations	(2,978)
Other long-term liabilities	(629)
Cumulative translation adjustment	(4,731)
	8,484
Gain on sale of BioSepra business	$ 18,527

As a result, Vermillion reported the BioSepra business as a discontinued operation beginning in the fourth quarter of 2004. The operating results of the BioSepra business are presented in the following table (in thousands):

	Eleven Months Ended November 30, 2004
Revenue	$ 8,395
Gross profit	4,921
Operating expenses	6,638
Operating loss	(1,717)
Loss before income taxes	(1,734)

Income tax provision	63
Loss from discontinued operations, net of tax	(1,797)

8. Goodwill and Other Intangible Assets

The Company adopted SFAS 142 on January 1, 2002 for all goodwill and other intangible assets. As a result, goodwill is no longer amortized but rather tested for impairment at least annually and in the interim whenever circumstances indicate that goodwill may be impaired.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company performed a transitional goodwill impairment assessment and noted no such impairment of goodwill. The Company also performed annual impairment tests from 2002 through 2006. In 2005, approximately $2.5 million of goodwill related to the Company s Japanese subsidiary was written off. In 2006, the remaining $76,000 of goodwill related to its instrument business was written off due to the sale of its instrument business to Bio-Rad. Goodwill and other intangible assets consisted of the following (in thousands):

	December 31, 2006			December 31, 2005		
	Gross Carrying Amount	Accumulated Amortization	Total	Gross Carrying Amount	Accumulated Amortization	Total
Non-amortizing:						
Goodwill	$	$	$	$ 76	$	$ 76
Amortizing:						
Acquired license related to litigation settlement				5,743	3,326	2,417
	$	$	$	$ 5,819	$ 3,326	$ 2,493

Additions to goodwill and other intangible assets consisted of approximately $346,000 paid in license fees related to a litigation settlement. Amortization expense for these intangible assets was (in thousands):

	2006	2005	2004
Acquired completed technology	$	$	$ 707
Patents			53
Acquired license related to litigation settlement	907	1,210	1,210
	$ 907	$ 1,210	$ 1,970

There are no longer any intangible assets recorded on our balance sheet. In connection with the asset sale of Vermillion s instrument business to Bio-Rad, Vermillion sublicensed to Bio-Rad certain rights to the license rights 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 it will retain non-exclusive rights in that field. Bio-Rad agreed to pay the royalties due to MAS under the license rights, either directly to Vermillion (to be paid to MAS) or directly to MAS, at its option.

The sublicensed license relates to the May 28, 2003 litigation settlement between Vermillion and Molecular Analytical Systems, Inc. (MAS), LumiCyte, Inc. (LumiCyte), and T. William Hutchens whereby the Company acquired the undisputed exclusive rights granted to MAS under patents licensed from Baylor College of Medicine and

the parties released all claims against each other. These patent rights refer to technology known as SELDI-TOF-MS, and provide the Company with an exclusive worldwide license and right to sublicense the technology and to commercialize any and all products, information and services derived from the technology without limitation.

Furthermore, LumiCyte assigned all rights granted to it from MAS and related to the Baylor College of Medicine patents to the Company without restriction. As part of the settlement:

(a) Vermillion paid LumiCyte $3.0 million in cash;

(b) Vermillion issued to LumiCyte 1,250,000 shares of Vermillion common stock which were valued at $7.8 million; and

(c) Vermillion agreed to pay license fees to MAS based on the revenues Vermillion and its affiliates derive from the SELDI technology and recognize between February 21, 2003 and May 28, 2014, provided

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

that such license fees will not exceed $1.0 million during calendar year 2003 or $10.0 million in the aggregate. Through December 31, 2006, the Company had paid or accrued a total of $2.6 million in such license fees.

The license rights were treated as an intangible asset that the Company purchased, and were amortized over its 17-year useful life, from April 1997 to May 2014, using the straight line method. The cost was prorated between cost of products revenue and cost of services revenue based on the ratio of SELDI-based products revenue to SELDI-based services revenue.

9. Accrued Liabilities (in thousands)

	December 31, 2006	2005
Payroll and related expenses	$ 785	$ 1,795
Compensated absences	320	998
Collaboration and research agreements expenses	1,697	390
Legal and accounting fees	437	1,526
Tax-related liabilities	637	225
Accrued interest on convertible senior notes	185	450
Other accrued liabilities	539	914
	$ 4,600	$ 6,298

10. Warranties and Maintenance Contracts

Until the sale of its instrument business to Bio-Rad, on November 13, 2006, Vermillion had a direct field service organization that provides service for its products. The Company generally included a standard 12 month warranty on its ProteinChip Systems, ProteinChip Tandem MS Interfaces and accessories in the form of a maintenance contract upon initial sale, after which maintenance and support may be provided under a separately priced contract or on an individual call basis. The Company substituted a maintenance contract in place of a standard 12-month warranty on its instruments and accessories upon initial sale. Vermillion also sold separately priced maintenance (extended warranty) contracts, which are generally for 12 or 24 months, upon expiration of the initial maintenance contract. Coverage under both the standard and extended maintenance contracts is identical. Revenue for both the standard and extended maintenance contracts is deferred and recognized on a straight line basis over the period of the applicable maintenance contract. Related costs are recognized as incurred.

Changes in product warranty obligations, including separately priced maintenance obligations, during the years ended December 31, 2006 and 2005 were as follows (in thousands):

	2006	2005

Balance at beginning of period	$ 2,831	$ 3,778
Add: Costs incurred for maintenance contracts	1,928	2,688
Revenue deferred for separately priced maintenance contracts	3,271	4,287
Less: Deferred Revenue sold to Bio-Rad	(2,206)	
Settlements made under maintenance contracts	(1,928)	(2,688)
Revenue recognized for separately priced maintenance contracts	(3,896)	(5,234)
Balance at end of period	$	$ 2,831

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

11. Long-term Debt and Capital Leases

7.0% Convertible Senior Notes Due 2011

On November 15, 2006, the Company closed the sale of $16,500,000 of Convertible Senior Notes due September 1, 2011(the New 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 New Notes. Fees paid on behalf of debt holders included the fair value of two warrants issued to underwriters to purchase a total of 200,000 shares of common stock at $1.26 per share. The warrant was valued at approximately $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% volatility rate. Interest on the notes is 7.0% per annum on the principal amount, payable semiannually on March 1 and September 1 of each year, beginning March 1, 2007. The New Notes were sold pursuant to separate exchange and redemption agreements between the Company and each of Highbridge International LLC, Deerfield International Limited, Deerfield Partners, L.P., Bruce Funds, Inc. and Professional Life & Casualty, each holders of the Company s existing 4.50% Convertible Senior Notes due September 1, 2008 (the Old Notes), pursuant to which holders of an aggregate of $27.5 million of the Old Notes agreed to exchange and redeem their Old Notes for an aggregate of $16.5 million in aggregate principal amount of the New Notes and $11.0 million in cash, plus accrued and unpaid interest on the Old Notes of $0.3 million 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 Old Notes were charged to expense as loss on extinguishment of debt. Offering costs and debt discount related to the New Notes will be amortized to interest expense using the effective interest method. Amortization expense in 2006 for the New Notes was $15,000.

The Company issued the New Notes pursuant to an indenture, dated November 15, 2006, between the Company and U.S. Bank National Association, as Trustee. Following the Closing, $2.5 million in aggregate principal amount of the Old Notes remain outstanding.

The New Notes are unsecured senior indebtedness of the Company and bear interest at the rate of 7.00% per annum, which may be reduced to 4.00% per annum if the Company receives approval or clearance for commercial sale of any of its ovarian cancer tests by the U.S. Food and Drug Administration. Interest is payable on March 1 and September 1 of each year, commencing March 1, 2007. The effective interest rate is 7.13% per annum.

The New 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 the Company s common stock at a conversion price of $2.00 per share, equivalent to a conversion rate equal to 500 shares of common stock per $1,000 principal of the New Notes, subject to adjustment in certain circumstances. If a Holder converts all or any portion of its 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 Note so converted an amount in cash equal to the difference of (i) the amount of all interest that the Company would be required to pay on such Note from the date of the indenture through October 31, 2008 and (ii) the amount of interest actually paid on such Note by the Company prior to the time of conversion.

Holders of the New Notes have the option to require the Company to repurchase the New Notes under certain circumstances, including at any time after September 1, 2009, if the Company has not received approval or clearance

for commercial sale of any of its ovarian cancer test by the FDA. The Company may redeem the 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 notes will be redeemable only if the closing price of the stock equals or exceeds equals or exceeds 200% 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. The 8,250,000 shares that could be issued if all convertible

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

senior notes were converted into common stock have not been included in the calculation of loss per share, as these potential common shares are antidilutive. Upon a change of control, each holder of the notes may require the Company to repurchase some or all of the notes at specified redemption prices, plus accrued and unpaid interest. The debenture contains a put option that entitles the holder to require the Company to redeem the debenture at a price equal to 105.0% of the principal balance upon a change in control of the Company.

The notes and common stock issuable upon conversion of the notes were registered with the U.S. Securities and Exchange Commission on Form S-3 on December 15, 2006, and at December 31, 2006 all notes remained issued and outstanding

4.5% Convertible Senior Notes Due 2008

On August 22, 2003, the Company closed the sale of $30.0 million of convertible senior notes due September 1, 2008. Offering costs were approximately $1.9 million. Interest on the notes is 4.5% per annum on the principal amount, payable semiannually on March 1 and September 1, beginning March 1, 2004. The effective interest rate is 5.85% per annum. The notes are convertible, at the option of the holder, at any time on or prior to maturity of the notes into shares of the Company s common stock initially at a conversion rate of 108.8329 shares per $1,000 principal amount of the notes, which is equal to a conversion price of approximately $9.19 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 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 notes was not required to purchase the notes until the closing date. Immediately after the closing, Vermillion common stock had a market price of $10.01 per share, or $0.82 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 Vermillion s common stock by the 3,264,987 underlying shares. This amount will be 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 notes. Amortization in 2006, 2005 and 2004 amounted to $473,000, $535,000 and $536,000, respectively.

The notes are the Company s senior unsecured obligations and rank on parity in right of payment with all of the Company s existing and future senior unsecured debt and rank senior to the Company s existing and future debt that expressly provides that it is subordinated to the notes. The notes are also effectively subordinated in right of payment to the Company 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 the Company or its subsidiaries of other indebtedness.

The Company may redeem the 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 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. The shares that could be issued if all convertible senior notes were converted into common stock have not been included in the calculation of loss per share as these potential common shares are antidilutive. Upon a change of control, each holder of the notes may require the Company to repurchase some or all of the notes at specified redemption prices, plus accrued and unpaid interest. The debenture contains a put option that entitles the holder to

require the Company to redeem the debenture at a price equal to 105.0% of the principal balance upon a change in control of the Company. The Company does not anticipate that the put option will have significant value because no change of control is currently contemplated.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The notes and common stock issuable upon conversion of the notes were registered with the U.S. Securities and Exchange Commission on Form S-3 on October 8, 2003, and at December 31, 2006. Following the closing of the November 15, 2006 sale of $16,500,000 of Convertible Senior Notes due September 1, 2011, holders of an aggregate of $27.5 million of the Old Notes agreed to exchange and redeem their Old Notes for an aggregate of $16.5 million in aggregate principal amount of the New Notes and $11.0 million in cash. Therefore, the remaining $2.5 million in aggregate principal amount of the Old Notes remain outstanding.

Loan from Quest Diagnostics

On July 22, 2005, Quest Diagnostics agreed to loan the Company up to $10 million. (see Note 2, Strategic Alliance with Quest Diagnostics.)

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 $5.0 million of capital equipment purchases. The Company financed $2.1 million 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. As of December 31, 2006, there was no balance outstanding on the loan as 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, $771,000, and $707,000 in the years ended December 31, 2006, 2005 and 2004 respectively.

Capital Leases

As of December 31, 2006, The Company no longer held any capital lease agreements. Any agreements, pertaining to certain machinery and equipment in Japan under capital lease agreements with Sumitomo Corporation and other independent finance companies, in place during the year were transferred to Bio-Rad as part of the asset sale transaction between Vermillion and Bio-Rad, completed on November 13, 2006.

12. Commitments and Contingencies

Operating Leases

The Company leases various equipment and facilities to support its worldwide manufacturing, research and development, Biomarker Discovery Center, and sales and marketing activities. Total rent expense under all leases was $3,421,000, $3,825,000 and $3,685,000 in the years ended December 31, 2006, 2005 and 2004, respectively. The Company leases its Fremont facility under a non- cancelable 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.

As of December 31, 2006, future minimum payments under non-cancelable operating leases were as follows (in thousands):

2007	$ 3,745
2008	2,616
2009	87
2010	
2011 and after	
	$ 6,448

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

These future minimum payments will be partially offset by the sub-lease payments for a portion of Vermillion s location in Fremont California for $1.6 million and $1.0 million in 2007 and 2008, respectively.

Inventory Purchase Obligations

Vermillion has an annual obligation for three years to purchase approximately $1,230,000 per year of systems and arrays under its manufacturing and supply agreement with Bio-Rad to support its collaboration agreements with Quest, which may be used as inventory for resale or fixed assets for collaboration purposes.

Product Development Agreement with a Customer

In the third quarter of 2005, the Company sold nine ProteinChip Systems to one customer for $601,000. The Company also entered into a product development agreement with this same customer, whereby the customer will develop for Vermillion a specific new product and Vermillion may pay the customer up to $500,000 based on the customer s attainment of specified development milestones. Under this agreement, Vermillion paid this customer $300,000 of development fees during 2005. This was recorded, following EITF 01-9, Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor s Products) , as a reduction to revenue, resulting in net revenue from this customer of approximately $301,000 in 2005. This constituted approximately 2% of products revenue and 1% of total revenue for 2005. No additional payment was made in 2006. With the sale of the instrument business to Bio-Rad, the product development agreement was also transferred to Bio-Rad.

Non-Cancelable Collaboration Obligations

On October 3, 2005, the Company entered into a two year research and license agreement with University College London and UCL BioMedica Plc. (together, UCL) to utilize Vermillion s suite of proteomic solutions (Deep Proteome™, Pattern Track™ Process and ProteinChip® System) to further UCL s ongoing research in ovarian cancer and breast cancer. Under the terms of the agreement, Vermillion has exclusive rights to license intellectual property resulting from discoveries made during the course of this collaboration for use in developing, manufacturing and selling products and services utilizing the intellectual property. Additionally, Vermillion will contribute approximately $2.1 million in cash and $652,000 in the form of Vermillion equipment, software, arrays and consumable supplies as requested by UCL, valued at Vermillion s list selling price, to cover part of the costs incurred by UCL specifically for this research program. $1.1 million of the cash obligation is to be paid in the first year of the agreement and is non-cancelable. The remainder is to be paid in the second year of the agreement and is cancelable with three months advance notice. As of December 31, 2006, the Company had expensed $1,389,000, of which $57,000 represented the Company s cost for the arrays and consumables it had provided.

On October 13, 2006, the company entered into a two year research and collaboration agreement with The Ohio State University Research Foundation directed at discovery, purification, identification and/or validation of Biomarkers related to thrombotic thrombocytopenic purpura and production of associated technology. Under the terms of the agreement, Vermillion will have exclusive rights to license discoveries made during the course of this collaboration. Vermillion will pay the financial contribution to the University in consideration for costs incurred by the University specifically used in furtherance of this research program for $149,500 in total during the first 15 months of the agreement. The contribution of $149,500 is non-cancelable. There is no financial contribution obligation for the remaining 9 months of the agreement.

On December 21, 2006, the company extended its research collaboration agreement through December 31, 2009 with The Johns Hopkins University School of Medicine directed to 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. Under the original agreement, which expired December 31, 2006, Vermillion has an outstanding obligation to pay $305,000, which had been accrued and

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

charged to research and development expense. Vermillion paid $685,000 of collaboration expenses to John Hopkins in 2006 and expensed them to research and development. Under the extended agreement, which is effective January 1, 2007, Vermillion has an obligation to provide additional collaboration funding of $600,000 for 2007. The first year contribution of $600,000 is non-cancelable.

On October 4, 2006, the company entered into a one year research and development agreement with Katholieke Universiteit Leuven, Belgium directed at discovery, validation, and characterization of novel Biomarkers related to gynecologic disease. Under the terms of the agreement, Vermillion will have exclusive rights to license discoveries made during the course of this collaboration. Vermillion will contribute 45,000 Euros or $59,300 per year to fund sample collection at the University from patients undergoing evaluation of a persistent mass who undergo surgical intervention. The first year contribution of 45,000 Euros or $59,300 is non-cancelable.

Litigation

On June 26, 2006, Health Discovery Corporation filed a lawsuit against us in the U.S. District Court for the Eastern District of Texas (Marshall Division), claiming that software used in certain of Vermillion s ProteinChip® Systems infringes on three of its United States patents. Health Discovery Corporation is seeking 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. On January 10, 2007, the court granted Vermillion s motion to transfer the case to the Northern District of California. The case is scheduled for a case management conference on April 27, 2007 in the Northern District of California. Given the early stage of this action, the Company cannot predict the ultimate outcome of this matter at this time.

13. Stockholders Equity

At December 31, 2006 and 2005, 5,000,000 shares of preferred stock were authorized, but no shares were issued or outstanding.

The Company has adopted a Stockholder Rights Plan, the purpose of which is, among other things, to enhance the Board s 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 the Company s common stock. The following summary description of the Stockholder Rights Plan does not purport to be complete and is qualified in its entirety by reference to the Company s Stockholder Rights Plan, which has been previously filed with the Securities and Exchange Commission as an exhibit to a Registration Statement on Form 8-A.

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 the Company 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.

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. Stock Options, Warrants and Employee Stock Purchase Plan

1993 Stock Option Plan

The Company has no shares of 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, 2006, no shares of common stock were subject to repurchase by the Company. Since the Company s initial public offering, no options have been granted under the 1993 Plan. During 2004, 2005 and 2006, options for 30,923, 12,040 and 18,250 shares were exercised, respectively. Options for 47,672, 87,113, and 371,979 shares were canceled during 2004, 2005 and 2006, respectively, and the shares reserved under the 1993 Plan were reduced by the same amount.

2000 Stock Plan

In April 2000, the stockholders approved the 2000 Stock Plan (the 2000 Plan). At December 31, 2006, the Company had 2,730,178 shares of common stock reserved for future stock option grants to employees, directors and consultants under this stock option plan. Under 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 five years and unexercised options generally expire ten years from the date of grant.

During 2004, options for 1,742,625 shares were granted, options for 53,900 shares were exercised, and options for 640,199 shares were canceled. During 2005, options for 2,727,000 shares were granted, options for 216 shares were exercised, and options for 1,319,471 shares were canceled. During 2006, options for 1,569,450 shares were granted, options for 6,595 shares were exercised, and options for 2,740,329 shares were canceled.

During 2005, two executives terminated their employment with the Company. The vesting of a portion of one s stock options was accelerated, and the exercise periods for both were extended, allowing the executives to potentially purchase option shares that would otherwise have expired. The expense resulting from these changes was not material to the consolidated financial statements.

On January 1, 2004, 2005 and 2006 an additional 1,400,000, 900,000 and 1,300,000 shares were reserved for issuance under the 2000 Plan, respectively.

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Activity under these two stock option plans was as follows (in thousands, except per share data):

	Shares	Options Outstanding			Weighted Average
	Available for Grant	Number of Shares	Price per Share	Aggregate Price	Exercise Price
Balances, January 1, 2004	494	4,054	$ 0.23-$11.96	$ 21,408	$ 5.28
Shares reserved for the 2000 Plan	1,400				
Reduction in shares reserved	(47)				
Options granted	(1,743)	1,743	3.29-9.99	13,376	7.68
Options canceled/shares repurchased	688	(687)	1.16-11.96	(4,088)	5.95
Options exercised		(85)	0.35-8.50	(329)	3.88
Balances, December 31, 2004	792	5,025	0.23-11.96	30,367	6.04
Shares reserved for the 2000 Plan	900				
Reduction in shares reserved	(87)				
Shares granted to an officer	(25)				
Options granted	(2,727)	2,727	0.90-3.90	5,293	1.94
Options canceled	1,406	(1,406)	1.16-11.96	(7,390)	5.25
Options exercised		(12)	1.16-1.80	(14)	1.17
Balances, December 31, 2005	259	6,334	0.23-11.96	28,256	4.46
Shares Reserved for the 2000 Plan	1,300				
Reduction in shares reserved	(372)				
Options granted	(1,569)	1,569	1.01-1.73	1,890	1.20
Options canceled	3,112	(3,112)	0.90-11.96	(12,958)	4.16
Options exercised		(25)	0.23-1.20	(12)	0.49
Balances, December 31, 2006	2,730	4,766	$ 0.90-$9.60	$ 17,186	$ 3.61

The options outstanding and currently exercisable by weighted average exercise price at December 31, 2006 were as follows:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number	Weighted Average Exercise Price

		(In thousands)	(Years)		(In thousands)	
$0.90	1.01	795	9.1	$ 0.92	228	$ 0.90
$1.16	2.06	1,383	9.1	1.40	477	1.60
$2.19	2.85	394	8.4	2.46	219	2.37
$2.96	3.43	162	7.9	2.98	152	2.98
$3.49	4.43	694	4.7	3.76	632	3.77
$4.53	6.08	379	5.2	5.16	379	5.17
$6.38	8.53	371	7.1	8.04	371	8.04
$8.64	9.60	589	6.8	9.36	589	9.36
$0.90	9.60	4,766	7.6	3.61	3.047	4.85

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Stock-Based Compensation

During the years ended December 31, 2004, 2005 and 2006, the exercise prices of all options granted were equal to fair market value on the dates of grant. During the year ended December 31, 2006, the Company recorded $1.6 million of stock-based compensation related to stock options granted to employees.

The allocation of stock-based compensation expense by functional area was as follows (in thousands):

	Years Ended December 31, 2006
Cost of revenue	$ 144
Research and development	337
Sales and marketing	321
General and administrative	813
Total stock-based compensation	$ 1,615

During the period from April 1997 through December 31, 2004, the Company recorded $20.9 million of deferred stock-based compensation related to stock options granted to consultants and employees. For options granted to consultants, the Company determined the fair value of the options using the Black-Scholes option pricing model with the following assumptions: contractual lives of ten years; weighted average risk-free rate calculated using rates between 4.5% and 6.2%; expected dividend yield of zero percent; volatility of 75% and deemed values of common stock between $0.35 and $14.67 per share. No options have been granted to consultants since the Company s initial public offering in 2000. Deferred stock-based compensation expense was recognized in accordance with an accelerated amortization method, over the vesting periods of the related options, which are generally five years.

The allocation of deferred stock-based compensation expense by functional area was as follows (in thousands):

	Years Ended December 31, 2004
Cost of revenue	$ 45
Research and development	37
Sales and marketing	93
General and administrative	427
Total stock-based compensation	$ 602

On December 20, 2005, Vermillion s Board of Directors approved the accelerated vesting of all unvested and out-of-the-money stock options held by employees with an exercise price per share of $4.00 or higher. The accelerated vesting caused options previously awarded for the purchase of approximately 1,035,000 shares of Vermillion s common stock, representing approximately 16% of total options outstanding, to vest and become exercisable immediately, subject to continued restrictions on sale. Of the 224 option grants subject to accelerated vesting, 27 are held by executive officers. Under APB No. 25 and FASB Interpretation No. 44, Accounting for Certain Transactions Involving Stock Compensation , the acceleration of the vesting of these options did not result in a compensation charge because the exercise prices of the affected options was greater than the closing price of our common stock on December 20, 2005.

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Warrants

At December 31, 2004 no warrants remained outstanding. During 2005, a warrant to purchase 2.2 million shares of Vermillion common stock at $3.50 per share was issued to Quest Diagnostics as part of the Company s strategic alliance with Quest Diagnostics (See note 2, Strategic Alliance with Quest Diagnostics). During 2006, two warrants to purchase 100,000 shares each of Vermillion common stock for a total of 200,000 shares, were issued to Oppenheimer & Co., Inc. for $1.26 per share. Fees paid on behalf of the debt holders were recorded as a discount on the New Notes. Fees paid on behalf of debt holders included the fair value of two warrants issued to underwriters to purchase a total of 200,000 shares of common stock at $1.26 per share. Fair value was determined by the Black Scholes method of valuation using a risk free interest rate of 4.75%, 5 year contractual life, and 88% volatility rate. These warrants were valued at approximately $140,000. (See Note 11 Long-term Debt and Capital Leases). At December 31, 2006, all of the aforementioned warrants remained outstanding.

Employee Stock Purchase Plan

In April 2000, the stockholders approved the 2000 Employee Stock Purchase Plan, under which eligible employees may purchase common stock of the Company through payroll deductions. Purchases are made semi-annually at a price equal to the lower of 85% of the closing price on the applicable offering commencement date or 85% of the closing price at the end of the purchase period. At December 31, 2006, the Company had 226,207 shares of common stock reserved for purchase by employees under this Plan. During 2004, 2005 and 2006, purchases of 306,209, 263,542, and 110,291 shares, respectively, were made under this Plan.

On January 1, 2004, 2005 and 2006 an additional 290,795, 180,000 and 170,000 shares, respectively, were reserved for purchase under the 2000 Employee Stock Purchase Plan. On June 3, 2004, the stockholders approved an additional 250,000 shares to be reserved for this Plan.

15. 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.

In 2006, 2005, and 2004, the Company has incurred income tax liabilities primarily in France and Japan, as well as in most of the other countries outside the U.S. in which it operates. The Company s provision for income taxes was due to current foreign income taxes, which were $152,000, $7,000, and $172,000 for the years ended December 31, 2006, 2005 and 2004, respectively, including discontinued operations. Excluding discontinued operations, current foreign income taxes were an expense of $152,000, $7,000, and $109,000 for the years ended December 31, 2006, 2005 and 2004, respectively.

Based on the available objective evidence, management believes it is more likely than not that the net deferred tax assets related to the Company s operations will not be fully realizable. Accordingly, the Company has provided a full valuation allowance against its net deferred tax assets at December 31, 2006.

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Net deferred tax assets (liabilities) consisted of the following (in thousands):

	December 31, 2006	2005
Depreciation and amortization	$ 21,515	$ 8,947
Other	4,093	6,814
Research and development and other credits	9,145	9,515
Net operating losses	46,999	48,767
Deferred tax assets	81,752	74,043
Less: Valuation allowance	(81,752)	(74,043)
	$	$

Reconciliation of the statutory federal income tax rate to the Company s effective tax rate:

	2006	2005	2004
Tax at federal statutory rate	(34)%	(34)%	(34)%
State tax, net of federal benefit	0	(6)	(6)
Research and development and credits	(5)	(3)	(4)
Foreign tax credits	2	(4)	0
Change in valuation allowance	0	48	35
Stock-based compensation	35	0	1
Foreign tax rate difference and other	2	(1)	3
Gain on sale of BioSepra	1	0	6
Provision for income taxes	0%	0%	1%

As of December 31, 2006, the Company has a net operating loss carryforwards of approximately $125 million for federal and $58.8 million for state tax purposes. If not utilized, these carryforwards will begin to expire beginning in 2009 for federal purposes and 2007 for state purposes.

As of December 31, 2006, the Company has $2.9 million of net operation carryforwards from its Japan operations. If not utilized, this carry forward will begin to expire beginning in 2012.

The Company has research credit carryforwards of approximately $4.4 million and $4.7 million for federal and state income tax purposes, respectively. If not utilized, the federal carryforwards will expire in various amounts beginning in 2011. The California credit can be carried forward indefinitely.

The Internal Revenue Code limits the use of net operating loss and tax credit carryforwards in certain situations where changes occur in the stock ownership of a company. In the event the Company has had a change in ownership, utilization of the carryforwards could be restricted.

The Company has foreign tax credit carryforwards of approximately $1.35 million for federal income tax purposes. If not utilized, the federal carryforwards will expire beginning 2015.

16. Accumulated Other Comprehensive Loss

Comprehensive loss generally represents all changes in stockholders (deficit) equity except those resulting from investments or contributions by stockholders. The only component of comprehensive loss that is excluded from the net loss is the Company s cumulative translation adjustments.

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

17. Net Loss per Share

Basic net loss per share is computed by dividing net loss for the period by the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss for the period by the weighted average number of common and potential common shares outstanding during the period, if their effect is dilutive. Potential common shares include shares that could be issued if all convertible senior notes were converted into common stock, common stock subject to repurchase, common stock issuable under the Company s 1993 and 2000 Employee Stock Purchase Plans, and incremental shares of common stock issuable upon the exercise of outstanding stock options and warrants.

The following table sets forth the computation of basic and diluted net loss per share for the periods indicated (in thousands, except per share amounts):

	Years Ended December 31,		
	2006	**2005**	**2004**
Numerator:			
Net loss from continuing operations	$ (22,066)	$ (36,387)	$ (36,571)
Net income from discontinued operations		954	16,730
Net loss	$ (22,066)	$ (35,433)	$ (19,841)
Denominator:			
Weighted average common shares outstanding	36,465	32,321	29,273
Weighted average unvested common shares subject to repurchase			(29)
Denominator for basic and diluted calculations	36,465	32,321	29,244
Net income (loss) per share, basic and diluted:			
Loss per share from continuing operations	$ (0.61)	$ (1.13)	$ (1.25)
Income per share from discontinued operations		0.03	0.57
Net loss per share	$ (0.61)	$ (1.10)	$ (0.68)

The following table sets forth the potential shares of common stock that are not included in the diluted net loss per share calculation above because to do so would be anti-dilutive for the periods indicated (in thousands):

	December 31,		
	2006	**2005**	**2004**
Common stock subject to repurchase			5

Stock options outstanding	4,766	6,334	5,025
Common stock issuable under employee stock purchase plan	29	41	65
Common stock warrants outstanding	2,400	2,200	
Shares that could be issued if all convertible senior notes were converted into common stock	8,522	3,265	3,265
	15,717	11,840	8,360

18. Employee Benefit Plans

The Company maintains the Vermillion, Inc. 401(k) Savings Plan for its U.S. employees. The Plan allows eligible employees to defer up to 90%, subject to the Internal Revenue Service annual contribution limit, of

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

their pretax compensation at the discretion of the employee. Under the Plan, the Company is not required to make Plan contributions. The Company had not made any contributions to the Plan as of December 31, 2006.

19. Related Parties

On July 22, 2005, Quest Diagnostics purchased approximately 17.4% of the Company. (See Note 2, Strategic Alliance with Quest Diagnostics .)

On November 13, 2006, Bio-Rad purchased approximately 7.9% of the Company. (See Note 6, Gain on the Sale of the Instrument Business .)

20. Segment Information and Geographic Data

Vermillion s revenue is derived from the sales of related products and services on a worldwide basis. The chief operating decision maker evaluates resource allocation not on a product or geographic basis, but rather on an enterprise-wide basis. Therefore, management has determined that Vermillion operates in only one reportable segment, which is the protein research tools and collaborative services business.

The following table reflects the results of the Company s sales to external customers by similar products and services for the years ended December 31, 2006, 2005 and 2004 (in thousands). Revenue from discontinued operations has been excluded.

	2006	2005	2004
ProteinChip Systems and related products	$ 11,292	$ 18,350	$ 31,378
Services	6,923	8,896	8,803
	$ 18,215	$ 27,246	$ 40,181

The Company sells 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 and excludes revenue from discontinued operations. Long-lived assets, predominantly machinery and equipment, are reported based on the location of the assets.

Following is a summary of the geographic information related to revenue from continuing operations and long-lived assets for the years ended December 31, 2006, 2005 and 2004 (in thousands):

	2006	2005	2004
Revenue			
United States	$ 5,155	$ 12,123	$ 17,636

Canada	973	923	950
Europe	6,984	7,636	9,387
Asia	5,103	6,564	12,208
Total	$ 18,215	$ 27,246	$ 40,181
Long-lived assets			
United States	$ 2,244	$ 6,256	$ 7,308
Canada	0	20	111
Europe	16	561	958
Asia	0	483	938
Total	$ 2,260	$ 7,320	$ 9,315

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In 2006, 2005 and 2004, sales to customers in Japan were 23%, 21%, and 25%, respectively, of total revenue from continuing operations.

21. Quarterly Consolidated Financial Data (Unaudited)

The following table presents certain unaudited consolidated quarterly financial information for the eight quarters ended December 31, 2006. Revenue and gross profit for discontinued operations have been excluded in all periods shown as a result of the sale of our BioSepra business. In management s opinion, this information has been prepared on the same basis as the audited consolidated financial statements and includes all adjustments (consisting only of normal recurring adjustments, except for the non-recurring expense resulting from the litigation settlement) necessary to state fairly the unaudited quarterly results of operations set forth herein.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Fiscal Year
	(In thousands, except per share data)				
Total revenue					
2006	$ 7,064	$ 5,273	$ 4,662	$ 1,216	$ 18,215
2005	6,648	6,941	7,056	6,601	27,246
Gross profit					
2006	3,660	2,325	2,182	710	8,877
2005	3,513	3,358	3,707	2,975	13,553
Net loss from continuing operations					
2006	(5,464)	(7,735)	(7,016)	(1,851)	(22,066)
2005	(9,332)	(9,328)	(7,476)	(10,251)	(36,387)
Net income (loss) from discontinued operations					
2006					
2005		(67)		1,021	954
Net loss					
2006	(5,464)	(7,735)	(7,016)	(1,851)	(22,066)
2005	(9,332)	(9,395)	(7,476)	(9,230)	(35,433)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Fiscal Year
	(In thousands, except per share data)				
Basic and diluted net loss per share from continuing operations					
2006	(0.15)	(0.21)	(0.19)	(0.05)	(0.61)
2005	(0.32)	(0.32)	(0.23)	(0.29)	(1.13)

Basic and diluted net income (loss) per share from discontinued operations					
2006	0.00	0.00	0.00	0.00	0.00
2005	0.00	0.00	0.00	0.03	0.03
Basic and diluted net loss per share					
2006	(0.15)	(0.21)	(0.19)	(0.05)	(0.61)
2005	(0.32)	(0.32)	(0.23)	(0.26)	(1.10)

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VERMILLION, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Quarterly and annual earnings per share are calculated independently, based on the weighted average number of shares outstanding during the periods.

22. Subsequent Events

The Company s United States Patent 6,734,022 (the 022 patent) is currently under re-examination in the United States Patent and Trademark Office. The 022 patent is directed to a fundamental process of SELDI that involves capturing an analyte from a sample on the surface of a mass spectrometry probe derivatized with an affinity reagent, applying matrix and detecting the captured analyte by laser desorption mass spectrometry. In March 2007, the USPTO issued a final office action in the re-examination, rejecting all of the claims of the 022 patent. The Company believes that the claims of the 022 patent are valid. While the office action is designated final the Company has, under the USPTO rules, as much as 6 months to advocate for the patentability of the claimed invention with the patent examiners, after which the Company has recourse to appeal. The Company plans to respond to the final office action and if necessary to appeal the decision. If the USPTO does not issue a re-examination certificate confirming the patentability of all of the claims as originally issued in the 022 patent, or claims of equivalent scope, the Company will not be entitled to receive the $2,000,000 holdback amount from Bio-Rad pursuant to the Asset Purchase Agreement between Vermillion and Bio-Rad. Furthermore, if these claims are canceled or significantly narrowed in scope, the Company may be unable to block competitors from utilizing SELDI to develop diagnostic tests that involve detecting a single diagnostic biomarker, and the Company s revenues may therefore be adversely affected.

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SCHEDULE II

VERMILLION, INC.

VALUATION AND QUALIFYING ACCOUNTS

Years Ended December 31, 2006, 2005 and 2004

	Balance at Beginning of Year	Additions Charged to Earnings	Deductions	Other Changes	Balance at End of Year
			(In thousands)		
Allowance for doubtful accounts:					
31 Dec 2006	$ 238	$ 66	$ 22	$ (280)	$ 2
31 Dec 2005	247	25	34		238
31 Dec 2004	553	214	295	(225)	247
Inventory reserve:					
31 Dec 2006	2,110	130	522	(1,718)	
31 Dec 2005	1,997	594	481		2,110
31 Dec 2004	1,338	1,843	219	(965)	1,997
Deferred tax valuation allowance:					
31 Dec 2006	74,043	7,709			81,752
31 Dec 2005	57,196	16,847			74,043
31 Dec 2004	50,250	6,946			57,196

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43,935,269 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.

, 2007

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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	100,000
Miscellaneous fees and expenses	200,000
Total	1,916,335

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. Our Second Amended and Restated Certificate of Incorporation and our Bylaws provide for indemnification of our directors, officers, employees and other agents to the extent and under the circumstances permitted by the Delaware General Corporation Law. We have also entered into agreements with our directors and executive officers that require us, 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. We have 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 us since August 31, 2004 which were not registered under the Securities Act.

1. On August 29, 2007, the Company closed a private placement with a group of existing and new investors pursuant to which it received approximately $20.6 million in gross proceeds from the sale of approximately 24.5 million shares of its common stock and the issuance of warrants for the purchase of approximately 19.6 million additional shares of the Company s common stock with an exercise price of $0.925 per share. In connection with the closing of the transaction, the Company and Quest Diagnostics Incorporated, or Quest Diagnostics, one of the investors in the private placement, entered into an amendment to the warrant issued by the Company to Quest Diagnostics on July 22, 2005. Pursuant to the terms of the amendment, the exercise price for the purchase of the Company s common stock under such warrant was reduced from $3.50 per share to $2.50 per share and the expiration date of the warrant 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. In connection with the August 2007 private placement, the Company issued warrants to purchase 921,000 shares of common stock at an exercise price of $0.925 per share, subject to certain adjustments, to Oppenheimer & Co. Inc., or Oppenheimer, in partial consideration of its services as Placement Agent in the private placement. The Board of Directors of the Company determined the value of such warrants to be equal to the price paid for the warrants by the investors in the offering, or $0.125 per warrant share, for an aggregate value of approximately $115,000. The sale, offer and issuance of the securities was exempt from registration

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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 sold an aggregate of $16,500,000 in principal amount of the Company s 7.0% Convertible Senior Notes due September 1, 2006, referred to herein as the 7.0% Notes. The 7.0% Notes were sold pursuant to separate exchange and redemption agreements between the Company and each of Highbridge International LLC, Deerfield International Limited, Deerfield Partners, L.P., Bruce Funds, Inc. and Professional Life & Casualty, collectively referred to herein as the Holders, each holders of the Company s existing 4.5% Convertible Senior Notes due September 1, 2008, referred to herein as the 4.5% Notes, pursuant to which holders of an aggregate of $27.5 million of the 4.5% Notes agreed to exchange and redeem their 4.5% Notes for an aggregate of $16.5 million in aggregate principal amount of the 7.0% Notes and $11.0 million in cash, plus accrued and unpaid interest on the 4.5% Notes through and including the day prior to the closing. Immediately following the transaction, $2.5 million in aggregate principal amount of the 4.5% Notes remained outstanding. 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. In August 2006 and November 2006, the Company issued warrants to purchase an aggregate of 200,000 shares of the Company s common stock at an exercise price of $1.26 per share, subject to certain adjustments, 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 were recorded as a discount on the 7.0% Notes. Fees paid on behalf of debt holders included the fair value of two warrants issued to Oppenheimer. Fair value was determined by the Black Scholes method of valuation using a risk free interest rate of 4.75%, five year contractual life, and 88% 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 its instrument business to Bio-Rad Laboratories, Incorporated, or Bio-Rad, the Company sold Bio-Rad 3,086,420 shares of its common stock for an aggregate purchase price of $3.0 million. 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 Diagnostics 6,225,000 shares of its common stock for an aggregate purchase price of $15.0 million and issued Quest Diagnostics a warrant to purchase up to 2,200,000 shares of the Company s common stock at an exercise price of $3.50 per share, subject to certain adjustments. 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 Amendment No. 2 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 6th day of December, 2007.

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 Amendment No. 2 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)	December 6, 2007
/s/ Qun Zhou Qun Zhou	Corporate Controller and Interim Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	December 6, 2007
* James L. Rathmann	Executive Chairman of the Board of Directors	December 6, 2007
* Judy Bruner	Director	December 6, 2007
* James S. Burns	Director	December 6, 2007
* Michael J. Callaghan	Director	December 6, 2007
* Kenneth J. Conway	Director	December 6, 2007
*	Director	December 6, 2007

Rajen K. Dalal		
*	Director	December 6, 2007
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 between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Pall Corporation dated October 27, 2004	8-K	000-31617	2.1	December 6, 2004		
3.1	Second Amended and Restated Certificate of Incorporation of Vermillion, Inc.						ü
3.2	Amended and Restated Bylaws of Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.)	S-1	333-32812	3.4	August 24, 2000		
3.3	Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.)	8-A	000-31617	3.5	March 21, 2002		
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 Stock Transfer & Trust Company dated March 20, 2002	8-A	000-31617	4.2	March 21, 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

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Filed Previously
		Form	File No.	Exhibit	Filing Date		
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		
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	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 KK dated March 24, 1999	S-1	333-32812	10.26	September 22, 2000		
10.19	Joint Development Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Stanford	S-1	333-32812	10.27	March 20, 2000		

	Research Systems, Inc. dated February 2, 1995 and amendment thereto				
10.20	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
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	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 May 28, 2003	8-K	000-31617	99.2	June 11, 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	8-K	000-31617	99.3	June 11, 2003		

	Hutchens dated May 28, 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
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

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Filed Previously
		Form	File No.	Exhibit	Filing Date		
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 dated July 22, 2005	8-K	000-31617	10.48	July 28, 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,	8-K	000-31617	10.55	November 6, 2006		

	Inc. (formerly Ciphergen Biosystems, Inc.) and certain holders of its 4.50% Convertible Senior Notes due September 1, 2008	
10.40	Letter Agreement between Vermillion, Inc. (formerly Ciphergen Biosystems, Inc.) and Oppenheimer & Co. Inc. dated August 3, 2006	ü
10.41	Warrant dated August 3, 2006 with Oppenheimer & Co. Inc.	ü
10.42	Warrant dated November 15, 2006 with Oppenheimer & Co. Inc.	ü

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Filed Previously
		Form	File No.	Exhibit	Filing Date		
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, 2006						ü
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
10.51	Amendment No. 1 to Manufacture and Supply Agreement between Vermillion, Inc. and Bio-Rad Laboratories, Inc. dated August 27, 2007	ü

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Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Filed Previously
		Form	File No.	Exhibit	Filing Date		
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		
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.