

# ASPIRA WOMEN'S HEALTH INC.

## **FORM 10-K** (Annual Report)

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

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**FORM 10-K**

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(Mark One)

☒ **Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.**

For the fiscal year ended December 31, 2009.

or

☐ **Transition Report under Section 13 or 15(d) of the Securities Exchange Act of 1934.**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_.

**Commission File Number: 000-31617**



**Vermillion, Inc.**

(Debtor-in-Possession)

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of  
incorporation or organization)

**47350 Fremont Blvd. Fremont, California**

(Address of principal executive offices)

**33-0595156**

(I.R.S. Employer  
Identification No.)

**94538**

(Zip Code)

**Registrant's telephone number, including area code: (510) 226-2800**

**Securities registered pursuant to Section 12(b) of the Act: None**

**Securities registered pursuant to Section 12(g) of the Act: Common Stock, Par Value \$0.001 Per Share**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☐

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check One):

Large accelerated filer ☐

Accelerated filer ☐

Non-accelerated filer ☐ (Do not check if a smaller reporting company)

Smaller reporting company ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes ☐ No ☒

The aggregate market value of voting common stock held by non-affiliates of the Registrant is \$131,437 and is based upon the last sales price as quoted on the NASDAQ Capital Market as of June 30, 2009.

As of March 31, 2010, the Registrant had 10,298,696 shares of common stock, par value \$0.001 per share, outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE: None**

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*Vermillion, OVA1, and OvaCalc* are trademarks of Vermillion, Inc. *ProteinChip* is a registered trademark of Bio-Rad Laboratories, Inc. *BioSeptra* is a registered trademark of Pall Corporation.

**PART I****Forward Looking Statements**

*Vermillion, Inc. (“Vermillion”) and its wholly owned subsidiaries (collectively, the “Company”) has made statements in Part I Item 1, “Business”; Part II Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations”; and other sections of this Annual Report on Form 10-K that are deemed forward-looking statements for purposes of the safe harbor provisions under the Private Securities Litigation Reform Act of 1995. The Company claims the protection of such safe harbor, and disclaims 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”, “should” and “continue” or similar words. These forward-looking statements may also use different phrases. The Company has based these forward-looking statements on management’s (“we”, “us” or “our”) current expectations and projections about future events. Examples of forward-looking statements include the following statements:*

- projections of the Company’s future revenue, results of operations and financial condition;*
- anticipated efficacy of Vermillion’s products and Vermillion’s product development activities and product innovations;*
- competition and consolidation in the markets in which the Company competes;*
- 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 Vermillion’s strategic alliance with Quest Diagnostics Incorporated (“Quest”);*
- our ability to comply with applicable government regulations;*
- our ability to expand and protect Vermillion’s intellectual property portfolio;*
- anticipated future losses;*
- expected levels of expenditures;*
- expected market adoption of our diagnostic tests, including that of the OVAI™ ovarian tumor triage test (the “OVAI Test”);*
- our ability to obtain reimbursement for our diagnostic tests, including the OVAI Test;*
- forgiveness of the outstanding principal amounts of the secured line of credit by Quest;*
- our ability to relist our common stock on the NASDAQ Global Market or other national securities exchange; and*
- market risk of the Company’s investments.*

*These statements are subject to significant risks and uncertainties, including those identified in Part I Item 1A, “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; our ability to manage the Company’s operating expenses and cash resources that is consistent with our plans; our ability to secure adequate funds on acceptable terms to execute our business plan; our ability to develop and commercialize diagnostic products using both Vermillion’s internal and external research and development resources; our ability to obtain market acceptance of Vermillion’s OVAI Test or future diagnostic products, including the risk that our products will not be competitive with products offered by other companies, or that users will not be entitled to receive adequate reimbursement for our products from third party payers such as private insurance companies and government insurance plans; our ability to successfully license or otherwise successfully partner with third parties to commercialize our products; our ability to obtain any regulatory approval for Vermillion’s future diagnostic products; our ability to protect and promote Vermillion’s proprietary technologies, and our ability to relist Vermillion’s shares on the NASDAQ Global Market or on other national securities exchange. We believe it is important to communicate our expectations to Vermillion’s 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 the Company’s forward-looking statements.*

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### Item 1. Business

#### *Company Overview*

Vermillion, Inc. (“Vermillion”; Vermillion and its wholly owned subsidiaries are collectively referred to as the “Company”) was originally incorporated in California on December 9, 1993, under the name Abiotic Systems. In March 1995, Abiotic Systems changed its corporate name to CIPHERGEN Biosystems, Inc. and subsequently on June 21, 2000, it reincorporated in Delaware. Under the name of CIPHERGEN Biosystems, Inc., Vermillion had its initial public offering on September 28, 2000, and began trading on the NASDAQ National Market. On August 21, 2007, CIPHERGEN Biosystems, Inc. changed its corporate name to Vermillion, Inc., which reflects the transition of the Company from its historic roots as a proteomics research products business to a novel diagnostic development and commercialization business. Additionally, Vermillion had a 1 for 10 reverse stock split of Vermillion’s common stock effective at the close of business on March 3, 2008. Accordingly, all share and per share amounts were adjusted to reflect the impact of the 1 for 10 reverse stock split in this Annual Report on Form 10-K.

The Company is dedicated to the discovery, development and commercialization of novel high-value diagnostic tests that help physicians diagnose, treat and improve outcomes for patients. Vermillion’s tests are intended to guide decisions regarding patient treatment, which may include decisions to refer patients to specialists, to perform additional testing, or to assist in the selection of therapy. A distinctive feature of Vermillion’s approach is to combine multiple markers into a single, reportable index score that has higher diagnostic accuracy than its constituents.

Management (“we”, “us” or “our”) concentrates its development of novel diagnostic tests in the fields of oncology, hematology, cardiology and women’s health, with the initial focus on ovarian cancer. Vermillion also intends to address clinical questions related to early disease detection, treatment response, monitoring of disease progression, prognosis and others through collaborations with leading academic and research institutions such as its strategic alliance agreement with Quest Diagnostic Incorporated (“Quest”).

Vermillion’s lead product is the OVA1<sup>™</sup> ovarian tumor triage test (the “OVA1 Test”), which was cleared by the United States Food and Drug Administration (the “FDA”) on September 11, 2009. The OVA1 Test addresses a clear unmet clinical need, namely the presurgical identification of women who are at high risk of having a malignant ovarian tumor. Numerous studies have documented the benefit of referral of these women to gynecologic oncologists for their initial surgery. Prior to the clearance of the OVA1 Test, no blood test had been cleared by the FDA for physicians to use in the presurgical management of ovarian adnexal masses. The OVA1 Test is a qualitative serum test that utilizes five well established biomarkers and proprietary FDA-cleared software to determine the likelihood of malignancy in women with a pelvic mass for whom surgery is planned. The OVA1 Test was developed through large pre-clinical studies in collaboration with numerous academic medical centers encompassing over 2,500 clinical samples. The OVA1 Test was fully validated in a prospective multi-center clinical trial encompassing 27 sites reflective of the diverse clinical centers at which ovarian adnexal masses are evaluated. The results of the clinical trial demonstrated that the OVA1 Test, in conjunction with clinical evaluation, was able to identify over 90% of the malignant ovarian tumors and to rule out malignancy (negative predictive value, or “NPV”) with over 90% certainty.

The OVA1 Test was launched on March 9, 2010, by Quest under the terms of its strategic alliance with Vermillion at a list price of \$650 for each OVA1 Test. On March 11, 2010, the Medicare contractor Highmark Medicare Services announced that it would cover the OVA1 Test in its reimbursement program. On May 10, 2010, Quest notified Vermillion that Highmark Medicare Services is adjudicating to Quest the OVA1 claims in the amount of \$516.25 for each OVA1 Test.

In addition to the OVA1 Test, Vermillion has development programs in other clinical aspects of ovarian cancer as well as in peripheral arterial disease (“PAD”). In the field of peripheral arterial disease, Vermillion has identified candidate biomarkers that may help to identify individuals at high risk for a decreased ankle-brachial index score, which is indicative of the likely presence of peripheral arterial disease.

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Current and former academic and research institutions that Vermillion has or has had collaborations with include The Johns Hopkins University School of Medicine (“JHU”); The University of Texas M.D. Anderson Cancer Center (“M.D. Anderson”); University College London (“UCL”); The University of Texas Medical Branch (“UTMB”); The Katholieke Universiteit Leuven; Clinic of Gynecology and Clinic of Oncology, Rigshospitalet, Copenhagen University Hospital (“Rigshospitalet”); The Ohio State University Research Foundation (“OSU”); Stanford University (“Stanford”); and the University of Kentucky (“UK”).

On March 30, 2009, Vermillion filed a voluntary petition for relief (the “Bankruptcy Filing”) under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware (the “Bankruptcy Court”). Subsequently, on January 22, 2010, the confirmation order issued by the Bankruptcy Court for approving Vermillion’s Second Amended Plan of Reorganization under Chapter 11 of the United States Bankruptcy Code dated January 5, 2010, (the “Plan of Reorganization”) became final and all conditions precedent to January 22, 2010, were satisfied or waived. Accordingly, the Company has emerged from bankruptcy under Chapter 11.

### *The Diagnostics Market*

The economics of healthcare demand improved allocation of resources. Improved allocation of resources can be derived through disease prevention, early detection of disease leading to early intervention, and diagnostic tools that can triage patients to more appropriate therapy and intervention. According to the May 2009 In Vitro Diagnostics Market Analysis 2009-2024 report, the worldwide market for in vitro diagnostics (“IVDs”) in 2008 was approximately \$40.0 billion. Visiongain predicts that the market will generate nearly \$60.0 billion in 2014.

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

Vermillion’s focus on translational proteomics enables it to address the market for novel diagnostic tests that simultaneously measure multiple protein biomarkers. A protein biomarker is a protein or protein variant that is present at greater or lesser concentrations in a disease state versus a normal condition. Conventional protein tests measure a single protein biomarker whereas most diseases are complex. We believe that efforts to diagnose cancer and other complex diseases have failed in large part because the disease is heterogeneous at the causative level (i.e., most diseases can be traced to multiple potential etiologies) and at the human response level (i.e., each individual afflicted with a given disease can respond to that ailment in a specific manner).

Consequently, measuring a single protein biomarker when multiple protein biomarkers may be altered in a complex disease is unlikely to provide meaningful information about the disease state. We believe that our approach of monitoring and combining multiple protein biomarkers using a variety of analytical techniques will allow Vermillion to create diagnostic tests with sufficient sensitivity and specificity about the disease state to aid the physician considering treatment options for patients with complex diseases.

### *Ovarian Cancer*

*Background* . Commonly known as the “silent killer”, ovarian cancer leads to approximately 15,000 deaths each year in the United States. Approximately 20,000 new ovarian cancer cases are diagnosed each year, with the majority of the patients in the late stages of the disease in which the cancer has spread beyond the ovary. Unfortunately, ovarian cancer patients in the late stages of the disease have a poor prognosis, which leads to the high mortality rates. According to the American Cancer Society, when ovarian cancer is diagnosed at its earliest stages, the patient has a 5-year survival rate of 93%. Ovarian cancer patients have up to a 90% cure rate following surgery and/or chemotherapy if detected in stage 1. However, only 19% of ovarian cancer patients are diagnosed before the tumor has spread outside the ovary. For ovarian cancer patients diagnosed in the late-stages of the disease, the 5-year survival rate falls to 18%.

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While the diagnosis of ovarian cancer in its earliest stages greatly increases the likelihood of survival from the disease, another factor that predicts survival from ovarian cancer is the specialized training of the surgeon who operates on the ovarian cancer patient. Numerous studies have demonstrated that treatment of malignant ovarian tumors by specialists such as gynecologic oncologists or at specialist medical centers improves outcomes for women with these tumors. Published guidelines from the Society of Gynecologic Oncologists (the “SGO”) and the American College of Obstetricians and Gynecologists (the “ACOG”) recommend referral of women with malignant ovarian tumors to specialists. Unfortunately, today, only about one third of women with these types of tumors are operated on by specialists, in part because of inadequate tests and procedures that can identify such malignancies with high sensitivity. Accordingly, an 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 of ovarian cancer, which is essential for improving overall survival in patients with ovarian cancer.

Although ovarian adnexal tumors are relatively common, malignant tumors are less so. Screening studies have indicated that the prevalence of ovarian adnexal tumors in postmenopausal women can be as high as 5 percent. Ovarian adnexal tumors are thought to be even more common in premenopausal women, but there are more non-persistent, physiologic ovarian tumors in this demographic. Using census estimates of 110 million women over the age of 18 and a 5% prevalence rate, this implies that over five million women are experiencing ovarian adnexal tumors at any given time. Although many of these do not present to the physician or are not concerning enough to warrant surgery, those that do require evaluation of the likelihood of malignancy.

The ACOG and the SGO have issued guidelines to help physicians evaluate ovarian adnexal tumors for malignancy. These guidelines take into account menopausal status, CA125 levels, and physical and imaging findings. However, these guidelines have notable shortcomings because of their reliance on tools with certain weaknesses. Most notably, the CA125 blood test, which is cleared by the FDA only for monitoring for recurrence of ovarian cancer, is absent in up to 50% of early stage ovarian cancer cases. Moreover, CA125 can be elevated in diseases other than ovarian cancer, including benign ovarian tumors and endometriosis. These shortcomings limit the CA125 blood test’s utility in distinguishing benign from malignant ovarian tumors or for use in detection of early stage ovarian cancer. Transvaginal ultrasound is another diagnostic modality used with patients with ovarian tumors. Attempts at defining specific morphological criteria that can aid in a benign versus malignant diagnosis have led to the morphology index and the risk of malignancy index, with reports of 40-70% predictive value. However, ultrasound interpretation can be variable and dependent on the experience of the operator. Accordingly, the ACOG and SGO guidelines perform only modestly in identifying early stage ovarian cancer and malignancy in pre-menopausal women. Efforts to improve detection of cancer by lowering the cutoff for CA125 (the “Modified ACOG/SGO Guidelines”) provide only a modest benefit, since CA125 is absent in certain types of epithelial ovarian cancer and is poorly detected in early stage ovarian cancer.

*Clinical Development* . To address this clear unmet clinical need, Vermillion initiated an ovarian cancer biomarker discovery program. In August 2004, Vermillion, along with collaborators at JHU, UCL and M.D. Anderson, reported in a *Cancer Research* paper the discovery of three biomarkers that, when combined with CA125, provided higher diagnostic accuracy for early stage ovarian cancer than other biomarkers, including CA125 alone. The three biomarkers that Vermillion reported in the August 2004 *Cancer Research* paper formed the basis of an expanded panel of biomarkers that together have demonstrated risk stratification value in a series of studies involving over 2,500 clinical samples from more than five clinical sites. Data presented at the June 2006 Annual Meeting of the American Society of Clinical Oncology demonstrated the portability of this biomarker panel among different clinical groups, indicating its potential validity across various testing populations. Data presented at the March 2007 Annual Meeting of the SGO described results from a cohort study. Vermillion was able to demonstrate in 525 consecutively sampled women, a significant increase in the positive predictive value using its biomarker panel over the baseline level. This translates into the potential to enrich the concentration of ovarian cancer cases referred to the gynecologic oncologist by more than twofold.



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*OVA1™ Ovarian Tumor Triage Test* . In January, 2007, Vermillion commenced its multi-center prospective clinical trial to demonstrate the clinical performance and utility of its OVA1 Test, which was developed based on the studies described above. The clinical study population came from institutions with primary care physicians, gynecologists (“non-GO”), and/or gynecologic oncologists (“GO”). The clinical study subject enrollment centers were representative of institutions where ovarian tumor subjects potentially undergo a gynecologic examination. The specimens were collected at 27 demographically mixed sites that included large and small medical centers (universities/community hospitals), clinics that specialize in women’s health, small gynecology/obstetrics groups, gynecology/oncology practices, and HMO groups. The performance of the OVA1 Test was determined based on 516 evaluable subjects who underwent surgery to remove a documented ovarian tumor and for whom a pathology result was available. Physicians were asked, based on the information they had, which included physical, radiologic, and laboratory results, whether they believed the patient had cancer (“Clinical Assessment”). Physicians were not provided with the OVA1 Test score in making this determination. After surgery, the specimen was examined by a surgical pathologist per routine clinical practice. The ability of physicians to predict malignancy without the OVA1 Test was compared to the ability of physicians or the OVA1 Test (“Dual Assessment”) to predict malignancy. With Dual Assessment, which included the OVA1 Test, 80.0% of cancers missed by clinician impression alone were detected. Dual Assessment, which included the OVA1 Test, had greater sensitivity and negative predictive value than Clinical Assessment alone and both metrics of clinical performance were over 90%. Vermillion obtained FDA clearance of the OVA1 Test on September 11, 2009. The OVA1 Test is the first and only FDA-cleared test to be used in the pre-surgical evaluation of ovarian adnexal tumors. Additionally, the OVA1 Test is the first and only protein-based in vitro diagnostics multivariate index assay (“IVDMIA”) cleared by the FDA.

Results from the clinical trial were presented at the 2010 Annual Meeting of the SGO. One presentation demonstrated that the ACOG/SGO guidelines detected only 77% of ovarian malignancies and that the Modified ACOG/SGO Guidelines improved detection to only 80%. Moreover, detection of early stage ovarian cancer was only 47%. A second presentation demonstrated that the OVA1 Test, in conjunction with clinical impression, improved detection of malignancy to 92% from 72% using clinical impression alone among patients evaluated by non-gynecologic oncologists. Among these patients, detection of stage I ovarian cancer was 79%.

Health economic analysis indicates that anticipated benefits of the OVA1 Test include 1) more appropriate referrals of women with high risk of malignancy to a gynecologic oncologist and fewer referrals of women at low risk of malignancy; 2) fewer second surgeries as a result of an initial surgery by a generalist on a woman with a malignant tumor; 3) reduced need for a backup surgeon (i.e. specialist) during a surgery by a generalist; 4) more appropriate and efficient administration of intraperitoneal chemotherapy; 5) longer survival, associated with better quality of life. Studies directed at demonstrating these benefits are currently being planned.

*Other ovarian cancer indications* . Additionally, Vermillion has identified markers that may assist physicians in determining prognosis and/or recurrence. These markers require additional validation, which is planned for the years ending December 31, 2010 and 2011.

### *Peripheral Arterial Disease*

Peripheral arterial disease (“PAD”) represents atherosclerosis of the lower extremities and is generally reflective of systemic atherosclerotic disease and is therefore a risk factor for adverse cardiac events such as myocardial infarction and stroke . This disease affects between 8-12 million Americans, and the number of people diagnosed with PAD is expected to increase concurrently with the rising number of people diagnosed with diabetes. The American Heart Association and the American College of Cardiology have identified three demographics at risk for PAD: smokers 50 years of age or older; diabetics 50 years of age or older; and the elderly 70 years of age or older. Collectively, this represents tens of millions of Americans.

PAD is most commonly diagnosed using the ankle-brachial index (“ABI”), which is performed using a handheld Doppler. Blood pressures are measured in the arm and at the ankles and the ratio (ankle/arm) is calculated. Non-affected individuals should have a ratio of 0.9 or greater, while individuals with a ratio of less than 0.9 are defined as having PAD. Although the ABI has good sensitivity and specificity for PAD, its implementation into routine clinical practice has been hampered by poor physician adoption, generally because of the need to utilize special equipment by a specially trained technician and the need to have the patient lie supine prior to the administration of this test. Additionally, studies have shown that the ABI is often performed incorrectly. Therefore, a blood test that can be more routinely implemented would be beneficial in identifying people at increased risk for PAD.

In collaboration with Dr. John Cooke at Stanford, Vermillion has performed both an initial discovery study and a first validation study that has resulted in the identification blood markers that could assist in the diagnosis of PAD. These findings form the basis of a novel blood diagnostic test for PAD.

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The results of these studies, including the publication of two blood markers for PAD, were published in the August 2007 on-line issue of the peer-reviewed journal *Circulation*, which is published by the American Heart Association (the “AHA”). Independent validation of these initial findings was subsequently published in the peer-reviewed journal *Vascular Medicine* in 2008. This study, which encompassed 540 individuals, confirmed the elevation of the two biomarkers in subjects with PAD. Moreover, the study showed that a panel of markers improved the identification of subjects with PAD and was complementary to available data, including the AHA risk score. In this study, subjects with a moderate AHA risk score but elevated PAD biomarker score had almost an 8 times increased likelihood of having PAD than if they had a normal PAD biomarker score.

Ongoing efforts are aimed at further validating these biomarkers in combination with additional cardiovascular biomarkers as well as a prospective study in a general practice setting. Quest has accepted the PAD test as a development program under the terms of the Amended Strategic Alliance Agreement.

### *Thrombotic Thrombocytopenic Purpura*

The functional activity of proteins is often modulated by changes in its structure. Conventional approaches to assay proteins vary in their ability to detect these changes, and may depend on the specificity of the antibody to the original or altered forms of the proteins. Additionally, a conventional assay may inadvertently measure only one form of a protein while many other forms of this protein exist. Vermillion’s use of mass spectrometry has advantages over traditional assay approaches due to its ability to distinguish two or more highly related protein species based on molecular mass, or in combination with chromatographic separation tools, such as with ProteinChip arrays, based on biochemical properties. Because most traditional assay approaches rely strictly on using antibodies to capture the intended biomarker, protein forms with a common epitope are not readily distinguished. For example, Vermillion is specifically addressing thrombotic thrombocytopenic purpura (“TTP”), a hematologic disease that affects mostly women and is a result of a deficiency in the A disintegrin and metalloproteinase with a thrombospondin type 1 motif, member 13 (“ADAMTS13”) enzyme. This disease affects approximately 1,000 Americans annually and is life threatening in the absence of appropriate treatment, which is usually plasmapheresis. Undertreatment can lead to increased mortality from the disease while overtreatment wastes precious resources. In addition, patients with TTP need to be monitored for clinical response to therapy. Current assays rely on unwieldy western blots or alternately immunoblot, which are both low throughput and poorly quantitative. Vermillion’s assay measures the product of the enzymatic reaction for ADAMTS13 enzyme directly, provides the quantitation necessary to distinguish TTP from other thrombocytopenic diseases, evaluates patient responses to therapy, and monitors patients during clinical remission to prevent recurrences of the disease. OSU is now offering the diagnostic test for clinical use as the laboratory developed test (“LDT”).

### *Commercialization*

Vermillion expects to commercialize and sell diagnostic tests (which may consist of reagents and/or and proprietary software) in one or both of two phases. One phase, referred to as the LDT phase, will involve the sale of certain reagents (which may be in the form of proprietary software) to certain customers coupled with the grant to such customer of a sublicense to utilize the reagent in a laboratory-developed test using the methodology covered by the relevant license(s) obtained from Vermillion’s collaborators. An LDT would comprise multiple reagents (such as assay test kits, software, or other reagents), some of which would be supplied by Vermillion, and would be utilized by clinical laboratories to develop and perform “home brew” laboratory tests in laboratories federally regulated under the Clinical Laboratory Improvement Amendments of 1988 (“CLIA”). In the other phase, referred to as the IVD phase, Vermillion plans to sell FDA-cleared devices (which may comprise multiple reagents such as assay test kits, software, or other reagents).

On July 22, 2005, Vermillion entered into a three-year strategic alliance agreement with Quest to develop and commercialize up to three diagnostic tests. This agreement was amended on October 7, 2009, with a renewal of the three year exclusivity relationship. Under this strategic alliance agreement, Quest has the exclusive right to perform up to three laboratory tests of its selection. To date, Quest has selected two tests, including the OVA1 test and the PAD test currently under development. Quest will have the exclusive right for up to five years, following commercialization of each respective diagnostic test kit (the “Exclusive Period”), to perform such laboratory tests and market software purchased from Vermillion in the United States, Mexico, the United Kingdom and other countries where Quest operates a clinical laboratory, and non-exclusive rights to commercialize these diagnostic test kits in the rest of the world, subject to a royalty payable to Vermillion.

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

In the instance of the FDA-cleared OVA1 Test, Vermillion sells Quest a license to use the OvaCalc™ software. Each instance of clinical use (i.e. a reported result for the purpose of providing a result to a patient) is recorded and Quest pays Vermillion on a per-test basis.

### *Customers*

In the United States, the IVD market can be segmented into three major groups: clinical reference laboratories, the largest of which are Quest and Laboratory Corporation of America; hospital laboratories; and physician offices. Initially, substantially all of Vermillion's revenue in the United States will be generated through clinical reference laboratories, and Quest will be the major customer. Vermillion will attempt to penetrate hospital laboratories and physician offices, when appropriate. Outside the United States, laboratories may become customers, either directly with Vermillion or via distribution relationships established between Vermillion and authorized distributors.

### *Research and Development*

Vermillion's research and development efforts center on the discovery and validation of biomarkers and combinations of biomarkers that can be developed into diagnostic assays. Vermillion does this predominantly through collaborations it has established with academic institutions such as JHU, Rigshospitalet, and Stanford as well as through contract research organizations ("CRO's") such as PrecisionMed.

### *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. Although the primary structure of a protein is determined by a gene, the active 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. Vermillion is focused on converting recent advances in proteomics into clinically useful diagnostic tests.

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Relationship Between Proteins and Diseases

The entire genetic content of any organism, known as its genome, is encoded in strands of deoxyribonucleic acid (“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, which resulted in the validation by researchers of approximately 200 protein biomarkers that are being used in commercially available clinical diagnostic products.

Limitations of Existing Diagnostic Approaches

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

Vermillion’s Solution

Vermillion’s studies, particularly in ovarian cancer, have given Vermillion a better understanding of both the disease pathophysiology and the host response. By using multiple biomarkers, Vermillion is able to better characterize the disease and host response heterogeneity. In addition, by examining specific biomarkers with greater resolution, for example, post-translational modifications, we believe Vermillion can improve the specificity of its diagnostic biomarkers because these modifications reflect both the pathophysiology and host response. This is accomplished using novel protein analysis tools coupled with multivariate statistical analysis software to identify combinations of specific biomarkers leading to commercialization of disease-specific assays.

Vermillion is applying translational proteomics research, development tools, and methods to analyze biological information in an attempt to discover associations between proteins, protein variants, protein-protein interaction and diseases. Vermillion intends to develop new diagnostic tests based on known and newly identified protein markers to help physicians predict an individual’s predisposition for a disease in order to better characterize, monitor progression of and select appropriate therapies for such disease. Our goal is to develop novel diagnostic tests that address unmet medical needs, particularly in stratifying patients according to the risk of developing a disease, having a disease or failing a specific therapy for a disease.

The following table is a summary of certain diagnostic issues and Vermillion’s solution:

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

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### *Addressing the Heterogeneity of Disease*

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

### *Validation of Biomarkers Through Proper Study Design*

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

When designing clinical studies, Vermillion begins with the clinical question, since this drives the downstream clinical utility of the biomarkers. With the starting point of building validation into the discovery process, Vermillion designs its studies to include the appropriate cases and control groups. Vermillion further incorporates an initial validation component even within the discovery component. Vermillion places an emphasis on multi-institutional studies, inclusion of clinically relevant controls, using qualified and trained operators to run assays and collect data. For example, in an August 2004 cancer research paper, which describes the first three biomarkers in the ovarian cancer panel, there were more than 600 specimen samples taken from five hospitals that were analyzed. In the development of its OVA1 Test, Vermillion analyzed more than 2,500 samples from five additional medical centers prior to initiating its prospective ovarian clinical study for submission to the FDA. Additionally to date, Vermillion has examined over 600 samples in its PAD program. In analyzing the complex proteomics data, Vermillion takes a skeptical view of statistical methodologies, choosing to use a variety of approaches and looking for concordance between approaches, taking the view that biomarkers deemed significant by multiple statistical algorithms are more likely to reflect biological conditions than mathematical artifacts.

Through biomarker discovery efforts conducted predominantly from 2000 through 2007, Vermillion has amassed a portfolio of candidate biomarkers identified in retrospective sample sets. Vermillion’s research and development efforts are now mostly focused on validating these biomarkers in prospective studies. During the period from 2007 through 2008, Vermillion conducted a multi-center prospective clinical trial to determine the clinical performance of its OVA1 Test, which was submitted to the FDA on June 19, 2008, and cleared by the FDA on September 11, 2009. Vermillion has additional markers for ovarian cancer that it plans to evaluate and validate. Additionally, Vermillion has several biomarkers for PAD that it plans to assess prospectively during the year ending December 31, 2010. Vermillion is also evaluating in-licensing opportunities for biomarkers in relevant disease areas. This approach requires less infrastructure and internal resources than establishing and maintaining an internal platform-driven biomarker discovery program. Additionally, it allows Vermillion to be platform-agnostic and potential biomarkers for in-licensing could be proteins, genes, or other types of analytes.

The Company’s research and development expenses were \$2,346,000 and \$5,289,000 for the years ended December 31, 2009 and 2008, respectively.

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### *Intellectual Property*

Vermillion's intellectual property includes a portfolio of owned, co-owned or licensed patents and patent applications. As of December 31, 2009, Vermillion's patent portfolio included 54 issued United States patents, 94 pending United States patent applications, and numerous pending patent applications and issued patents outside the United States. These patents and patent applications are directed to several areas of technology important to Vermillion's business, including SELDI technology, diagnostic applications, protein biochips, instrumentation, software and biomarkers. The issued patents covering the SELDI and mass spectrometry technologies expire at various times from 2012 to 2025. Pursuant to the Instrument Business Sale, the Company entered into a cross license agreement with Bio-Rad pursuant to which the Company 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. The Company has been granted exclusive rights to commercialize the proprietary rights in the clinical diagnostics market during a five-year exclusivity period that ends on November 13, 2011. After the end of the five-year period, the Company and Bio-Rad will share exclusive rights. The Company 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.

Vermillion owns, licenses or hold options to license the patents related to biomarkers developed using SELDI technology. As of December 31, 2009, Vermillion was maintaining 34 patent application families. These include applications in the areas of cancer, cardiovascular disease, infectious disease, neurodegenerative disease and women's health. On March 31, 2009, Vermillion was issued patent number 7,510,842, "Biomarker for ovarian and endometrial cancer: hepcidin". On October 20, 2009, Vermillion was issued patent number 7,605,003, "Use of biomarkers for detecting ovarian cancer".

Outstanding material patents for the OVA1 Test are described in the table below:

<u>Territory</u>	<u>General Subject Matter</u>	<u>Expiration Date</u>
United States	Use of biomarkers for detecting ovarian cancer	8/7/2025

Vermillion has negotiated an extension of the term of its collaboration agreement with JHU, which ends on December 31, 2010, with automatic one-year extensions for up to three additional years unless terminated by Vermillion or JHU, to patent applications directed to biomarkers for ovarian cancer that Vermillion intends to commercialize as an ovarian cancer diagnostic test. Other institutions and companies from which Vermillion holds options to license intellectual property related to biomarkers or is a co-inventor on applications include UCL, M.D. Anderson, UK, OSU, McGill University (Canada), Eastern Virginia Medical School, Aaron Diamond AIDS Research Center, UTMB, Goteborg University (Sweden), University of Kuopio (Finland), The Katholieke Universiteit Leuven (Belgium), Rigshospitalet, and Inverness Medical.

In connection with the Instrument Business Sale, Vermillion sublicensed to Bio-Rad certain rights to the core SELDI technology for use outside of the clinical diagnostics field. Vermillion retained exclusive rights to the license rights for use in the field of clinical diagnostics for a five-year period, after which the license will be co-exclusive in this field. The rights to the SELDI technology are derived through royalty-bearing sublicenses from Molecular Analytical Systems, Inc. ("MAS"). MAS holds an exclusive license to patents directed to the SELDI technology from the owner, Baylor College of Medicine. MAS granted certain rights under these patents to its wholly owned subsidiaries, IllumeSys Pacific, Inc. and CIPHERGEN Technologies, Inc. in 1997. Vermillion obtained further rights under the patents in 2003 through sublicenses and assignments executed as part of the settlement of a lawsuit between Vermillion, MAS, LumiCyte and T. William Hutchens. Together, the sublicenses and assignments provide all rights to develop, make and have made, use, sell, import, market and otherwise exploit products and services covered by the patents throughout the world in all fields and applications, both commercial and non-commercial. The sublicenses carry the obligation to pay MAS a royalty equal to 2% of revenues recognized between February 21, 2003, and the earlier of (i) February 21, 2013, or (ii) the date on which the cumulative payments to MAS have reached \$10,000,000 (collectively, the "Sublicenses"). As of December 31, 2009, Vermillion has paid \$2,597,000 in royalties to MAS under the Sublicenses. Under Vermillion's sublicense with Bio-Rad, Bio-Rad agreed to pay the royalties directly to MAS under the license rights.



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On July 10, 2007, Vermillion entered into a license and settlement agreement with Health Discovery Corporation (“HDC”) pursuant to which Vermillion licensed more than 25 patents covering HDC’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 HDC upon entry into the agreement on July 13, 2007, \$100,000 three months following the date of the agreement on October 9, 2007, and \$150,000 twelve months following the date of the agreement on July 9, 2008. The remaining \$150,000 payable under the HDC Agreement, which was due twenty-four months following the date of the agreement and payable as of December 31, 2008, was subsequently paid on January 22, 2010. The HDC Agreement settled all disputes between Vermillion and HDC.

### ***Commercial Operations***

Upon clearance of the OVA1 Test, Vermillion initiated efforts directed at building a commercial infrastructure, including hiring of sales and marketing expertise and contracting with reimbursement specialists. To date, Vermillion has a total of five direct sales representatives. These sales representatives work closely with colleagues at Quest to identify opportunities for communicating the benefits of the OVA1 Test to general gynecologists and gynecologic oncologists alike. Additionally, we are contracting with Premier Source to develop and implement strategies towards effective reimbursement. Vermillion’s success will also depend on our ability to penetrate markets outside of the United States. Towards that end, we have taken steps towards obtaining CE mark, which will permit us to begin marketing the test in European territories.

### ***Reimbursement***

In the United States, revenue for diagnostic tests comes from several sources, including third-party payers such as insurance companies and government healthcare programs, such as Medicare and Medicaid. On March 12, 2010, Vermillion announced that Highmark Medicare Services, the Medicare contractor that has jurisdiction over claims submitted by Quest for the OVA1 Test, will cover the OVA1 Test. On May 10, 2010, Quest notified Vermillion that Highmark Medicare Services is adjudicating to Quest the OVA1 claims in the amount of \$516.25 for each OVA1 Test. Vermillion and Quest are pursuing coverage from additional payers.

### ***Environmental Matters***

#### ***Medical Waste***

Vermillion is 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. Vermillion’s 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. Vermillion utilizes outside vendors for disposal of specimens. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of these materials. Vermillion could be subject to damages in the event of an improper or unauthorized release of, or exposure of individuals to, hazardous materials.

#### ***Occupational Safety***

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

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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.

### **Government Regulation**

#### *General*

Vermillion's 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 its 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.

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

If the FDA indicates that a PMA is required for any of Vermillion 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.

Even in the case of devices like analyte specific reagents ("ASRs"), which may be exempt from 510(k) clearance or PMA approval requirements, the FDA may impose restrictions on marketing. Vermillion's potential future ASR products may be sold only to clinical laboratories certified under the 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. Vermillion 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 Vermillion's products, could have a material adverse effect on the Company.

Vermillion's suppliers' manufacturing facilities are, and, if and when Vermillion begins commercializing and manufacturing its products itself, its manufacturing facilities will be, subject to periodic and unannounced inspections by the FDA and state agencies for compliance with Quality System Regulations ("QSRs"). Additionally, the FDA will generally conduct a pre-approval inspection for PMA devices. Although Vermillion believes it and its suppliers will be able to operate in compliance with the FDA's QSRs for ASRs, Vermillion cannot assure that Vermillion or its suppliers will be in or be able to maintain compliance in the future. Vermillion has never been subject to an FDA inspection and cannot assure that it will pass an inspection, if and when it occurs. If the FDA believes that Vermillion or its suppliers are not in compliance with applicable laws or regulations, the FDA can issue a Form 483 List of Observations, warning letter, detain or seize Vermillion products, issue a recall notice, enjoin future violations and assess civil and criminal penalties against Vermillion. In addition, approvals or clearances could be withdrawn under certain circumstances.



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

### *United States Food and Drug Administration Regulation of Cleared Tests*

Once granted, a 510(k) clearance or PMA approval may place substantial restrictions on how Vermillion's device is marketed or to whom it may be sold. All devices cleared by the FDA are subject to continuing regulation by the FDA and certain state agencies. We are required to set forth and adhere to a Quality Policy and other regulations. Additionally, we may be subject to inspection by federal and state regulatory agencies. Non-compliance with these standards can result in, among other things, fines, injunctions, civil penalties, recalls, total or partial suspension of production. Labeling and promotional activities are subject to scrutiny by the FDA, which prohibits the marketing of medical devices for unapproved uses.

As a medical device manufacturer, Vermillion is also required to register and list its products with the FDA. In addition, Vermillion is required to comply with the FDA's QSRs, which require that its devices be manufactured and records be maintained in a prescribed manner with respect to manufacturing, testing and control activities. Further, Vermillion is 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 Vermillion provides information to the FDA whenever evidence reasonably suggests that one of its 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.

### *Foreign Government Regulation of Vermillion's Products*

We intend to obtain regulatory approval in other countries to market our tests. Each country maintains its own regulatory review process, tariff regulations, duties and tax requirements, product standards, and labeling requirements. Vermillion has retained the services of the Emergo Group and TUV SUD America Inc. to assist in its efforts to satisfy the regulatory requirements necessary for commercialization in Europe.

### *Competition*

The diagnostics industry in which the Company operates 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 Vermillion or its collaborators;
- develop diagnostic products that are more effective or cost-effective than those developed by Vermillion or its collaborators;
- obtain regulatory clearance or approval of their diagnostic products more rapidly than Vermillion or its collaborators; or
- obtain patent protection or other intellectual property rights that would limit the ability to develop and commercialize, or a customers' ability to use Vermillion's or its collaborators' diagnostic products.

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The Company competes with companies in the United States and abroad that are engaged in the development and commercialization of novel biomarkers that may form the basis of novel diagnostic tests. These companies may develop products that are competitive with and/or perform the same or similar to the products offered by the Company or its collaborators, such as biomarker specific reagents or diagnostic test kits. Also, clinical laboratories may offer testing services that are competitive with the products sold by the Company or its collaborators. For example, a clinical laboratory can either use reagents purchased from manufacturers other than the Company 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 the Company 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 the Company or its 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.

### *Employees*

As of December 31, 2008, the Company had 13 full-time employees, which was comprised of 4 employees in research and development, 3 employees in sales and marketing and 6 employees in general and administrative. The Company also engages independent contractors for certain matters. None of the Company's employees are covered by a collective bargaining agreement. The Company believes that its relations with its employees are good. The Company's success will depend in large part on its ability to attract and retain skilled and experienced employees.

As of March 31, 2009, in connection with the Company's Bankruptcy Filing and in an effort to conserve cash, the Company reduced its staff to 3 full-time employees, including 2 employees in research and development and 1 employee in general and administrative. As of December 31, 2009, the Company had 2 full-time employees, including 1 employee in research and development and 1 employee in general and administrative. Additionally, the Company had engaged as independent contractors several former employees and executive management members.

Subsequently on September 11, 2009, Vermillion received clearance of its OVA1 Test 510(k) Pre-Market Application Notification from the FDA. On November 24, 2009, Vermillion filed its Plan of Reorganization and Disclosure Statement with the Bankruptcy Court, which was amended on December 3, 2009. The Second Amended Plan of Reorganization was approved by the Company's unsecured creditors on January 6, 2010, and by the Bankruptcy Court on January 7, 2010. Vermillion emerged from bankruptcy under Chapter 11 on January 22, 2010. As part of the Second Amended Plan of Reorganization, Vermillion completed a private placement sale of 2,327,869 shares of its common stock for gross proceeds of \$43,050,000 to a group of investors. In connection with these events, the Company increased its staff to 10 full-time employees as of March 31, 2010.

### *Information About Vermillion*

The Company files annual reports, quarterly reports, special reports, proxy and information statements, and other information with the Securities and Exchange Commission (the "SEC"). You may read and copy any material the Company files with the SEC at the SEC's Public Reference Room located at the following address:

100 F Street, NE  
Washington, DC 20549

You may obtain information on the operation of the SEC's Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website, [www.sec.gov](http://www.sec.gov), that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

In addition, the Company makes available free of charge under the Investors Relation section of its website, [www.vermillion.com](http://www.vermillion.com), the Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after the Company has electronically filed such material with or furnished it to the SEC. You may also obtain these documents free of charge by submitting a written request for a paper copy to the following address:

Investor Relations  
Vermillion, Inc.  
47350 Fremont Blvd.  
Fremont, California 94538

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### Item 1A. Risk Factors

*You should carefully consider the following risk factors and uncertainties together with all of the other information contained in this Annual Report on Form 10-K, including Vermillion, Inc. ("Vermillion") and subsidiaries' (collectively referred to as the "Company") audited consolidated financial statements and the accompanying notes in Part II Item 8, "Financial Statements and Supplementary Data". The risks and uncertainties management ("we", "us" or "our") describes below are the only ones the Company faces. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also adversely affect the Company's business.*

*At the February 14, 2008, Special Meeting of Stockholders, the stockholders of Vermillion approved the proposal to authorize the Board of Directors in its discretion, without further authorization of Vermillion's stockholders, to amend Vermillion's Certificate of Incorporation to effect a reverse split of Vermillion's common stock by a ratio of between 1 for 6 to 1 for 10. On February 15, 2008, Vermillion's Board of Directors approved a 1 for 10 reverse stock split (the "Reverse Stock Split") of Vermillion's common stock effective at the close of business on Monday, March 3, 2008. Accordingly, all share and per share amounts were adjusted to reflect the impact of the 1 for 10 reverse stock split in this Annual Report on Form 10-K.*

#### ***Risks Related to Vermillion's Emergence from Bankruptcy***

*Vermillion filed a petition for relief under Chapter 11 of the United States Bankruptcy Code on March 30, 2009, and, despite having emerged from bankruptcy on January 22, 2010, Vermillion continues to be subject to the risks and uncertainties associated with residual Chapter 11 bankruptcy proceedings.*

On March 30, 2009, Vermillion filed a voluntary petition for relief (the "Bankruptcy Filing") under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware (the "Bankruptcy Court"). Subsequently on January 22, 2010, the confirmation order issued by the Bankruptcy Court for approving Vermillion's Second Amended Plan of Reorganization under Chapter 11 of the United States Bankruptcy Code dated January 5, 2010 (the "Plan of Reorganization") became final and all conditions precedent January 22, 2010 were satisfied or waived. Accordingly, the Company emerged from bankruptcy under Chapter 11. Because of the residual risks and uncertainties associated with Vermillion's Chapter 11 bankruptcy proceedings, the ultimate impact that events that occurred during, or that may occur subsequent to, these proceedings will have on the Company's business, financial condition and results of operations cannot be accurately predicted or quantified.

*The Company's actual financial results after Vermillion's emergence from bankruptcy under Chapter 11 may vary significantly from the projections filed with the Bankruptcy Court.*

Vermillion emerged from bankruptcy under Chapter 11 on January 22, 2010, pursuant to terms of its Plan of Reorganization approved by the Bankruptcy Court. In connection with the Plan of Reorganization, the Company was required to prepare projected financial information to demonstrate to the Bankruptcy Court the feasibility of the Plan of Reorganization and the Company's ability to continue operations upon emergence from bankruptcy under Chapter 11. The projected financial information filed with the Bankruptcy Court reflected numerous assumptions concerning anticipated future performance and prevailing and anticipated market and economic conditions, many of which were and continue to be beyond our control and which may not materialize. Projections are inherently subject to uncertainties and to a wide variety of significant business, economic and competitive risks. The Company's actual results will likely vary from those contemplated by the projected financial information and the variations may be material.

*The Company's actual financial results after emergence from bankruptcy under Chapter 11 may not be comparable to its historical financial information.*

As a result of the consummation of the Plan of Reorganization and the transactions contemplated thereby, the Company's financial condition and results of operations from and after January 22, 2010, may not be comparable to the financial condition or results of operations reflected in the Company's historical financial statements.

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*We cannot be certain that the Chapter 11 bankruptcy proceedings will not adversely affect the Company's operations going forward.*

Although Vermillion emerged from bankruptcy under Chapter 11 upon consummation of the Plan of Reorganization, we cannot assure you that having been subject to bankruptcy protection will not adversely affect the Company's operations going forward, including its ability to negotiate favorable terms from suppliers, partners and others and to attract and retain customers. The failure to obtain such favorable terms and retain customers could adversely affect the Company's financial performance.

### ***Risks Related to the Company's Business***

*We expect to incur a net loss for 2011 and 2010. If we are unable to generate significant diagnostic products revenue, the Company may never achieve profitability.*

From the Company's inception through December 31, 2009, the Company has generated cumulative revenue from the sale of products and services to customers of \$229,424,000 and has incurred net losses of \$279,475,000. The Company has experienced significant operating losses each year since its inception and we expect these losses to continue for at least the next year, resulting in an expected net loss for the years ending December 31, 2011 and 2010. For example, the Company experienced net losses of \$22,048,000, \$18,330,000 and \$21,282,000 for the years ended December 31, 2009, 2008 and 2007, respectively. The Company's losses have resulted principally from costs incurred in research and development, sales and marketing, litigation, and general and administrative costs associated with the Company's operations. These costs have exceeded the Company's gross profit, which was generated principally from product sales and service income derived from the protein research products and collaborative services business (the "Instrument Business"), before the assets and liabilities were sold (the "Instrument Business Sale") to Bio-Rad Laboratories, Inc. ("Bio-Rad") on November 13, 2006. We expect to incur additional operating losses that may be substantial. The Company's inability to become and remain profitable may depress the market price of Vermillion's common stock and impair the Company's ability to raise capital and continue our operations. Even if the Company does achieve profitability, the Company may not be able to sustain or increase profitability on a quarterly or annual basis.

*We may need to raise additional capital for the Company 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 currently believe that the Company's current cash resources together with existing debt facilities will be sufficient to meet the Company's anticipated needs for the next 12 months. However, we may need to raise additional capital sooner in order to develop new or enhanced products or services, increase our efforts to discover biomarkers and develop them into diagnostic products, or acquire complementary products, businesses or technologies. We may seek to raise additional capital through the issuance of equity or debt securities, or a combination thereof, in the public or private markets, through a collaborative arrangement or sale of assets, or through the liquidation of Vermillion's investments in auction rate securities. Additional financing opportunities may not be available to us, 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 the Company's business. Any future issuance of equity securities or securities convertible into equity would result in substantial dilution to Vermillion's stockholders, and the securities issued in such a financing may have rights, preferences or privileges senior to those of Vermillion's common stock or convertible senior notes. If Vermillion raises additional funds by issuing debt, the Company may be subject to limitations on its operations, through debt covenants or other restrictions. If Vermillion obtains additional funds through arrangements with collaborators or strategic partners, Vermillion may be required to relinquish rights to certain technologies or products that it might otherwise seek to retain. If adequate and acceptable financing is not available to Vermillion at the time that it seeks to raise additional capital, our ability to execute our business plan successfully may be negatively impacted.

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*Substantial leverage and debt service obligations may adversely affect the Company's consolidated cash flows.*

As of December 31, 2009, Vermillion had \$7,365,000 of outstanding principal under its convertible senior notes, including \$5,000,000 in aggregate principal of its 7.00% convertible senior notes due September 1, 2011 (the "7.00% Notes"), and \$2,365,000 in aggregate principal of its 4.50% convertible senior notes due September 1, 2008 (the "4.50% Notes"), and \$10,000,000 outstanding under Vermillion's secured line of credit with Quest Diagnostics Incorporated ("Quest"). As a result of negotiations between the holders of the 4.50% Notes and Vermillion, the \$2,500,000 outstanding principal balance related to the 4.50% Notes, which matured on September 1, 2008, was not redeemed by Vermillion. Interest of \$56,000 related to the 4.50% Notes was paid on the maturity date, September 1, 2008. Pursuant to the 4.50% Notes indenture agreement, late payment may result in interest to be calculated on the outstanding principal balance and overdue interest. On December 11, 2008, the trustee of the Indenture and the holders of the \$2,500,000 outstanding principal balance related to the 4.50% Notes agreed to extend the maturity date of the 4.50% Notes to September 1, 2009, and to waive any past default by Vermillion of its obligation to make payment on the principal of and interest on the 4.50% Notes.

From November 24, 2009 to January 22, 2010, Vermillion exchanged a total of 15,794 shares of its common stock for \$305,000 in principal and \$18,000 in unpaid interest related to the 4.50% Notes. On January 22, 2010, Vermillion paid the remaining unpaid principal balance of \$2,195,000 and interest of \$140,000 related to the 4.50% Notes. None of the 4.50% Notes are outstanding.

From November 30, 2009, through January 22, 2010, Vermillion exchanged 428,906 shares of its common stock for \$7,100,000 in principal and unpaid interest of \$732,000 related to the 7.00% Notes. From October 21, 2009 through November 19, 2009, \$4,400,000 in principal related to the 7.00% Notes was converted into 220,000 shares of Vermillion's common stock. On January 22, 2010, Vermillion paid \$362,000 of interest related to the 7.00% Notes. \$5,000,000 in principal of the 7.00% Notes remain outstanding.

Quest provided Vermillion with \$10,000,000 secured line of credit, which was forgivable based upon the achievement of certain milestones related to the development, regulatory approval and commercialization of certain diagnostic tests of Vermillion. As of Vermillion's emergence from bankruptcy, several of the milestones had been met and the principal balance of the secured line of credit was reduced to \$7,000,000. The \$7,000,000 secured line of credit is secured by Vermillion's assets, and is senior to the outstanding \$5,000,000 of the 7.00% Notes.

As a result of this indebtedness, Vermillion has substantial principal and interest payment obligations. The degree to which the Company is leveraged could, among other things:

- make it difficult for Vermillion to make payments on the convertible senior notes and secured line of credit;
- make it difficult for Vermillion to obtain financing for working capital, acquisitions or other purposes on favorable terms, if at all;
- make the Company more vulnerable to industry downturns and competitive pressures; and
- limit our flexibility in planning for or reacting to changes in the Company's business.

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

*Vermillion holds auction rate securities in its portfolio of investments. Due to failed auctions of individual auction rate securities held in Vermillion's investment portfolio, Vermillion is currently unable to liquidate its auction rate securities into cash at par value. If Vermillion is required to liquidate its investments in the future, the Company may incur a significant loss.*

At December 31, 2009, Vermillion's investments consisted of \$526,000 invested in auction rate securities, which were classified as available-for-sale long-term investments due to failed auctions related to these investments through December 31, 2009. The underlying assets of these auction rate securities include private placements of credit linked notes. These auction rate securities are intended to provide liquidity via an auction process that resets the applicable interest rate at predetermined calendar intervals generally every 28 days. Upon an auction failure, the interest rates do not reset at a market rate but instead reset based on a formula contained in the security, which rate is generally higher than the current market rate. The failure of the auctions means Vermillion may be unable to liquidate its auction rate securities into cash at par value until a future auction of these investments is successful or the auction rate security is refinanced by the issuer into another type of instrument. If Vermillion is required to redeem its investments at less than par value or to liquidate its investments at a deep discount in the future, Vermillion may incur a significant loss on the Company's business, consolidated results of operations, financial condition and cash flows. If Vermillion is unable to liquidate its investments in auction rate securities or there is additional other-than-temporary impairment in the market value of its investments in auction rate securities, this will have an adverse effect on the Company's business, consolidated results of operations, financial condition and cash flows, and may increase the volatility of Vermillion's common stock price.

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

The Company's success depends on our ability to continue to develop and commercialize diagnostic products. There is considerable risk in developing diagnostic products based on Vermillion's biomarker discovery efforts as candidate biomarkers 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 additional 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 Vermillion 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 Vermillion's 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 Vermillion's products, the scope and extent of which will affect patients' willingness to pay for Vermillion's products and will likely heavily influence physicians' decisions to recommend Vermillion's products.

These factors present obstacles to significant commercial acceptance of Vermillion's potential diagnostic products, which the Company will have to spend substantial time and financial resources to overcome and there is no guarantee that we will be successful in doing so. Our inability to do so successfully would prevent the Company from generating revenue from future diagnostic products and from developing a profitable business.

*The diagnostics space is competitive and we may not be able to compete successfully, which would adversely impact our ability to generate revenue.*

Our principal competition currently comes from the current clinical practices (e.g. those of obstetricians and gynecologists and gynecologic oncologists in the case of the OVA1™ ovarian tumor triage test (the "OVA1 Test")). We believe that the OVA1 Test provides a significant improvement over current clinical practices, but if we are not able to convince clinicians of this, our ability to commercialize OVA1 Test would be adversely affected. The field of ovarian cancer diagnostics generally and the management of ovarian adnexal masses specifically are competitive. Companies such as Fujirebio, Correllogic, LabCorp, ArrayIt, HealthLynx, Becton Dickinson among others have publicly disclosed that they have been or are currently working on ovarian cancer diagnostic assays. Additionally, academic institutions periodically report new findings in ovarian cancer diagnostics. If we are unable to license these findings and if these findings are licensed to other parties, we may be at a competitive disadvantage.

We have priced the OVA1 Test at a point that recognizes the value-added by its increased sensitivity for ovarian malignancy. If others develop a test that is viewed to be similar to the OVA1 Test in efficacy but is priced at a lower point, we may have to lower the price of the OVA1 Test, which would impact our margins and potential for profitability.



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*Our ability to commercialize Vermillion’s potential diagnostic tests is heavily dependent on its strategic alliance with Quest.*

On July 22, 2005, Vermillion and Quest entered into a strategic alliance agreement (the “Strategic Alliance Agreement”) to develop and commercialize up to three diagnostic tests from Vermillion’s product pipeline (the “Strategic Alliance”). The term of the Strategic Alliance Agreement, which is the period Vermillion has an obligation to present three diagnostic tests to Quest for potential election, was set to expire on the earlier of (i) the three-year anniversary of the agreement, which was July 22, 2008, and (ii) the date on which Quest commercializes the three diagnostic tests covered by such agreement. On July 21, 2008, Vermillion and Quest amended the Strategic Alliance Agreement to extend the term of the agreement to end on the earlier of (i) September 1, 2008 and (ii) the date on which Quest commercializes the three diagnostic tests. On October 24, 2008, Vermillion and Quest amended the Strategic Alliance Agreement to extend the term of the agreement to end on the earlier of (i) September 1, 2009 and (ii) the date on which Quest commercializes the three diagnostic tests. Subsequently on October 7, 2009, Vermillion and Quest amended the Strategic Alliance Agreement (the Strategic Alliance Agreement and the July 21, 2008, October 24, 2008 and October 7, 2009, amendments are collectively referred to as the “Amended Strategic Alliance Agreement”) to extend the term of the agreement to end on the earlier of (i) October 7, 2012 and (ii) the date on which Quest makes its third development election. To date, Quest has selected only two diagnostic tests, which are the peripheral artery disease (“PAD”) blood test (“VASCLIR™”) and the OVA1 Test, to commercialize. If this Strategic Alliance does not continue for its full term or if Quest fails to proceed to diligently perform its obligations as a part of the Strategic Alliance, such as independently developing, validating, and commercializing potential diagnostic tests, our ability to commercialize Vermillion’s potential diagnostic tests would be seriously harmed. Due to the current uncertainty with regard to the United States Food and Drug Administration (the “FDA”) regulation of analyte specific reagents (“ASRs”) or, for other reasons, Quest may elect to forgo development of ASR “home brew” laboratory tests and instead elect to wait for the development of in vitro diagnostic (“IVD”) test kits, which would adversely affect the Company’s revenues. If we elect to increase the Company’s expenditures to fund in-house diagnostic development programs or research programs, the Company will need to obtain additional capital, which may not be available on acceptable terms, or at all.

*The commercialization of Vermillion’s diagnostic tests may be affected adversely by changing FDA regulations, and any delay by or failure of the FDA to approve any of Vermillion’s diagnostic tests submitted to the FDA may adversely affect the Company’s consolidated revenues, results of operations and financial condition.*

The current regulatory environment with regard to ASRs and IVD multivariate index assays (“IVDMIAs”) continues to evolve and be a topic of discussion. To the extent the FDA requires that Vermillion’s diagnostic tests receive FDA 510(k) clearance or FDA pre-market approval, our ability to develop and commercialize Vermillion’s diagnostic tests may be prevented or significantly delayed, which would adversely affect the Company’s consolidated revenues, results of operations and financial condition. Any delay by or failure of the FDA to approve any diagnostic test that Vermillion submits to the FDA may adversely affect the Company’s consolidated revenues, results of operations and financial condition.

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

Vermillion’s technologies are new and cutting edge, 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 Vermillion’s product offerings. Development of these technologies remains a substantial risk to the Company 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 Vermillion’s technologies. In addition, we have reduced Vermillion’s research and development headcount and expenditures, which may adversely affect Vermillion’s ability to further develop its technologies.

*If we fail to maintain Vermillion’s rights to utilize intellectual property directed to diagnostic biomarkers, Vermillion 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 Vermillion has the right to utilize through licenses with its academic collaborators, such as The Johns Hopkins University School of Medicine and The University of Texas M.D. Anderson Cancer Center. In some cases, Vermillion’s collaborators own the entire right to the biomarkers. In other cases, Vermillion co-owns the biomarkers with its collaborators. If, for some reason, Vermillion loses its license to biomarkers owned entirely by its collaborators, Vermillion may not be able to use those biomarkers in diagnostic tests. If Vermillion loses its exclusive license to biomarkers co-owned by Vermillion and its collaborators, Vermillion’s collaborators may license their share of the intellectual property to a third party that may compete with the Company in offering diagnostic tests, which would materially adversely affect the Company’s consolidated revenues, results of operations and financial condition.

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*Vermillion has drawn \$10,000,000 from the secured line of credit provided by Quest. If Vermillion fails to achieve the milestones for the forgiveness of the secured line of credit set forth in Vermillion's amended credit agreement with Quest, Vermillion will be responsible for full repayment of the secured line of credit on or before October 7, 2012.*

As of December 31, 2009, Vermillion has drawn \$10,000,000 from the secured line of credit in connection with the Strategic Alliance. Vermillion borrowed in monthly increments of \$417,000 over a two-year period, and has paid all interest that was due. Funds from this secured line of credit may only be used for certain costs and expenses directly related to the Strategic Alliance, with forgiveness of the repayment obligations based upon Vermillion's achievement of milestones related to the development, regulatory approval and commercialization of certain diagnostic tests. On October 7, 2009, Vermillion and Quest amended the Strategic Alliance Agreement to extend the term of the agreement to end on the earlier of (i) October 7, 2012 and (ii) the date on which Quest makes its third development election. On September 11, 2009, Vermillion announced its milestone achievement of clearing the OVA1 Test with the FDA and, effective after the emergence from Chapter 11 bankruptcy, reduced its principal obligations under the Amended Strategic Alliance Agreement to \$7,000,000. Should Vermillion fail to achieve the remaining milestones, Vermillion would be responsible for the repayment of the outstanding principal amount and any unpaid interest on the secured line of credit on or before October 7, 2012, which would materially adversely affect the Company's consolidated results of operations and financial condition.

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

The Company's success depends in part on our ability to maintain and enforce Vermillion's proprietary rights. The Company relies on a combination of patents, trademarks, copyrights and trade secrets to protect Vermillion's technology and brand. In addition to Vermillion's licensed Surface Enhanced Laser Desorption/Ionization ("SELDI") technology, Vermillion has also submitted patent applications covering biomarkers that may have diagnostic or therapeutic utility. Vermillion's patent applications may not result in additional patents being issued.

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

The Company also relies upon the skills, knowledge and experience of its technical personnel. To help protect Vermillion's 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 the Company's trade secrets, knowledge or other proprietary information in the event of any unauthorized use or disclosure. If any trade secret, knowledge or other technology not protected by a patent were to be disclosed to or independently developed by a competitor, it could have a material adverse effect on the Company's business, consolidated results of operations and financial condition.

*If others successfully assert their proprietary rights against the Company, the Company may be precluded from making and selling its products or the Company may be required to obtain licenses to use their technology.*

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



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*Current and future litigation against the Company could be costly and time consuming to defend.*

The Company is from time to time subject to legal proceedings and claims that arise in the ordinary course of business, such as claims brought by the Company's clients in connection with commercial disputes, employment claims made by current or former employees, and claims brought by third parties alleging infringement on their intellectual property rights. In addition, the Company may bring claims against third parties for infringement on Vermillion's intellectual property rights. Litigation may result in substantial costs and may divert our attention and Company resources, which may seriously harm the Company's business, consolidated results of operations and financial condition.

An unfavorable judgment against the Company in any legal proceeding or claim could require the Company 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 Vermillion's licensing and sublicensing activities, which could harm the Company's business, consolidated results of operations and consolidated financial condition.

On September 17, 2007, Molecular Analytical Systems ("MAS") filed a lawsuit in the Superior Court of California for the County of Santa Clara naming Vermillion and Bio-Rad as defendants (the "State Court lawsuit"). Under the State Court lawsuit, MAS seeks an unspecified amount of damages and alleges, among other things, that Vermillion is in breach of its license agreement with MAS relating to SELDI technology as a result of Vermillion's entry into a sublicense agreement with Bio-Rad. Vermillion filed its general denial and affirmative defense on April 1, 2008. The Company and Bio-Rad thereafter moved to compel arbitration of the State Court lawsuit, which motion was denied in the trial court. Thereafter, the Company appealed the denial of the motion to compel arbitration, which appeal had the effect of staying the State Court lawsuit, which stay was further extended in both the state trial and appellate courts when the Company filed on March 30, 2009, a Voluntary Petition for Relief under Chapter 11 in the United States Bankruptcy Court for the District of Delaware. MAS filed a proof of claim on June 30, 2009, in connection with the Company's Chapter 11 bankruptcy proceedings. The proof of claim mirrored the MAS lawsuit and asserted that the Company breached the Exclusive License Agreement by transferring certain technologies to Bio-Rad without obtaining MAS's consent. MAS listed the value of its claim as in excess of \$5,000,000. On December 28, 2009, the Company objected to MAS's Proof of Claim in the Bankruptcy Court. On January 7, 2010, the Bankruptcy Court confirmed the Company's plan of reorganization. Per the Court's order confirming the plan, the Company's bankruptcy case will be closed after a final, non-appealable judgment is entered on MAS's claims. After the plan was confirmed, MAS filed a motion with the Bankruptcy Court asking it to abstain from hearing its proof of claim and asked the Bankruptcy Court to grant relief from stay so that MAS could proceed with the State Court lawsuit in California. The Bankruptcy Court granted that motion on March 15, 2010. Thereafter, the California Court of Appeal has set oral argument on the Company's appeal of the trial court order denying the Company's motion to compel arbitration for June 17, 2010. Management cannot predict the ultimate outcome of this matter at this time.

*The Company's failure to meet its purchase commitments, pursuant to a manufacture and supply agreement with Bio-Rad, could adversely affect the Company's consolidated results of operations and financial condition.*

Vermillion was a party to a manufacture and supply agreement with Bio-Rad, dated November 13, 2006, whereby Vermillion agreed to purchase from Bio-Rad the ProteinChip Systems and ProteinChip Arrays necessary to support Vermillion's diagnostics efforts. Under the terms of the agreement, Vermillion was required to purchase a specified number of ProteinChip Systems and ProteinChip Arrays in each of the three years following the date of the agreement. Pursuant to a letter from the Company to Bio-Rad dated May 2, 2008, the Company exercised its right to terminate the agreement for convenience upon 180 days' written notice. Consequently, termination of the agreement became effective on October 29, 2008. As part of the Chapter 11 bankruptcy process, Bio-Rad made a claim for approximately \$1,000,000. Vermillion has accrued for the contingency in accordance with ASC 450 Contingencies, within general and administrative expense. If Vermillion is unable to renegotiate this claim, it would have an adverse effect on the Company's consolidated cash flows.

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

The commercialization of Vermillion's products could be delayed, halted or prevented by applicable FDA regulations. If the FDA were to view any of the Company's actions as non-compliant, it could initiate enforcement actions, such as a warning letter and possible imposition of penalties. In addition, ASRs that Vermillion may provide will be subject to a number of FDA requirements, including compliance with the FDA's Quality System

Regulations ("QSR"), which establish extensive requirements for quality assurance and control as well as manufacturing procedures. Failure to comply with these regulations could result in enforcement actions for Vermillion or its potential suppliers. Adverse FDA actions in any of these areas could significantly increase the Company's expenses and limit its revenue and profitability. Although the Company is ISO 9001:2000 certified with respect to its manufacturing processes used for the Company's previous ProteinChip products, Vermillion will need to undertake additional steps to maintain its operations in line with the FDA's QSR requirements. Some components of the OVA1 Test are manufactured by other companies and Vermillion is required to maintain supply agreements with these companies. If these agreements are not satisfactory to the FDA, Vermillion will have to renegotiate these agreements. Any failure to do so would have an adverse effect on Vermillion's ability to commercialize OVA1 Test. Vermillion's suppliers' manufacturing facilities will be subject to periodic regulatory inspections by the FDA and other federal and state regulatory agencies. If and when Vermillion begins commercializing and assembling its products itself, Vermillion's facilities will be subject to the same inspections. Vermillion or its suppliers may not satisfy such regulatory requirements, and any such failure to do so would have an adverse effect on Vermillion's diagnostics efforts.

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

The Company is highly dependent on its executive officers and certain key employees. The Company's executive officers and key employees are employed at will by the Company. As of December 31, 2009, the Company had 2 employees in connection with the Bankruptcy Filing and in an effort to conserve cash, which included 1 employee in research and development and 1 employee in general and administrative. Since Vermillion's emergence from bankruptcy under Chapter 11, the Company has reappointed its President and Chief Executive Officer, and Senior Vice President and Chief Scientific Officer; appointed a Vice President and Chief Financial Officer, and a Vice President of Finance and Chief Accounting Officer; and has engaged additional consultants; however, minimal staffing and any inability of the Company to engage new executive officers or key employees could impact operations or delay or curtail Vermillion's research, development and commercialization objectives. To continue Vermillion's research and product development efforts, the Company needs people skilled in areas such as bioinformatics, biochemistry and information services. Competition for qualified employees is intense.

*Vermillion's diagnostic efforts may cause it to have significant product liability exposure.*

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

*Business interruptions could limit the Company's ability to operate its business.*

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

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

Compliance with laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, and new regulations enacted by the Securities and Exchange Commission (the "SEC"), are resulting in increased compliance costs. The Company, like all other public companies, is incurring expenses and diverting employees' time in an effort to comply with Section 404 of the Sarbanes-Oxley Act of 2002. The Company is a smaller reporting company, and has completed the process of documenting its systems of internal control and has evaluated its systems of internal control. Beginning with the year ended December 31, 2007, the Company has been required to assess continuously its compliance with Section 404 of the Sarbanes-Oxley Act of 2002. We expect to continue to devote the necessary resources, including internal and external resources, to support the Company's assessment. In the future, if we identify one or more material weaknesses, or the Company's independent registered public accounting firm is unable to attest that the Company's report is fairly stated or to express an opinion on the effectiveness of the Company's internal controls over financial reporting, this could result in a loss of investor confidence in the Company's financial reports, have an adverse effect on Vermillion's stock price and/or subject the Company to sanctions or investigation by regulatory authorities. Compliance with these evolving standards will result in increased general and administrative expenses and may cause a diversion of our time and attention from revenue-generating activities to compliance activities.

*Changes in healthcare policy could increase our costs and impact sales of and reimbursement for our tests.*

Several proposals to reform the system of health care delivery in the U.S. are currently being considered by the federal and many state governments. Some of the reforms call for a government sponsored health plan. A number of states are also contemplating significant reform of their healthcare policies. A proposal for additional government-funded health care could subject expenditures for health care to governmental budget constraints and limits on spending. We cannot predict what healthcare policy reforms, if any, will be adopted or the effect that such adoption may have on our taxes, fees and other costs, which could impact our business, financial condition and results of operations. In addition, proposals to implement fees or taxes on medical product manufacturers and clinical laboratories have been considered. At this point, it is not clear whether health reform legislation will be enacted by Congress and whether it will include any new taxes or fees on clinical laboratories or medical device manufacturers or reductions in laboratory payments under Medicare. If such fees, taxes, or reductions in payments are adopted, these could have a negative impact on our business.

*The Company is subject to environmental laws and potential exposure to environmental liabilities.*

The Company is subject to various international, federal, state and local environmental laws and regulations that govern the Company's operations, including the handling and disposal of non-hazardous 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. The Company is also subject to laws and regulations that impose liability and clean-up responsibility for releases of hazardous substances into the environment. Under certain of these laws and regulations, a current or previous owner or operator of property may be liable for the costs to remediate 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 the Company's consolidated results of operations.

### ***Risks Related to Owning Vermillion's Stock***

*The Company is not current in its reporting obligations with the SEC, and the Company's status as a public company could be revoked at any time.*

The Company is not current in its filing obligations with the SEC. While we are putting forth our best efforts to file all delinquent reports with the SEC, if we are unable to complete those filings before the SEC seeks to bring an administrative action against the Company, it is likely that the Company would cease being a public company. In that event, the liquidity of Vermillion's common stock would be severely diminished and our ability to continue the Company's operations could be materially affected.

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*Vermillion's common stock is trading over-the-counter on the Pink Quote electronic quotation system, and thus the liquidity of Vermillion's common stock is low.*

On September 25, 2008, Vermillion's common stock was delisted from and suspended from trading on the NASDAQ Capital Market due to noncompliance with Marketplace Rule 4310(c)(3), which requires, among other things, that listed companies have stockholders' equity of at least \$2,500,000.

Vermillion's common stock currently trades over-the-counter on Pink Quote, formerly known as Pink Sheets, electronic quotation system ("Pink Quote") under the symbol "VRML.PK". Quotes for stocks listed on Pink Quote are not listed in the financial sections of newspapers, and newspapers generally have very little coverage of stocks listed solely on the Pink Quote. Accordingly, prices for and coverage of securities traded solely on the Pink Quote may be difficult to obtain. In addition, stock traded solely on Pink Quote tend to have a limited number of market makers and a larger spread between the bid and ask prices than those listed on the New York Stock Exchange, the American Stock Exchange, the NASDAQ Stock Market or the OTC Bulletin Board. All of these factors may cause holders of Vermillion's common stock to be unable to resell their securities at or near their original offering price or at any price.

Because Vermillion's common stock is not listed on a principal national exchange, Vermillion is subject to Rule 15g-9 under the Securities and Exchange Act of 1934, as amended. This rule imposes additional sales practice requirements on broker-dealers that sell low-priced securities to persons other than established customers and institutional accredited investors. Consequently, this rule may affect the ability of broker-dealers to sell Vermillion's common stock and affect the ability of holders to sell their shares of Vermillion's common stock in the secondary market. Moreover, investors may be less interested in purchasing low-priced securities because the brokerage commissions, as a percentage of the total transaction value, tend to be higher for such securities, and some investment funds, other than those investment funds which focus on small-capitalization companies or low-priced securities, will not invest in low-priced securities.

*Vermillion may not be able to be re-listed on NASDAQ Global Market, which could adversely affect trading and liquidity of the common stock.*

We intend to apply for the listing of Vermillion's common stock on the NASDAQ Global Market as soon as practicable, assuming that the Company satisfies the applicable listing criteria. However, there is no assurance that the NASDAQ Global Market or any other national stock exchange will approve Vermillion's common stock for listing as there is no assurance that the Company will satisfy the criteria for listing, or be approved for listing, on the NASDAQ Global Market or any other national stock exchange. Failure to list Vermillion's common stock on the NASDAQ Global Market could result in a less liquid market for existing and potential stockholders in which to trade shares of our common stock, which in turn could depress the trading price of our common stock, and adversely impact our ability to raise capital in the future.

*Vermillion's stock price has been, and may continue to be, highly volatile, and an investment in Vermillion's stock could suffer a decline in value.*

The trading price of Vermillion's 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 the Company's control, including:

- Vermillion's recent emergence from bankruptcy under Chapter 11, and the risks, uncertainties and difficulties related thereto;
- 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 the Company or its competitors;
- publicity regarding actual or potential discoveries of biomarkers by others;
- comments or opinions by securities analysts or major stockholders;

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- conditions or trends in the pharmaceutical, biotechnology and life science industries;
- announcements by the Company of significant acquisitions and divestitures, strategic partnerships, joint ventures or capital commitments;
- developments regarding Vermillion's patents or other intellectual property or that of the Company's competitors;
- litigation or threat of litigation;
- additions or departures of key personnel;
- sales of Vermillion's common stock;
- limited daily trading volume;
- Vermillion's delisting from the NASDAQ Capital Market and subsequent quotation on the Pink Quotes; and
- economic and other external factors, disasters or crises.

In addition, the stock market in general and the market for technology companies, in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, there has been significant volatility in the market prices of securities of life science companies. These broad market and industry factors may seriously harm the market price of Vermillion's common stock, regardless of the Company's 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 Vermillion could result in substantial costs, potential liabilities and the diversion of our attention and Company resources.

*Anti-takeover provisions in Vermillion's charter, bylaws and stockholder rights plan and under Delaware law could make a third party acquisition of the Company difficult.*

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

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

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

*The Company may need to sell additional shares of Vermillion's common stock or other securities in the future to meet the Company's capital requirements. In such circumstances, or upon conversion of Vermillion's senior convertible notes and exercises of currently outstanding options and warrants, the ownership interests of Vermillion's stockholders prior to such sale, conversion or exercise could be substantially diluted. The possibility of dilution posed by shares available for future sale could reduce the market price of Vermillion's common stock and could make it more difficult for the Company to raise funds through equity offerings in the future.*

As of December 31, 2009, Vermillion had 7,918,705 shares of its common stock outstanding and 7,923,132 shares of its common stock reserved for future issuance to employees, directors and consultants pursuant to the Company's employee stock plans, which excludes 678,301 shares of Vermillion's common stock that were subject to outstanding options. In addition, as of December 31, 2009, warrants to purchase 505,647 shares of Vermillion's common stock were outstanding at exercise prices ranging from \$9.25 to \$25.00 per share, with a weighted average exercise price of \$16.18 per share. Also as of December 31, 2009, there were 250,000 shares of Vermillion's common stock reserved for issuance upon conversion of the 7.00% Notes. On December 11, 2008, the trustee of the Indenture and the holders of the \$2,500,000 outstanding principal balance related to the 4.50% Notes and Vermillion agreed to extend the maturity date of the 4.50% Notes to September 1, 2009, and to extend the option of the holders to convert the 4.50% Notes into Vermillion's common stock on or before August 31, 2009, with an adjusted conversion rate of 20 shares per \$1,000 principal amount of the 4.50% Notes, which is equal to a conversion price of \$50.00 per share. The adjusted conversion rate increased the shares of Vermillion's common stock reserved for issuance upon conversion of the 4.50% notes from 27,208 shares to 50,000 shares.

From November 24, 2009 to January 22, 2010, Vermillion exchanged a total of 15,794 shares of its common stock for \$305,000 in principal and \$18,000 in unpaid interest related to the 4.50% Notes. On January 22, 2010, Vermillion paid the remaining unpaid principal balance of \$2,195,000 and interest of \$140,000 related to the 4.50% Notes. None of the 4.50% Notes are outstanding.

From November 30, 2009 through January 22, 2010, Vermillion exchanged 428,906 shares of its common stock for \$7,100,000 in principal and unpaid interest of \$732,000 related to the 7.00% Notes. From October 21, 2009 through November 19, 2009, \$4,400,000 in principal related to the 7.00% Notes was converted into 220,000 shares of Vermillion's common stock. On January 22, 2010, Vermillion paid \$362,000 of interest related to the 7.00% Notes. \$5,000,000 in principal of the 7.00% Notes remain outstanding.

From October 5, 2009, through April 12, 2010, Vermillion issued 990 shares of its common stock for \$12,000 from the cash exercise of its warrants dated August 3, 2006, with an exercise price of \$12.60 per share (the "August 3 Warrants"), and 3,496 shares of its common stock from the cashless exercise of 8,625 underlying common stock shares of its August 3 Warrants. From October 5, 2009, through April 12, 2010, Vermillion issued 990 shares of its common stock for \$12,000 from the cash exercise of its warrants dated November 15, 2006, with an exercise price of \$12.60 per share (the "November 15 Warrants"), and 3,486 shares of its common stock from the cashless exercise of 8,625 underlying common stock shares of its November 15 Warrants. From September 29, 2009, through March 4, 2010, Vermillion issued 392,120 shares of its common stock for \$3,627,000 from the cash exercise of its warrants dated August 29, 2007, with an exercise price of \$9.25 per share (the "2007 Warrants"), and 521,213 shares of its common stock from the cashless exercise of 1,435,678 underlying common stock shares of its 2007 Warrants.

The exercise or conversion of all or a portion of these securities would dilute the ownership interests of Vermillion's stockholders. Furthermore, future sales of substantial amounts of Vermillion's common stock in the public market, or the perception that such sales are likely to occur, could affect prevailing trading prices of Vermillion's common stock and the value of the notes.



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### Item 1B. Unresolved Staff Comments

None

### Item 2. Properties

Vermillion, Inc. (“Vermillion”) and subsidiaries (collectively, the “Company”) lease and operate solely from its principal facility, which is 7,290 square feet and located at 47350 Fremont Boulevard in Fremont, California. The lease of this facility began on July 1, 2008, and expires on June 30, 2010. This facility serves as Vermillion’s research and development laboratories and its marketing and administrative offices.

### Item 3. Legal Proceedings

On September 17, 2007, Molecular Analytical Systems (“MAS”) filed a lawsuit in the Superior Court of California for the County of Santa Clara naming Vermillion, Inc. (“Vermillion”; Vermillion and its wholly-owned subsidiaries are collectively referred to as the “Company”) and Bio-Rad Laboratories, Inc. (“Bio-Rad”) as defendants (the “State Court lawsuit”). Under the State Court lawsuit, MAS seeks an unspecified amount of damages and alleges, among other things, that Vermillion is in breach of its license agreement with MAS relating to Surface Enhanced Laser Desorption/Ionization (“SELDI”) technology as a result of Vermillion’s entry into a sublicense agreement with Bio-Rad. Vermillion filed its general denial and affirmative defense on April 1, 2008. The Company and Bio-Rad thereafter moved to compel arbitration of the State Court lawsuit, which motion was denied in the trial court. Thereafter, the Company appealed the denial of the motion to compel arbitration, which appeal had the effect of staying the State Court lawsuit, which stay was further extended in both the state trial and appellate courts when the Company filed on March 30, 2009, a Voluntary Petition for Relief under Chapter 11 in the United States Bankruptcy Court for the District of Delaware. MAS filed a proof of claim on June 30, 2009, in connection with the Company’s Chapter 11 bankruptcy proceedings. The proof of claim mirrored the MAS lawsuit and asserted that the Company breached the Exclusive License Agreement by transferring certain technologies to Bio-Rad without obtaining MAS’s consent. MAS listed the value of its claim as in excess of \$5,000,000. On December 28, 2009, the Company objected to MAS’s Proof of Claim in the Bankruptcy Court. On January 7, 2010, the Bankruptcy Court confirmed the Company’s plan of reorganization. Per the Court’s order confirming the plan, the Company’s bankruptcy case will be closed after a final, non-appealable judgment is entered on MAS’s claims. After the plan was confirmed, MAS filed a motion with the Bankruptcy Court asking it to abstain from hearing its proof of claim and asked the Bankruptcy Court to grant relief from stay so that MAS could proceed with the State Court lawsuit in California. The Bankruptcy Court granted that motion on March 15, 2010. Thereafter, the California Court of Appeal has set oral argument on the Company’s appeal of the trial court order denying the Company’s motion to compel arbitration for June 17, 2010. Management cannot predict the ultimate outcome of this matter at this time.

On March 30, 2009, Vermillion filed a voluntary petition for relief (the “Bankruptcy Filing”) under Chapter 11 of the United States Bankruptcy Code in the Bankruptcy Court. On January 7, 2010, the Bankruptcy Court issued a confirmation order approving Vermillion’s Second Amended Plan of Reorganization (the “Plan of Reorganization”). On January 22, 2010, the confirmation order issued by the Bankruptcy Court became final and all conditions precedent to January 22, 2010 were satisfied or waived. Accordingly, the Company has emerged from bankruptcy under Chapter 11.

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On April 21, 2009, during the Bankruptcy Filing, Vermillion filed the Debtor's Motion for Entry of an Order Approving the Debtor's Incentive Plan (the "Incentive Plan") and Authorizing Payments thereunder pursuant to §§ 363(b) and 503(b) of the Bankruptcy Code (the "Incentive Plan Motion"), which sought to provide proper incentives to the directors (Gail Page, John Hamilton and James Burns, collectively, the "Directors") to help achieve a successful sale or restructuring of Vermillion. At a hearing on June 22, 2009, the Court entered an Order approving the Incentive Plan Motion (the "Incentive Plan Order"). The Incentive Plan was based upon a percentage of (A) the gross proceeds of Asset Sales, both prior to and after the Food and Drug Administration approval of the ovarian tumor triage test, and (B) the value of consideration - cash, debt and equity - distributed pursuant to a Confirmed Plan. In the end, the Incentive Plan Order provided that the Directors would receive: (i) zero, on Qualified Transaction Proceeds of \$3,000,000 or less, (ii) 6% on Qualified Transaction Proceeds of \$3,000,001 to \$10,000,000, and (iii) 8% on Qualified Transaction Proceeds of greater than \$10,000,000. While the Incentive Plan Order provided Vermillion with the authority to make distributions under the Incentive Plan, Vermillion agreed as part of the Plan of Reorganization to seek final judicial approval of the amounts to be paid pursuant to the Incentive Plan. On April 13, 2010, counsel for Vermillion, the Official Committee of the Equity Security Holders, and the Directors submitted a proposed settlement to the Bankruptcy Court. On April 14, 2010, after a hearing, an order was issued by the Bankruptcy Court approving the Management Incentive Plan. Under the Management Incentive Plan, Vermillion is directed to distribute an aggregate of \$5,000,000 in cash and 302,541 shares of restricted stock in Incentive Plan Payments to the Directors. All such restricted stock is to be distributed, with 1/24th of it to vest on each monthly anniversary of the vesting commencement date, June 22, 2009. The total Incentive Plan Payments are to be allocated to Gail Page, James Burns and John Hamilton on a 60%-20%-20% basis, respectively, or as otherwise may be agreed to in writing by the Directors. Vermillion is further authorized to take any and all actions necessary or appropriate in connection therewith.

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

### **Item 4.     RESERVED**



**PART II**

**Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

***Market Information***

On August 21, 2007, CIPHERGEN Biosystems, Inc. changed its corporate name to Vermillion, Inc. ("Vermillion"). In conjunction with the name change, Vermillion changed its common stock ticker symbol on the NASDAQ Capital Markets to "VRML". Prior to the corporate name change, Vermillion's common stock was traded on the NASDAQ Capital Market under the symbols "CIPH" and "CIPHE".

At the February 14, 2008, Special Meeting of Stockholders, the stockholders of Vermillion approved the proposal to authorize the Board of Directors in its discretion, without further authorization of Vermillion's stockholders, to amend Vermillion's Certificate of Incorporation to effect a reverse split of Vermillion's common stock by a ratio of between 1 for 6 to 1 for 10. On February 15, 2008, Vermillion's Board of Directors approved a 1 for 10 reverse stock split (the "Reverse Stock Split") of Vermillion's common stock effective at the close of business on Monday, March 3, 2008. Accordingly, all share and per share amounts were adjusted to reflect the impact of the Reverse Stock Split. On March 4, 2008, Vermillion's common stock began trading under the Reverse Stock Split basis. Additionally, beginning on March 4, 2008, Vermillion's common stock traded for a period of 20 trading days under ticker symbol "VRMLD" as an interim symbol to denote its new status. After this 20 trading day period, Vermillion's common stock resumed trading under the ticker symbol "VRML".

On September 25, 2008, Vermillion's common stock was delisted from and suspended from trading on the NASDAQ Capital Market as a result of Vermillion's noncompliance with the listing criteria under Marketplace Rule 4310(c)(3). Upon delisting from the NASDAQ Capital Market, Vermillion's common stock became immediately eligible for quotation and began trading over-the-counter ("OTC") on Pink Quotes, formerly known as Pink Sheets, electronic quotation system ("Pink Quote") on September 25, 2008, under the ticker symbol "VRML.PK". After a market maker's application to trade Vermillion's common stock on the OTC Bulletin Board was approved by the Financial Industry Regulatory Authority ("FINRA"), Vermillion's common stock began trading on the OTC Bulletin Board under the ticker symbol "VRML.OB" on October 10, 2008.

In connection to Vermillion's March 30, 2009, filing of a voluntary petition for relief (the "Bankruptcy Filing") under Chapter 11 of the United States Bankruptcy Code with the United States Bankruptcy Court for the District of Delaware, Vermillion's common stock began trading under the ticker symbol "VRMLQ.OB" on April 6, 2009. On April 20, 2009, Vermillion's common stock began trading under the ticker symbol "VRMQE.OB" as a result of Vermillion becoming a delinquent filer of its required financial reports to the Securities and Exchange Commission (the "SEC") under the National Association of Securities Dealers, Inc. ("NASD") Rule 6530. After a 30-day grace period on May 20, 2009, Vermillion's common stock was delisted from the OTC Bulletin Board for noncompliance with NASD Rule 6530. Upon delisting from the OTC Bulletin Board, Vermillion's common stock became immediately eligible for quotation and began trading on Pink Quote under the ticker symbol "VRMLQ.PK" on May 20, 2009. On January 27, 2010, Vermillion's common stock began trading under the symbol "VRML.PK" in connection with Vermillion's emergence from bankruptcy under Chapter 11 of the United States Bankruptcy Code on January 22, 2010.

As of January 11, 2010, there were 69 holders of record of Vermillion's common stock, excluding shares held in book-entry form through The Depository Trust Company, and 3,083 beneficial owners of Vermillion's common stock. The closing price for Vermillion's common stock on April 30, 2010, was \$18.00.

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The high and low sales prices of Vermillion's common stock as quoted on the NASDAQ Capital Market, Pink Sheets and OTC Bulletin Board during the years ended December 31, 2009 and 2008 were as follows:

	2009		2008	
	High	Low	High	Low
Three months ended March 31,	\$ 0.90	\$0.21	\$8.20	\$2.50
Three months ended June 30,	1.20	0.02	5.14	0.93
Three months ended September 30,	14.00	0.01	2.60	0.80
Three months ended December 31,	28.45	9.56	1.05	0.21

### *Performance Graph*

Per Instructions to Item 201(e)(6) of Regulation S-K, information is not required.

### *Dividends*

Vermillion has never paid or declared any dividend on its common stock and does not anticipate paying cash dividends on its common stock in the future. If Vermillion pays a cash dividend on its common stock, Vermillion 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 Vermillion's ability to declare and pay dividends on its common stock. Vermillion intends to retain all available funds and any future earnings to fund the development and expansion of its business.

### *Unregistered Sales of Equity Securities*

On January 7, 2010, Vermillion closed a private placement transaction with a group of investors. Vermillion received \$43,050,000 in gross proceeds from the sale of 2,327,869 shares of its common stock at a price of \$18.4932 per share. The shares of Vermillion's common stock issued in connection with the private placement will be exempted from the registration requirement pursuant to Regulation D of the Securities Act. Accordingly, these restricted shares are subject to the resale limitations of Rule 144 under 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.

From November 30, 2009, through January 22, 2010, Vermillion exchanged 428,906 shares of its common stock for \$7,100,000 in principal and unpaid interest of \$732,000 related to the convertible senior notes due September 1, 2011 (the "7.00% Notes"). From October 21, 2009 through November 19, 2009, \$4,400,000 in principal related to the 7.00% Notes was converted into 220,000 shares of Vermillion's common stock. The offer and issuance of the securities was exempt from registration under Section 3(a)(9) of the Securities Act.

From November 24, 2009 to January 22, 2010, Vermillion exchanged a total of 15,794 shares of its common stock for \$305,000 in principal and \$18,000 in unpaid interest related to the convertible senior notes due September 1, 2009 (the "4.50% Notes"). The offer and issuance of the securities was exempt from registration under Section 3(a)(9) of the Securities Act.

From October 5, 2009, through April 12, 2010, Vermillion issued 990 shares of its common stock for \$12,000 from the cash exercise of its warrants dated August 3, 2006, with an exercise price of \$12.60 per share (the "August 3 Warrants"), and 3,496 shares of its common stock from the cashless exercise of 8,625 underlying common stock shares of its August 3 Warrants. From October 5, 2009, through April 12, 2010, Vermillion issued 990 shares of its common stock for \$12,000 from the cash exercise of its warrants dated November 15, 2006, with an exercise price of \$12.60 per share (the "November 15 Warrants"), and 3,486 shares of its common stock from the cashless exercise of 8,625 underlying common stock shares of its November 15 Warrants. From September 29, 2009, through March 4, 2010, Vermillion issued 392,120 shares of its common stock for \$3,627,000 from the cash exercise of its warrants dated August 29, 2007, with an exercise price of \$9.25 per share (the "2007 Warrants"), and 521,213 shares of its common stock from the cashless exercise of 1,435,678 underlying common stock shares of its 2007 Warrants. The offer and issuance of securities is subject to the resale limitations of Rule 144 under the Securities Act.

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On August 29, 2007, Vermillion completed a private placement sale of 2,451,309 shares of its common stock and a warrant to purchase up to an additional 1,961,047 shares of its common stock with an exercise price of \$9.25 per share and expiration date of August 29, 2012, to a group of existing and new investors for \$20,591,000 in gross proceeds. The net proceeds of the transaction will be used for general working capital needs. In connection with Quest Diagnostics Incorporated's ("Quest") participation in this transaction, Vermillion amended a warrant to purchase an additional 220,000 shares of its common stock that was originally issued to Quest on July 22, 2005. Pursuant to the terms of the amendment, the warrant to purchase 220,000 shares of Vermillion's common stock was reduced from \$35.00 per share to \$25.00 per share and the expiration date was extended from July 22, 2010, to July 22, 2011. The sale, offer and issuance of the securities was exempt from registration under Section 4(2) and/or Rule 506 of Regulation D of the Securities Act, as a transaction not involving a public offering because, among other things, the investors were accredited investors at the time of the transaction and appropriate legends were affixed to the instruments representing such securities issued in such transaction.

As partial consideration for services as placement agent in connection with the August 29, 2007, private placement sale, Vermillion issued a warrant to purchase up to 92,100 shares of Vermillion's common stock with an exercise price of \$9.25 per share and expiration date of August 29, 2012, to Oppenheimer & Co. Inc. ("Oppenheimer"). Vermillion's Board of Directors determined the value of such warrants to be equal to the price paid for the warrants by the investors in the offering, or \$1.25 per warrant share, for an aggregate value of \$115,000. The sale, offer and issuance of the securities was exempt from registration under Section 4(2) and/or Rule 506 of Regulation D of the Securities Act, as a transaction not involving a public offering, because among other things, 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.

### *Securities Authorized for Issuance Under Equity Compensation Plans*

Vermillion currently maintains three equity-based compensation plans that were approved by its stockholders and a new equity-based compensation plan that was recently approved by the Board of Directors on February 8, 2010. The plans are the 1993 Stock Option Plan (the "1993 Plan"), the Amended and Restated 2000 Stock Plan (the "2000 Plan"), the Amended and Restated 2000 Employee Stock Purchase Plan (the "2000 ESPP"), and the 2010 Stock Incentive Plan (the "2010 Plan").

**1993 Plan** . The authority of Vermillion's Board of Directors to grant new stock options and awards under the 1993 Plan terminated in 2001. Vermillion's Board of Directors continues to administer the 1993 Plan with respect to the stock options that remain outstanding to Vermillion's officers, employees, directors and a consultant. Currently, there are 1,720 shares of stock options that remain outstanding under the 1993 Plan.

**2000 Plan** . Vermillion's Board of Directors or a committee of Vermillion's Board of Directors may grant stock options and stock awards under the 2000 Plan. Their authorities to grant stock options and stock awards under the 2000 Plan will terminate in 2010. Vermillion's officers, employees, directors and consultants are eligible to receive stock option grants and stock awards under the 2000 Plan. Vermillion's non-employee directors are also eligible for certain automatic stock option grants under the 2000 plan. Vermillion's Board of Directors administers the 2000 Plan and approves each stock option grant and stock award. Vermillion's Board of Directors or a committee of Vermillion's Board of Directors determines the per share purchase price of Vermillion's common stock related to stock option grants and stock awards under the 2000 Plan. Additionally, Vermillion's Board of Directors or a committee of Vermillion's Board of Directors determines the vesting schedule, duration, and other terms and conditions of each stock option grant or stock award subject to the limitations of the 2000 Plan. At December 31, 2009, there are 676,581 shares of stock options that remain outstanding under the 2000 Plan.

**2000 ESPP** . Subject to limits, all of Vermillion's officers and employees in the United States are eligible to participate in the 2000 ESPP. The 2000 ESPP operates in successive six-month offering and purchase periods. Participants in the ESPP may purchase Vermillion's common stock at the end of each purchase period at a purchase price equal to 85.0% of the lower of the fair market value of Vermillion's common stock at the beginning of the offering period or the end of the purchase period. The 2000 ESPP administrator may allow participants to contribute up to 15.0% of their eligible compensation to purchase stock under the 2000 ESPP. Vermillion's Board of Directors or a committee of Vermillion's Board of Directors administers the 2000 ESPP. The total amount of shares originally available for purchase under the 2000 ESPP was 1,505,795, of which 136,222 shares had been purchased.

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**2010 Plan** . The 2010 Plan will be administered by the Compensation Committee of the Board. Vermillion's employees, directors, and consultants are eligible to receive awards under the 2010 Plan. The 2010 Plan permits the granting of a variety of awards, including stock options, share appreciation rights, restricted shares, restricted share units, and unrestricted shares, deferred share units, performance and cash-settled awards, and dividend equivalent rights. The Company is authorized to issue up to 1,322,983 shares of common stock, par value \$0.001 per share under the 2010 Plan, subject to adjustment as provided in the 2010 Plan.

The number of shares of Vermillion's common stock to be issued upon exercise of outstanding stock options, the weighted-average exercise price of outstanding stock options and the number of shares available for future stock option grants and stock awards under equity compensation plans as of December 31, 2009, were as follows:

<u>Plan Category</u>	<u>Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights</u>	<u>Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights</u>	<u>Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Shares Reflected in First Column)</u>
Equity compensation plans approved by security holders	678,301 <sup>(1)</sup>	\$ 14.22 <sup>(2)</sup>	7,923,132 <sup>(3)</sup>
Equity compensation plans not approved by security holders	—	—	—
<b>Total</b>	<b>678,301</b>	<b>\$ 14.22</b>	<b>7,923,132</b>

- (1) Includes outstanding stock options for 1,720 shares of Vermillion's common stock under the 1993 Plan and 676,581 shares of Vermillion's common stock under the 2000 Plan.
- (2) Includes the weighted average stock price for outstanding stock options of \$34.88 under the 1993 Plan and \$14.17 for the 2000 Plan.
- (3) Includes 6,553,859 shares of Vermillion's common stock 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 lowest of (i) 215,000 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 Vermillion's Board of Directors. Also includes 1,369,273 shares of Vermillion's common stock for the 2000 ESPP. On January 1 of each year during the term of the 2000 ESPP, the total number of shares available for sale under the 2000 ESPP will increase by the lowest of (i) 43,000 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 Vermillion's Board of Directors. On February 8, 2010, the Board of Directors of Vermillion approved the 2010 Stock Incentive Plan. Under the 2010 Plan, the total amount of common stock available for future issuance is reduced to 1,322,983 shares. No future awards shall occur under the 1993 Plan, the 2000 Plan, or the 2000 ESPP.

## Item 6. Selected Financial Data

Per Item 301(c) of Regulation S-K, information is not required.

**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operation**

*You should read the following discussion in conjunction with Vermillion, Inc. ("Vermillion") and its wholly owned subsidiaries' (collectively, the "Company") audited consolidated financial statements and the accompanying notes in Part II Item 8, "Financial Statements and Supplementary Data". The following discussion includes certain forward-looking statements that involve risks and uncertainties. The Company's actual results could differ materially from those referred to in the forward-looking statements as a result of various factors, including those discussed in Part I Item 1A, "Risk Factors", and elsewhere in this Annual Report on Form 10-K.*

**Overview**

Vermillion was originally incorporated in California on December 9, 1993, under the name Abiotic Systems. In March 1995, Abiotic Systems changed its corporate name to CIPHERGEN Biosystems, Inc., and subsequently on June 21, 2000, it reincorporated in Delaware. Under the name CIPHERGEN Biosystems, Inc., Vermillion had its initial public offering on September 28, 2000. On November 13, 2006, the Company sold the assets and liabilities of its protein research products and collaborative services business (the "Instrument Business Sale") to Bio-Rad Laboratories, Inc. ("Bio-Rad"), which allowed Vermillion to focus on the development of its diagnostics tests. On August 21, 2007, CIPHERGEN Biosystems, Inc. changed its corporate name to Vermillion, Inc. Effective at the close of business on March 3, 2008, Vermillion had a 1 for 10 reverse stock split of Vermillion's common stock. Accordingly, all share and per share amounts were adjusted to reflect the impact of the 1 for 10 reverse stock split in this Annual Report on Form 10-K.

Vermillion is dedicated to the discovery, development and commercialization of novel high-value diagnostic tests that help physicians diagnose, treat and improve outcomes for patients. Vermillion's tests are intended to guide decisions regarding patient treatment, which may include decisions to refer patients to specialists, to perform additional testing, or to assist in the selection of therapy. A distinctive feature of Vermillion's approach is to combine multiple markers into a single, reportable index score that has higher diagnostic accuracy than its constituents.

Management ("we", "us" or "our") concentrates its development of novel diagnostic tests in the fields of oncology, hematology, cardiology and women's health, with the initial focus on ovarian cancer. Vermillion also intends to address clinical questions related to early disease detection, treatment response, monitoring of disease progression, prognosis and others through collaborations with leading academic and research institutions such as its strategic alliance agreement with Quest Diagnostic Incorporated ("Quest").

Vermillion's lead product is the OVA1<sup>TM</sup> ovarian tumor triage test (the "OVA1 Test"), which was cleared by the United States Food and Drug Administration (the "FDA") on September 11, 2009. The OVA1 Test addresses a clear unmet clinical need, namely the presurgical identification of women who are at high risk of having a malignant ovarian tumor. Numerous studies have documented the benefit of referral of these women to gynecologic oncologists for their initial surgery. Prior to the clearance of the OVA1 Test, no blood test had been cleared by the FDA for physicians to use in the presurgical management of ovarian adnexal masses. The OVA1 Test is a qualitative serum test that utilizes five well established biomarkers and proprietary FDA-cleared software to determine the likelihood of malignancy in women with a pelvic mass for whom surgery is planned. The OVA1 Test was developed through large pre-clinical studies in collaboration with numerous academic medical centers encompassing over 2,500 clinical samples. The OVA1 Test was fully validated in a prospective multi-center clinical trial encompassing 27 sites reflective of the diverse clinical centers at which ovarian adnexal masses are evaluated. The results of the clinical trial demonstrated that the OVA1 Test, in conjunction with clinical evaluation, was able to identify over 90% of the malignant ovarian tumors and to rule out malignancy (negative predictive value, or "NPV") with over 90% certainty.

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On July 22, 2005, Vermillion and Quest entered into a strategic alliance agreement (the “Strategic Alliance Agreement”) to develop and commercialize up to three diagnostic tests from Vermillion’s product pipeline (the “Strategic Alliance”). The Strategic Alliance Agreement was set to expire on the earlier of (i) the three-year anniversary of the agreement, which was July 22, 2008, and (ii) the date on which Quest commercializes the three diagnostic tests. On July 21, 2008, Vermillion and Quest amended the Strategic Alliance Agreement to extend the term of the agreement to end on the earlier of (i) September 1, 2008 and (ii) the date on which Quest commercializes the three diagnostic tests. On October 24, 2008, Vermillion and Quest amended the Strategic Alliance Agreement to extend the term of the agreement to end on the earlier of (i) September 1, 2009 and (ii) the date on which Quest makes its third development election. Subsequently on October 7, 2009, Vermillion and Quest amended the Strategic Alliance Agreement (the Strategic Alliance Agreement and the July 21, 2008, October 24, 2008 and October 7, 2009, amendments are collectively referred to as the “Amended Strategic Alliance Agreement”) to extend the term of the agreement to end on the earlier of (i) October 7, 2012 and (ii) the date on which Quest makes its third development election. To date, Quest has selected only two diagnostic tests, which are the PAD blood test (“VASCLIR™”) and the OVA1 Test, to commercialize. On September 11, 2009, the Company achieved the FDA clearance of the OVA1 Test milestone provision in the secured line of credit agreement providing for a reduction in the principal amount of the loan of \$3,000,000 but was only able to apply the milestone once it was no longer in default under the terms of the secured line of credit while under Chapter 11 bankruptcy protection. The Company cured the default upon payment of accrued interest on January 22, 2010 totaling approximately \$472,000. On January 23, 2010, the principal was reduced to \$7,000,000. The Company is in discussions with Quest regarding the achievement of an additional \$1,000,000 forgiveness milestone as a result of obtaining FDA clearance of the OVA1 Test under the terms of the Strategic Alliance Agreement.

The OVA1 Test was launched on March 9, 2010, by Quest under the terms of its strategic alliance with Vermillion at a list price of \$650 for each OVA1 Test. On March 11, 2010, the Medicare contractor Highmark Medicare Services announced that it would cover the OVA1 Test in its reimbursement program. On May 10, 2010, Quest notified Vermillion that Highmark Medicare Services is adjudicating to Quest the OVA1 claims in the amount of \$516.25 for each OVA1 Test.

In addition to the OVA1 Test, Vermillion has development programs in other clinical aspects of ovarian cancer as well as in peripheral arterial disease (“PAD”). In the field of peripheral arterial disease, Vermillion has identified candidate biomarkers that may help to identify individuals at high risk for a decreased ankle-brachial index score, which is indicative of the likely presence of peripheral arterial disease.

Current and former academic and research institutions that Vermillion has or has had collaborations with include The Johns Hopkins University School of Medicine (“JHU”); The University of Texas M.D. Anderson Cancer Center (“M.D. Anderson”); University College London (“UCL”); The University of Texas Medical Branch (“UTMB”); The Katholieke Universiteit Leuven; Clinic of Gynecology and Clinic of Oncology, Rigshospitalet, Copenhagen University Hospital (“Rigshospitalet”); The Ohio State University Research Foundation (“OSU”); Stanford University (“Stanford”); and the University of Kentucky (“UK”).

On March 30, 2009, Vermillion filed a voluntary petition for relief (the “Bankruptcy Filing”) under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware (the “Bankruptcy Court”). Subsequently, on January 22, 2010, the confirmation order issued by the Bankruptcy Court for approving Vermillion’s Second Amended Plan of Reorganization under Chapter 11 of the United States Bankruptcy Code dated January 5, 2010, (the “Plan of Reorganization”) became final and all conditions precedent to January 22, 2010, were satisfied or waived. Accordingly, the Company has emerged from bankruptcy under Chapter 11.

We expect to incur losses for at least the next year. Due to the Instrument Business Sale and recent commercial launch of the OVA1 Test, the Company will have limited revenues until additional diagnostic tests are developed or the Company continues to successfully commercialize the OVA1 Test. To become profitable, the Company may need to complete development of additional key diagnostic tests, obtain FDA approval and successfully commercialize those products in addition to the OVA1 Test. The Company has a limited history of operations in developing diagnostic tests, and we anticipate that the Company’s 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 the Company’s research and development efforts, the introduction of new products by the Company’s competitors and possible patent or license issues. The Company’s limited operating history as a diagnostics business makes accurate prediction of future results of operations difficult.



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### *Critical Accounting Policies and Estimates*

The notes to the consolidated financial statements contain a summary of the Company's significant accounting policies that are presented in Part II Item 8, "Financial Statements and Supplementary Data", of this Annual Report on Form 10-K. We believe that it is important to have an understanding of certain policies, along with the related estimates that we are required to make in recording the financial transactions of the Company, in order to have a complete picture of the Company's financial condition. In addition, in arriving at these estimates, we are required to make complex and subjective judgments, many of which include a high degree of uncertainty. The following is a discussion of these critical accounting policies and significant estimates related to these policies.

#### *Fair Value of Investments*

We classify all of our marketable securities as available-for-sale. We carry these investments at fair value, based upon the levels of inputs described below. The amortized cost of securities in this category is adjusted for amortization of premiums and accretions of discounts to maturity. Such amortization is included in interest income. Realized gains and losses are recorded in our statement of operations.

The Company reviews the impairment of its investments on a quarterly basis in order to determine the classification of the impairment as "temporary" or "other-than-temporary". Beginning January 1, 2009, if the fair value of a debt security is less than its amortized cost, the Company assesses whether the impairment is other-than-temporary. An impairment is considered other-than-temporary if: (i) the Company has the intent to sell the security; (ii) it is more likely than not that the Company will be required to sell the security before recovery of the entire amortized cost basis; or (iii) the Company does not expect to recover the entire amortized cost basis of the security. If an impairment is considered other than temporary based on condition (i) or (ii) described above, the entire difference between the amortized cost and the fair value of the debt security is recognized in earnings. If an impairment is considered other than temporary based on condition (iii) described above, the amount representing credit losses (defined as the difference between the present value of the cash flows expected to be collected and the amortized cost basis of the debt security) will be recognized in earnings and the amount relating to all other factors will be recognized in other comprehensive loss. Prior to January 1, 2009, declines in the fair value of debt securities deemed to be other-than-temporary were reflected in earnings as realized losses. Once an other-than-temporary impairment is recorded, a new cost basis in the investment is established.

We adopted ASC 820, "Fair Value and Measurements," in the first quarter of 2008. ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

Level 1 - Quoted prices in active markets for identical assets or liabilities.

Level 2 - Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Our short-term investments primarily utilize broker quotes in a non-active market for valuation of these securities.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

ASC 820 requires us to maximize the use of observable inputs and minimize the use of unobservable inputs. If a financial instrument uses inputs that fall in different levels of the hierarchy, the instrument will be categorized based upon the lowest level of input that is significant to the fair value calculation. Our financial assets measured at fair value on a recurring basis include securities available for sale. Securities available for sale include money market funds and auction rate securities in private placements of credit linked notes.

#### *Fair Value of Warrants*

Prior to January 1, 2009, common stock warrants were recorded in stockholders equity in accordance with ASC 815, "Derivatives and Hedging" and ASC 825, "Financial instruments." However in June 2008, the Financial Accounting Standards Board ("FASB") issued new guidance now codified in ASC 815 that clarifies the determination of whether an instrument (or an embedded feature) is indexed to an entity's own stock, which would qualify for classification as a liability. The new guidance was effective for financial statements issued for fiscal years beginning after December 15, 2008. The adoption of the new guidance on January 1, 2009, resulted in the reclassification of certain of our outstanding warrants from stockholders' deficit to liability and a cumulative effect of change in accounting principle on our accumulated deficit. In addition, the stock warrants are required to be fair valued at each reporting period, with the changes in fair value recognized in our consolidated statement of operations. We fair value the warrants using a Black Scholes valuation model. Since the outstanding common stock warrants are fair valued at the end of each reporting period, any change in the underlying assumptions to the Black Scholes valuation model, including the volatility and price of our common stock, may have a significant impact on our consolidated financial statements.

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### *Research and Development Costs*

Research and development costs are expensed as incurred. Research and development costs consist primarily of payroll and related costs, materials and supplies used in the development of new products, and fees paid to third parties that conduct certain research and development activities on behalf of the Company. Software development costs incurred in the research and development of new products are expensed as incurred until technological feasibility is established.

### *Stock-Based Compensation*

We account for stock options and stock purchase rights related to our 2000 Stock Plan (the “2000 Plan”) and 2000 Employee Stock Purchase Plan (the “2000 ESPP”) under the provisions of ASC 718 which requires the recognition of the fair value of stock-based compensation. The fair value of stock options and ESPP shares was estimated using a Black-Scholes option valuation model. This model requires the input of subjective assumptions in implementing ASC 718 including expected stock price volatility, expected life and estimated forfeitures of each award. The fair value of equity-based awards is amortized over the vesting period of the award, and we have elected to use the straight-line method of amortization. Due to the limited amount of historical data available to us, particularly with respect to stock-price volatility, employee exercise patterns and forfeitures, actual results could differ from our assumptions.

We account for equity instruments issued to non-employees in accordance with the provisions of ASC 718 and ASC 505, “Equity.” As a result, the non-cash charge to operations for non-employee options with vesting or other performance criteria is affected each reporting period by changes in the estimated fair value of our common stock. The two factors which most affect these changes are the price of the common stock underlying stock options for which stock-based compensation is recorded and the volatility of the stock price. If our estimates of the fair value of these equity instruments change, it would have the effect of changing compensation expenses.

### *Contingencies*

We account for contingencies in accordance with ASC 450 Contingencies (“ASC 450”). ASC 450 requires that an estimated loss from a loss contingency shall be accrued when information available prior to issuance of the financial statements indicates that it is probable that an asset has been impaired or a liability has been incurred at the date of the financial statements and when the amount of the loss can be reasonably estimated. Accounting for contingencies such as legal and contract dispute matters requires us to use our judgment. We believe that our accruals for these matters are adequate. Nevertheless, the actual loss from a loss contingency might differ from our estimates.

### *Income Taxes*

Our income tax policy records the estimated future tax effects of temporary differences between the tax basis of assets and liabilities and amounts reported in the accompanying balance sheets, as well as operating loss and tax credit carry forwards. We have recorded a full valuation allowance to reduce our deferred tax assets, as based on available objective evidence; it is more likely than not that the deferred tax assets will not be realized. In the event that we were to determine that we would be able to realize our deferred tax assets in the future, an adjustment to the deferred tax assets would increase net income in the period such determination was made.

### *Recently Adopted Accounting Pronouncements*

In June 2009, Accounting Standards Codification (“ASC”) ASC 105 Generally Accepted Accounting Principles (“ASC 105”) was issued. ASC 105 became the single official source of authoritative, nongovernmental generally accepted accounting principles (“GAAP”) in the United States. The historical GAAP hierarchy was eliminated and the ASC became the only level of authoritative GAAP, other than guidance issued by the Securities and Exchange Commission. Our accounting policies were not affected by the conversion to ASC. However, references to specific accounting standards in the footnotes to our consolidated financial statements have been changed to refer to the appropriate section of ASC.



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In April 2009, FASB issued ASC 825 Financial Instruments (“ASC 825”) and ASC 270 Interim Reporting or (“ASC 270”). ASC 825 and ASC 270 requires us to disclose on a quarterly basis, providing quantitative and qualitative information about fair value estimates for all financial instruments not measured in the Consolidated Balance Sheets at fair value. ASC 825 and ASC 270 are effective for interim periods ending after June 15, 2009. We have adopted the provisions of ASC 825 and ASC 270 effective the first quarter of fiscal 2009 (see Note 5 and Note 8 to the consolidated financial statements). The adoption of this guidance did not have a material impact on our consolidated financial statements

In April 2009, FASB issued ASC 320 Investments—Debt and Equity Securities (“ASC 320”). ASC 320 modifies the other-than-temporary impairment guidance for debt securities through increased consistency in the timing of impairment recognition and enhanced disclosures related to the credit and noncredit components of impaired debt securities that are not expected to be sold. In addition, increased disclosures are required for both debt and equity securities regarding expected cash flows, credit losses, and an aging of securities with unrealized losses. ASC 320 is effective for interim and annual reporting periods that end after June 15, 2009, and early adoption is permissible. We have adopted the provisions of ASC 320 on January 1, 2009. We have considered the guidance provided by ASC 320 in our determination of impairment, and have determined that the impact was not material (see Note 8 to the consolidated financial statements).

In October 2009, the FASB issued Accounting Standards Update 2009-13, Revenue Recognition (Topic 605): “*Multiple Deliverable Revenue Arrangements—A Consensus of the FASB Emerging Issues Task Force.*” This update provides application guidance on whether multiple deliverables exist, how the deliverables should be separated and how the consideration should be allocated to one or more units of accounting. This update establishes a selling price hierarchy for determining the selling price of a deliverable. The selling price used for each deliverable will be based on vendor-specific objective evidence, if available, third-party evidence if vendor-specific objective evidence is not available, or estimated selling price if neither vendor-specific or third-party evidence is available. We will be required to apply this guidance prospectively for revenue arrangements entered into or materially modified after January 1, 2011; however, earlier application is permitted. We have not determined the impact that this update may have on our consolidated financial statements.

In January 2010, the FASB issued updated guidance related to fair value measurements and disclosures, which requires a reporting entity to disclose separately the amounts of significant transfers in and out of Level 1 and Level 2 fair value measurements and to describe the reasons for the transfers. In addition, in the reconciliation for fair value measurements using significant unobservable inputs, or Level 3, a reporting entity should disclose separately information about purchases, sales, issuances and settlements (that is, on a gross basis rather than one net number). The updated guidance also requires that an entity should provide fair value measurement disclosures for each class of assets and liabilities and disclosures about the valuation techniques and inputs used to measure fair value for both recurring and non-recurring fair value measurements for Level 2 and Level 3 fair value measurements. The updated guidance is effective for interim or annual financial reporting periods beginning after December 15, 2009, except for the disclosures about purchases, sales, issuances and settlements in the roll forward activity in Level 3 fair value measurements, which are effective for fiscal years beginning after December 15, 2010 and for interim periods within those fiscal years. We do not expect adoption of the updated guidance to have a material impact on its consolidated results of operations or financial condition.

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### Results of Operations

Year Ended December 31, 2009, Compared to Year Ended December 31, 2008

The selected summary financial and operating data of Vermillion for the years ended December 31, 2009 and 2008 were as follows (dollars in thousands):

	Year Ended December 31,		Increase (Decrease)	
	2009	2008	Amount	%
Revenue:				
Products	\$ —	\$ 10	\$ (10)	(100.00)
Services	—	114	(114)	(100.00)
Total revenue	—	124	(124)	(100.00)
Cost of revenue:				
Products	—	4	(4)	(100.00)
Services	—	20	(20)	(100.00)
Total cost of revenue	—	24	(24)	(100.00)
Gross profit	—	100	(100)	(100.00)
Operating expenses:				
Research and development	2,346	5,289	(2,943)	(55.64)
Sales and marketing	455	2,019	(1,564)	(77.46)
General and administrative	2,562	7,309	(4,747)	(64.95)
Total operating expenses	5,363	14,617	(9,254)	(63.31)
Loss from operations	(5,363)	(14,517)	(9,154)	63.06
Interest income	28	399	(371)	(92.98)
Interest expense	(1,691)	(2,035)	344	(16.90)
Loss on investment in auction rate securities	—	(2,176)	2,176	(100.00)
Change in fair value and exercise of warrants	(12,106)	—	(12,106)	—
Debt conversion costs	(819)	—	(819)	—
Reorganization items	(2,066)	—	(2,066)	—
Other income (expense), net	(20)	(41)	21	(51.22)
Loss before income taxes	(22,037)	(18,370)	(3,667)	19.96
Income tax benefit (expense)	(11)	40	(51)	(127.50)
Net loss	<u>\$ (22,048)</u>	<u>(18,330)</u>	<u>\$ (3,718)</u>	<u>20.28</u>

**Products Revenue** . There was no product revenue for the year ended December 31, 2009. Products revenue of \$10,000 was generated from the sales of thrombotic thrombocytopenic purpura (“TTP”) test component material to The Ohio State University Research Foundation (“OSU”) for the year ended December 31, 2008.

**Services Revenue** . There was no service revenue for the year ended December 31, 2009. Services revenue for the year ended December 31, 2008, consisted of \$66,000 received from a consortium supported by the European Union for advanced molecular diagnostics research performed, and \$48,000 from support services provided to a customer in accordance with a consortium agreement, which expired on March 31, 2008.

**Cost of Products Revenue** . There was no cost of product revenue for the year ended December 31, 2009. Cost of products revenue related to sales of TTP test component material to OSU was \$4,000 for the year ended December 31, 2008.

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**Cost of Services Revenue** . There was no cost of service revenue for the year ended December 31, 2009. Cost of Cost of services revenue for the year ended December 31, 2008 were costs associated with support services provided to a customer in accordance with a consortium agreement, which expired on March 31, 2008.

**Research and Development Expenses** . Research and development expenses decreased by \$2,943,000, or 55.6%, to \$2,346,000 for the year ended December 31, 2009, from \$5,289,000 for the same period in 2008. This decrease was primarily due to the reduction in employee headcount to one at December 31, 2009, from four at December 31, 2008, and, correspondingly, salaries, payroll taxes, employee benefits and stock-based compensation decreased by \$685,000, and travel expenses decreased by \$64,000. Additionally, collaboration costs decreased by \$621,000 due to the completion of the whole blood specimen collection for the OVA1 Test 510(k) pre-market notification application by our clinical research organization; other professional services decreased by \$260,000; materials and supplies used in the development of new products decreased by \$230,000 due to the completion of the OVA1 Test clinical trials; depreciation and loss on disposal of assets decreased by \$592,000; and occupancy costs decreased by \$448,000 primarily due to the reduction of rent expense related to the Company's move into a smaller principal facility on July 1, 2008. Stock-based compensation expense included in research and development expenses was \$219,000 and \$120,000 for the years ended December 31, 2009 and 2008, respectively.

**Sales and Marketing Expenses** . Sales and marketing expenses decreased by \$1,564,000, or 77.5%, to \$455,000 for the year ended December 31, 2009, from \$2,019,000 for the same period in 2008. This decrease was primarily due to lower occupancy costs as a result of the reduction of rent expense related to the Company's move into a smaller principal facility on July 1, 2008, by \$418,000; payroll and related expenses by \$697,000; outside services by \$138,000; and travel expenses by \$160,000. Stock-based compensation expense included in sales and marketing expenses was \$24,000 and \$93,000 for the years ended December 31, 2009 and 2008, respectively.

**General and Administrative Expenses** . General and administrative expenses decreased by \$4,747,000, or 65.0%, to \$2,562,000 for the year ended December 31, 2009, from \$7,309,000 for the same period in 2008. The decrease was primarily due to \$408,000 in payroll and related expenses; \$1,212,000 in legal services, \$917,000 in other professional services; \$793,000 in accounting and auditing fees; \$114,000 in travelling expenses; \$922,000 in contingency relating to a contract dispute; \$243,000 in depreciation and related expenses, and \$218,000 in occupancy costs. The decrease was offset by an accrual of \$696,000 for related party severances, and an increase in other operating expenses of \$117,000. Stock-based compensation expense included in general and administrative expenses was \$328,000 and \$423,000 for the years ended December 31, 2009 and 2008, respectively.

**Interest Income** . Interest income was \$28,000 for the year ended December 31, 2009, compared to \$399,000 for the same period in 2008. Interest income decreased primarily due to lower interest yields and the reduction of investments available-for-sale and money market funds.

**Interest Expense** . Interest expense was \$1,691,000 for the year ended December 31, 2009, compared to \$2,035,000 for the same period in 2008. Interest expense in both periods consisted largely of interest related to Vermillion's convertible senior notes and borrowings from Quest. Interest expense included the amortization of the beneficial conversion feature associated with the 4.50% convertible senior notes and underwriter fees associated with the 7.00% convertible senior notes, which amounted to \$150,000 and \$211,000 for the years ended December 31, 2009 and 2008, respectively.

**Loss on investment in auction rate securities** . There were no losses related to investments available-for-sale for the year ended December 31, 2009. Loss on investment in auction rate securities was due to an other-than-temporary charge on investments available-for-sale of \$2,176,000 for the year ended December 31, 2008.

**Change in fair value and exercise of warrants**. The change in fair value of warrants was \$20,062,000 for the year ended December 31, 2009 as a result of warrant revaluations. Warrant exercise gain was \$7,956,000 for the year ended December 31, 2009. Effective January 1, 2009, the adoption of the new accounting guidance resulted in the reclassification of certain outstanding warrants from stockholders' deficit to liability, which further required remeasurement at the end of each reporting period.

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**Debt conversion costs.** Debt conversion costs were \$819,000 for the year ended December 31, 2009. During the year ended December 31, 2009, the Company entered into exchange agreements with the 4.5% and 7.0% Note holders that included a more favorable conversion rate compared to the original conversion rates under the terms of the 4.5% and 7.0% Notes.

**Reorganization items.** Reorganization items were \$2,066,000 for the year ended December 31, 2009. Reorganization items are expenses directly attributed to our Chapter 11 reorganization process such as advisory and professional service fees of \$1,770,000 and expenses relating to the debtor-in-possession financing of \$203,000. See Note 2 to our consolidated financial statements in Item 8 for a summary of these costs.

**Other Income (Expense), Net.** Net other expense was \$20,000 for the year ended December 31, 2009, compared to \$41,000 for the same period in 2008.

**Income Tax Benefit (Expense).** Income tax expenses were \$11,000 for the year ended December 31, 2009. Income taxes were a benefit of \$40,000 for the year ended December 31, 2008. The income tax benefit was due to foreign income tax refunds.

The Company has incurred net losses since inception and consequently is not subject to corporate income taxes in the United States to the extent of its tax loss carryforwards. At December 31, 2009, the Company had net operating loss carryforwards of \$101,000,000 for federal and \$69,000,000 for state tax purposes. If not utilized, these carryforwards will begin to expire in 2026 for federal purposes and 2016 for state purposes. As of December 31, 2009, the Company had \$5,400,000 of net operation carryforwards from Vermillion's Japan operations. If not utilized, this carryforward will begin to expire in 2012. The utilization of net operating loss carryforwards to reduce future income taxes will depend on the Company's 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 the Company's stock ownership.

### ***Liquidity and Capital Resources***

The Company has experienced significant cumulative operating losses since inception and, as of December 31, 2009, had an accumulated deficit of \$279,475,000. On March 30, 2009, the Company filed a voluntary petition for relief under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware (the "Bankruptcy Court"). On October 16, 2009, the Bankruptcy Court approved for the Company to enter into a Debtor-In-Possession Credit and Security Agreement ("DIP financing") with Quest for proceeds up to \$1,500,000, which is secured by a first lien on substantially all of the Company's assets and bears interest at the prime rate plus 0.5% per annum. The Company utilized \$400,000 of the DIP financing to fund general corporate matters. From September 2009 through December 31, 2009, the Company issued 886,372 shares of its common stock for total net proceeds of \$3,651,000 from the exercise of its warrants. On January 7, 2010, the Bankruptcy Court issued a confirmation order approving the Company's Second Amended Plan of Reorganization under Chapter 11 of the United States Bankruptcy Code (the "Plan of Reorganization"). On January 7, 2010, in connection with the Plan of Reorganization, the Company completed a private placement sale of 2,327,869 shares of its common stock to a group of new and existing investors for \$43,050,000 in gross proceeds. Subsequently on January 22, 2010, the confirmation order issued by the Bankruptcy Court for approving the Company's Plan of Reorganization became final and all conditions precedent to January 22, 2010 were satisfied or waived. Accordingly, the Company emerged from bankruptcy under Chapter 11 (see Note 2 to our consolidated financial statements in Item 8).

On March 9, 2010, the Company commercially launched its OVA1 Test. The Company will continue to expend substantial resources in the selling and marketing of the OVA1 Test and research and development of additional key diagnostic tests, obtain FDA approval and successfully commercialize those products in addition to the OVA1 Test. The Company will continue to be in an accumulated deficit position unless sufficient revenues can be generated to offset expenses.

We believe that our existing cash and cash equivalents will be sufficient to meet our cash requirements for at least the next twelve months.

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The successful achievement of our business objectives may require additional financing and therefore, we may need to raise additional capital or incur indebtedness to continue to fund our future operations. We may seek to raise capital through a variety of sources, including:

- the public equity market;
- private equity financing;
- collaborative arrangements;
- licensing arrangements; and/or
- public or private debt.

Any additional equity financing may be dilutive to stockholders, and debt financing, if available, may involve restrictive covenants. Additional funding may not be available when needed or on terms acceptable to us. If we are unable to obtain additional capital, we may be required to delay, reduce the scope of or eliminate our sales and marketing and research and development activities or not be able to pay our convertible senior notes. Our future liquidity and capital requirements will depend upon many factors, including, among others:

- Resources devoted to establish sales, marketing and distribution capabilities;
- The liquidity of auction rate securities held in our investment portfolio;
- The rate of product adoption by doctors and patients;
- Our determination to acquire or invest in other products, technologies and businesses;
- The market price of our common stock as it affects the exercise of stock options and the conversion terms of our convertible debt; and
- The insurance payer community's acceptance of and reimbursement for the OVA1 Test.

Cash and cash equivalents at December 31, 2009 and 2008 were \$3,440,000 and \$2,464,000, respectively. At December 31, 2009 and 2008, the working deficit was \$7,373,000 and \$3,727,000, respectively. The increase in working deficit for the year ended December 31, 2009, was principally due to funds used to finance operating losses of \$22,048,000, .

Net cash used in operating activities was \$3,114,000 for the year ended December 31, 2009, primarily as a result of the \$22,048,000 net loss reduced by \$14,091,000 of noncash expenses that included the net change in the fair value of warrants and warrant exercise gain of \$12,106,000; debt conversion costs of \$819,000; depreciation and amortization of \$335,000; stock-based compensation of \$571,000; and amortization of convertible senior notes discount of \$150,000. Net cash used in operating activities was offset by \$4,843,000 of cash provided by changes in operating assets and liabilities. Net cash used in operating activities was \$15,440,000 for the year ended December 31, 2008, primarily as a result of the \$18,330,000 net loss reduced by \$4,343,000 of noncash expenses that included depreciation and amortization of \$928,000, loss on sale and disposal of property and equipment of \$334,000, other than temporary charge on investments and loss on sale of investments of \$2,176,000, stock-based compensation of \$636,000 and amortization of convertible senior notes discount of \$211,000. Net cash used in operating activities was also increased by \$1,453,000 of cash used in changes in operating assets and liabilities.

Net cash provided by investing activities was \$42,000 for the year ended December 31, 2009, which primarily resulted from proceeds in connection with the maturity of a certificate of deposit pledged as collateral on a letter of credit. Net cash provided by investing activities was \$10,323,000 for the year ended December 31, 2008, which primarily resulted from the net sales of investments available-for-sale of \$10,358,000.

Net cash provided by financing activities was \$4,051,000 for the year ended December 31, 2009, which resulted from net proceeds of \$3,651,000 in connection with the exercise of stock warrants and debtor-in-possession financing of \$400,000 received from a related party. Net cash provided by financing activities was \$3,000 for the year ended December 31, 2008, which resulted from the purchase of common stock under the employee stock purchase plan.

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### ***Off Balance Sheet Arrangements***

As of December 31, 2009, the Company had no off-balance sheet arrangements that are reasonably likely to have a current or future material effect on its consolidated financial condition, results of operations, liquidity, capital expenditures or capital resources.

### **Item 7A. Quantitative and Qualitative Disclosures About Market Risk**

Per Item 305(e) of Regulation S-K, information is not required.



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**Item 8. Financial Statements and Supplementary Data**

**Vermillion, Inc.  
(Debtor-in-Possession)  
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**Report of Independent Registered Public Accounting Firm**

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

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1), present fairly, in all material respects, the financial position of Vermillion, Inc. and its subsidiaries at December 31, 2009 and 2008, and the results of their operations and their cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 2 to the consolidated financial statements, the Company voluntarily filed for Chapter 11 bankruptcy protection on March 30, 2009 and subsequently emerged from bankruptcy on January 22, 2010.

/s/ PricewaterhouseCoopers LLP

San Jose, California  
May 20, 2010

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**Vermillion, Inc.**  
**(Debtor-in-Possession)**  
**Consolidated Balance Sheets**  
**(Amounts in Thousands, Except Share and Par Value Amounts)**

	<b>December 31,</b>	
	<b>2009</b>	<b>2008</b>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 3,440	\$ 2,464
Accounts receivable	—	31
Prepaid expenses and other current assets	454	326
Total current assets	3,894	2,821
Property and equipment, net	189	611
Long-term investments, at fair value	526	341
Other assets	—	85
Total assets	<u>\$ 4,609</u>	<u>\$ 3,858</u>
<b>Liabilities and Stockholders' Deficit</b>		
Current liabilities:		
Accounts payable	\$ 2,227	\$ 1,676
Accrued liabilities	1,903	2,372
Debtor-in-possession loan with related party	400	—
Current portion of convertible senior notes, net of discount	—	2,500
Total current liabilities	4,530	6,548
Long-term debt owed to related party	10,000	10,000
Convertible senior notes, net of discount	—	16,378
Warrant liability	5,659	—
Liabilities subject to compromise	11,737	—
Total liabilities	<u>31,926</u>	<u>32,926</u>
Commitments and contingencies (Note 9)		
Stockholders' deficit:		
Preferred stock, \$0.001 par value, 5,000,000 shares authorized, none issued and outstanding at December 31, 2009 and 2008	—	—
Common stock, \$0.001 par value, 150,000,000 shares authorized at December 31, 2009 and 2008; 7,918,705 and 6,383,916 shares issued and outstanding at December 31, 2009 and 2008, respectively	8	6
Additional paid-in capital	252,196	228,560
Accumulated deficit	(279,475)	(257,472)
Accumulated other comprehensive loss	(46)	(162)
Total stockholders' deficit	<u>(27,317)</u>	<u>(29,068)</u>
Total liabilities and stockholders' deficit	<u>\$ 4,609</u>	<u>\$ 3,858</u>

See accompanying notes to the consolidated financial statements.

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**Vermillion, Inc.**  
**(Debtor-in-Possession)**  
**Consolidated Statements of Operations**  
**(Amounts in Thousands, Except Share and Per Share Amounts)**

	<b>Year Ended December 31,</b>	
	<b>2009</b>	<b>2008</b>
Revenue:		
Products	\$ —	\$ 10
Services	—	114
Total revenue	—	124
Cost of revenue:		
Products	—	4
Services	—	20
Total cost of revenue	—	24
Gross profit	—	100
Operating expenses:		
Research and development	2,346	5,289
Sales and marketing	455	2,019
General and administrative	2,562	7,309
Total operating expenses	5,363	14,617
Loss from operations	(5,363)	(14,517)
Interest income	28	399
Interest expense	(1,691)	(2,035)
Loss on investments in auction rate securities	—	(2,176)
Change in fair value and exercise of warrants	(12,106)	—
Debt conversion costs	(819)	—
Reorganization items	(2,066)	—
Other income (expense), net	(20)	(41)
Loss before income taxes	(22,037)	(18,370)
Income tax benefit (expense)	(11)	40
Net loss	\$ (22,048)	\$ (18,330)
Loss per share - basic and diluted	\$ (3.31)	\$ (2.87)
Shares used to compute basic and diluted loss per common share	6,662,231	6,381,802

See accompanying notes to the consolidated financial statements.

**Vermillion, Inc.**  
**(Debtor-in-Possession)**  
**Consolidated Statements of Changes in Stockholders' Deficit and Comprehensive Loss**  
**(Amounts in Thousands, Except Share Amounts)**

	<u>Common Stock</u>		<u>Additional</u>	<u>Accumulated</u>	<u>Accumulated</u>	<u>Total</u>	<u>Comprehensive</u>
	<u>Shares</u>	<u>Amount</u>	<u>Paid-In</u>	<u>Deficit</u>	<u>Other</u>	<u>Stockholders'</u>	<u>Loss</u>
			<u>Capital</u>		<u>Comprehensive</u>	<u>Equity (Deficit)</u>	
					<u>Loss</u>		
Balance at December 31, 2007	6,380,197	\$ 6	\$227,895	\$ (239,142)	\$ (221)	\$ (11,462)	
Net loss	—	—	—	(18,330)	—	(18,330)	\$ (18,330)
Change in unrealized gain(loss) on available for sale securities	—	—	—	—	98	98	98
Foreign currency translation adjustment	—	—	—	—	(39)	(39)	(39)
Comprehensive loss							<u>\$ (18,271)</u>
Registration costs adjustment related to private placement offering	—	—	26	—	—	26	
Payment for fractional shares related to 1 for 10 reverse stock split	(31)	—	—	—	—	—	
Common stock shares issued in connection with employee stock purchase plan	3,750	—	3	—	—	3	
Stock compensation charge	—	—	636	—	—	636	
Balance at December 31, 2008	6,383,916	6	228,560	(257,472)	(162)	(29,068)	
Net loss	—	—	—	(22,048)	—	(22,048)	\$ (22,048)
Cumulative effect of a change in accounting principle to reclassify certain warrants to warrant liability				(21)		(21)	
Cumulative effect adjustment to reclassify a portion of previously recognized other-than temporary impairment of auction rate securities	—	—	—	66	(66)	—	—
Change in unrealized gain(loss) on available for sale securities	—	—	—	—	185	185	185
Foreign currency translation adjustment	—	—	—	—	(3)	(3)	(3)
Comprehensive loss							<u>\$ (21,866)</u>
Warrant exercises	886,372	1	10,015	—	—	10,016	
Conversion of convertible senior notes	648,417	1	13,050	—	—	13,051	
Stock compensation charge	—	—	571	—	—	571	
Balance at December 31, 2009	<u>7,918,705</u>	<u>\$ 8</u>	<u>\$252,196</u>	<u>\$ (279,475)</u>	<u>\$ (46)</u>	<u>\$ (27,317)</u>	

See accompanying notes to the consolidated financial statements.

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**Vermillion, Inc.**  
**(Debtor-in-Possession)**  
**Consolidated Statements of Cash Flows**  
**(Amounts in Thousands)**

	<b>Year Ended December 31,</b>	
	<b>2009</b>	<b>2008</b>
<b>Cash flows from operating activities:</b>		
Net loss	\$ (22,048)	\$ (18,330)
Adjustments to reconcile net loss to net cash used in operating activities:		
Charge on impairment and loss on sale of investments	—	2,176
Change in warrant value and warrant exercise gain	12,106	—
Debt conversion costs	819	—
(Gain) loss on sale and disposal of property and equipment	(2)	334
Depreciation and amortization	335	928
Stock-based compensation expense	571	636
Amortization of debt discount	73	211
Amortization of debt issuance costs	9	58
Write-off of debt issuance costs and discounts related to debt subject to compromise	93	—
Impairment of property and equipment	87	—
Changes in operating assets and liabilities:		
Decrease (increase) in accounts receivable	31	(12)
Decrease (increase) in prepaid expenses and other current assets	(108)	778
Decrease in other assets	—	555
Increase (decrease) in accounts payable and accrued liabilities	4,920	(2,469)
Decrease in deferred revenue	—	(27)
Decrease in other liabilities	—	(278)
Net cash used in operating activities	<u>(3,114)</u>	<u>(15,440)</u>
<b>Cash flows from investing activities:</b>		
Proceeds from sales of investments	—	14,458
Purchases of investments	—	(4,100)
Purchase of certificate of deposit pledged as collateral on letter of credit	—	(100)
Proceeds from sale of property and equipment	2	150
Purchase of property and equipment	—	(85)
Proceeds from maturity of certificate of deposit pledged as collateral on letter of credit	40	—
Net cash provided by investing activities	<u>42</u>	<u>10,323</u>
<b>Cash flows from financing activities:</b>		
Proceeds from debtor-in-possession loan financing with related party	400	—
Proceeds from stock warrant exercises, net	3,651	—
Proceeds from purchase of common stock by employee stock purchase plan	—	3
Net cash provided by financing activities	<u>4,051</u>	<u>3</u>
Effect of exchange rate changes on cash and cash equivalents	<u>(3)</u>	<u>(39)</u>
Net increase (decrease) in cash and cash equivalents	976	(5,153)
Cash and cash equivalents, beginning of year	<u>2,464</u>	<u>7,617</u>
Cash and cash equivalents, end of year	<u>\$ 3,440</u>	<u>\$ 2,464</u>
<b>Supplemental disclosure of cash flow information:</b>		
<b>Cash paid during the period for:</b>		
Interest	\$ 67	\$ 1,859
Income taxes	10	35
<b>Noncash investing and financing activities:</b>		
Unrealized (gain) loss on investments	\$ (185)	\$ 98
Cumulative effect of change in accounting principle - warrant liability	(21)	—
Cumulative effect of change in accounting principle - unrealized loss on investments	66	—
Registration costs adjustment related to private placement offering of common stock and warrants	—	26
Issuance of common stock from warrant exercise	6,365	—
Issuance of common stock from conversion of principal and interest for senior convertible notes	13,051	—

See accompanying notes to the consolidated financial statements.



**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements**

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

***Organization***

Vermillion, Inc. (“Vermillion”; Vermillion and its wholly-owned subsidiaries are collectively referred to as the “Company”) is incorporated in the state of Delaware, and is engaged in the business of discovering, developing and commercializing diagnostics tests in the fields of oncology, hematology, cardiology and women’s health. On March 9, 2010, the Company commercially launched OVA1™ ovarian tumor triage test (the “OVA1 Test”).

***Liquidity***

The Company has incurred significant net losses and negative cash flows from operations since inception. At December 31, 2009, the Company had an accumulated deficit of \$279,475,000. On November 13, 2006, the Company completed the sale of assets and liabilities of the Company’s protein research products and collaborative services business (the “Instrument Business Sale”) to Bio-Rad Laboratories, Inc. (“Bio-Rad”). On March 30, 2009, the Company filed a voluntary petition for relief (the “Bankruptcy Filing”) under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware (the “Bankruptcy Court”). On January 7, 2010, in connection with the Second Amended Plan of Reorganization under Chapter 11 of the United States Bankruptcy Code (“Plan of Reorganization”), the Company completed a private placement sale of 2,327,869 shares of its common stock to a group of new and existing investors for \$43,050,000 in gross proceeds. Subsequently on January 22, 2010, the confirmation order issued by the Bankruptcy Court for approving the Company’s Plan of Reorganization became final and all conditions precedent to January 22, 2010 were satisfied or waived. Accordingly, the Company emerged from bankruptcy under Chapter 11 (see Note 2). On March 9, 2010, the Company commercially launched the OVA1 Test. Due to the Instrument Business Sale and recent commercial launch of the OVA1 Test, the Company will have limited revenues until additional diagnostic tests are developed or the Company continues to successfully commercialize the OVA1 Test.

To become profitable in the near future, the Company may need to complete development of additional key diagnostic tests, obtain FDA approval and successfully commercialize those products in addition to the OVA1 Test. 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. The Company may seek to raise additional funding from various possible sources, including the public equity market, private financings, sales of assets, collaborative arrangements and debt. If Vermillion raises additional capital 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 Vermillion’s common stock or convertible senior notes. If the Company raises additional funds by issuing debt, the Company may be subject to limitations on its operations, through debt covenants or other restrictions. If the Company obtains additional funds through arrangements with collaborators or strategic partners, the Company may be required to relinquish its rights to certain technologies or products that it might otherwise seek to retain.

There can be no assurance that the Company will be able to obtain such financing, or obtain it on acceptable terms. If the Company is unable to obtain financing on acceptable terms, it may be unable to execute its business plan, the Company could be required to reduce the scope of or eliminate its sales and marketing and research and development activities or not be able to pay its convertible senior notes.

***Principals of Consolidation***

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

**Vermillion, Inc.**  
**(Debtor-in-Possession)**  
**Notes to Consolidated Financial Statements—(Continued)**

***Basis of Presentation***

On February 15, 2008, Vermillion's Board of Directors approved a 1 for 10 reverse stock split (the "Reverse Stock Split") of Vermillion's common stock effective at the close of business on Monday, March 3, 2008. All share and per share amounts were adjusted to take into account the Reverse Stock Split in the accompanying notes to the consolidated financial statements.

***Use of Estimates***

The preparation of consolidated financial statements in accordance with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. The primary estimates underlying the Company's consolidated financial statements include the fair value of its investment portfolio, assumptions regarding variables used in calculating the fair value of its equity awards, income taxes and contingent liabilities. Actual results could differ from those estimates.

***Cash and Cash Equivalents and Long-term Investments***

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

The Company classifies all of its marketable securities as available-for-sale and carries these investments at fair value, based upon the levels of inputs described below. The amortized cost of securities in this category is adjusted for amortization of premiums and accretions of discounts to maturity. Such amortization is included in interest income. Realized gains and losses are recorded in our statement of operations.

The Company reviews the impairment of its investments on a quarterly basis in order to determine the classification of the impairment as "temporary" or "other-than-temporary". Beginning January 1, 2009, if the fair value of a debt security is less than its amortized cost, the Company assesses whether the impairment is other-than-temporary. An impairment is considered other-than-temporary if: (i) the Company has the intent to sell the security; (ii) it is more likely than not that the Company will be required to sell the security before recovery of the entire amortized cost basis; or (iii) the Company does not expect to recover the entire amortized cost basis of the security. If an impairment is considered other than temporary based on condition (i) or (ii) described above, the entire difference between the amortized cost and the fair value of the debt security is recognized in earnings. If an impairment is considered other than temporary based on condition (iii) described above, the amount representing credit losses (defined as the difference between the present value of the cash flows expected to be collected and the amortized cost basis of the debt security) will be recognized in earnings and the amount relating to all other factors will be recognized in other comprehensive loss. Prior to January 1, 2009, declines in the fair value of debt securities deemed to be other-than-temporary were reflected in earnings as realized losses. Once an other-than-temporary impairment is recorded, a new cost basis in the investment is established.

With respect to the auction rate securities that were held as of January 1, 2009, The Company determined that the cumulative effect adjustment required to reclassify the non-credit portion of previously recognized other-than-temporarily impaired adjustments was \$66,000. Therefore, the Company decreased its accumulated deficit and increase its accumulated other comprehensive loss by the \$66,000 cumulative effect adjustment. With respect to the \$1 million of par value auction rate securities investments held as of December 31, 2009, the unrealized losses included in accumulated comprehensive loss was \$119,000.

**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

***Fair Value Measurement***

The Company adopted ASC 820, “Fair Value and Measurements,” in the first quarter of 2008. ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

Level 1 - Quoted prices in active markets for identical assets or liabilities.

Level 2 - Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Our short-term investments primarily utilize broker quotes in a non-active market for valuation of these securities.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

ASC 820 requires us to maximize the use of observable inputs and minimize the use of unobservable inputs. If a financial instrument uses inputs that fall in different levels of the hierarchy, the instrument will be categorized based upon the lowest level of input that is significant to the fair value calculation. Our financial assets measured at fair value on a recurring basis include securities available for sale. Securities available for sale include money market funds and auction rate securities in credit linked private placement notes.

***Concentration of Credit Risk***

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash and cash equivalents, a certificate of deposit, investments in marketable securities and accounts receivable. The Company maintains the majority of its cash and cash equivalents in recognized financial institutions in the United States. The Company also maintains cash deposits with banks in Western Europe, Canada, China and Japan. The Company has not experienced any losses associated with its deposits of cash and cash equivalents. The Company has pledged a certificate of deposit as collateral on a letter of credit serving as a security deposit on its principal facility (see description of operating lease in Note 9, “Commitments and Contingencies”). This certificate of deposit is maintained in a recognized financial institution in the United States. The Company’s investment in marketable securities consists of auction rate securities, and is managed by a recognized financial institution in the United States. The Company does not invest in derivative instruments or engage in hedging activities.

The Company’s accounts receivable are derived from sales made to customers located in North America. The Company performs ongoing credit evaluations of its customers’ financial condition and generally does not require collateral. The Company maintains an allowance for doubtful accounts based upon the expected collectability of accounts receivable. The Company’s accounts receivable at December 31, 2008 and revenues for the years ended at December 31, 2008 are from two customers.

***Property and Equipment***

Property and equipment are carried at cost less accumulated depreciation and amortization. Property and equipment are depreciated using the straight-line method over the estimated useful lives, generally three to five years. Leasehold improvements are amortized using the straight-line method over the shorter of the estimated useful life of the asset or the remaining term of the lease. Maintenance and repairs are charged to operations as incurred. Upon sale or retirement of assets, the cost and related accumulated depreciation are removed from the balance sheet and the resulting gain or loss is reflected in operations.

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

**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

***Revenue Recognition***

Revenue from product sales, including consumables, is recognized upon product shipment, provided no significant obligations remain and collection of the receivables is reasonably assured. Revenue from shipping and handling is 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. Services revenue was recognized upon completion of work and receipt of payment.

***Research and Development Costs***

Research and development costs are expensed as incurred. Research and development costs consist primarily of payroll and related costs, materials and supplies used in the development of new products, and fees paid to third parties that conduct certain research and development activities on behalf of the Company. Software development costs incurred in the research and development of new products are expensed as incurred until technological feasibility is established.

***Stock-Based Compensation***

The Company account for stock options and stock purchase rights related to its 2000 Stock Plan (the “2000 Plan”) and 2000 Employee Stock Purchase Plan (the “2000 ESPP”) under the provisions of ASC 718, “Compensation – Stock Compensation,” (“ASC 718”) which requires the recognition of the fair value of stock-based compensation. The fair value of stock options and 2000 ESPP shares is estimated using a Black-Scholes option valuation model. This model requires the input of subjective assumptions in implementing ASC 718 including expected stock price volatility, expected life and estimated forfeitures of each award. The fair value of equity-based awards is amortized over the vesting period of the award, and we have elected to use the straight-line method of amortization. These assumptions consist of estimates of future market conditions, which are inherently uncertain, and therefore are subject to management’s judgment.

The expected life of options is based on historical data of Vermillion’s actual experience with the options it has granted and represents the period of time that the options granted are expected to be outstanding. This data includes employees’ expected exercise and post-vesting employment termination behaviors. The expected stock price volatility is estimated using a combination of historical and peer group volatility for a blended volatility in deriving the expected volatility assumption for the year ended December 31, 2008. The Company made an assessment that blended volatility is more representative of future stock price trends than just using historical or peer group volatility, which corresponds to the expected life of the options. The expected dividend yield is based on the estimated annual dividends that Vermillion expects to pay over the expected life of the options as a percentage of the market value of Vermillion’s common stock as of the grant date. The risk-free interest rate for the expected life of the options granted is based on the United States Treasury yield curve in effect as of the grant date.

The expected life of shares purchased under the 2000 ESPP is six months, which corresponds to the offering period. The expected stock price volatility is estimated using a combination of historical and peer group volatility for a blended volatility in deriving the expected volatility assumption, which corresponds to the offering period. The expected dividend yield is based on the estimated annual dividends that Vermillion expects to pay over the expected life of shares purchased under the 2000 ESPP as a percentage of the market value of Vermillion’s common stock as of the grant date. The risk-free interest rate for the expected life of the shares purchased under the 2000 ESPP is based on the United States Treasury yield curve in effect as of the beginning of the offering period.

***Contingencies***

We account for contingencies in accordance with ASC 450 Contingencies (“ASC 450”). ASC 450 requires that an estimated loss from a loss contingency shall be accrued when information available prior to issuance of the financial statements indicates that it is probable that an asset has been impaired or a liability has been incurred at the date of the financial statements and when the amount of the loss can be reasonably estimated. Accounting for contingencies such as legal and contract dispute matters requires us to use our judgment. We believe that our accruals for these matters are adequate. Nevertheless, the actual loss from a loss contingency might differ from our estimates.

**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

***Income Taxes***

The Company accounts for income taxes using the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and the tax bases of assets and liabilities using the current tax laws and rates. A valuation allowance is established when necessary to reduce deferred tax assets to the amounts more likely than not expected to be realized.

In July 2006, the Financial Accounting Standards Board (“FASB”) issued Financial Interpretation (“FIN”) 48, “Accounting for Uncertainty in Income Taxes”, (codified primarily in FASB ASC Topic 740-10-50, “Accounting for Uncertainty of Income Taxes”) which clarifies the accounting for uncertainty in income taxes recognized in the financial statements in accordance with Statement of Financial Accounting Standards (“SFAS”) 109, “Accounting for Income Taxes” (codified primarily in FASB ASC Topic 740, Income Taxes). ASC Topic 740-10-50 provides that a tax benefit from an uncertain tax position may be recognized when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, based on the technical merits. Income tax positions must meet a more likely than not recognition threshold at the effective date to be recognized upon the adoption of ASC Topic 740-10-50 and in subsequent periods. This interpretation also provides guidance on measurement, derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

The Company recognizes interest and penalties related to unrecognized tax benefits within the interest expense line and other expense line, respectively, in the consolidated statement of operations. Accrued interest and penalties are included within the related liability lines in the consolidated balance sheet.

The Company adopted the provisions of ASC Topic 740-10-50, on January 1, 2007. The adoption of ASC Topic 740-10-50 had no impact on the Company’s financial statements.

***Foreign Currency Translation***

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

The functional currency of all other foreign operations is the United States dollar. Accordingly, all monetary assets and liabilities of these foreign operations are translated into United States dollars at current period-end exchange rates and non-monetary assets and related elements of expense are translated using historical rates of exchange. Income and expense elements are translated to United States dollars using average exchange rates in effect during the period. Gains and losses from the foreign currency transactions of these subsidiaries are recorded as other income (expense).

***Accumulated Other Comprehensive Loss***

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

**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

***Loss Per Share***

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

***Fair Value of Financial Instruments***

Financial instruments include cash and cash equivalents, marketable securities, accounts receivables, accounts payable, accrued liabilities, convertible senior notes and the amount owed on a secured line of credit and debtor-in-possession debt with Quest Diagnostics Incorporated (“Quest”). The estimated fair value of financial instruments has been determined using available market information or other appropriate valuation methodologies. However, considerable judgment is required in interpreting market data to develop estimates of fair value; therefore, the estimates are not necessarily indicative of the amounts that could be realized or would be paid in a current market exchange. The effect of using different market assumptions and/or estimation methodologies may be material to the estimated fair value amounts. The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities are at cost, which approximates fair value due to the short maturity of those instruments. The estimated fair value of the convertible senior notes is based on quoted market prices. The carrying value of the amount owed on a secured line of credit and debtor-in-possession debt with Quest approximates fair value, which is based on discounting the future cash flows using applicable spreads to approximate current interest rates available to the Company.

Prior to January 1, 2009, common stock warrants were recorded in stockholders equity in accordance with ASC 815, “Derivatives and Hedging” and ASC 825, “Financial instruments.” However in June 2008, the Financial Accounting Standards Board (“FASB”) issued new guidance now codified in ASC 815 that clarifies the determination of whether an instrument (or an embedded feature) is indexed to an entity’s own stock, which would qualify for classification as a liability. The new guidance was effective for financial statements issued for fiscal years beginning after December 15, 2008. The adoption of the new guidance on January 1, 2009, resulted in the reclassification of certain of our outstanding warrants from stockholders’ equity to liability and a cumulative effect of change in accounting principle on our accumulated deficit of \$21,000. In addition, the stock warrants are required to be fair valued at each reporting period, with the changes in fair value recognized in our consolidated statement of operations. We fair value the warrants using a Black Scholes valuation model. Since the outstanding common stock warrants are fair valued at the end of each reporting period, any change in the underlying assumptions to the Black Scholes valuation model, including the volatility and price of our common stock, may have a significant impact on our consolidated financial statements.

***Segment Reporting***

The Company operates one reportable segment, novel diagnostic tests.

**2. Chapter 11 Bankruptcy**

On March 30, 2009, the Company filed a voluntary petition for relief under Chapter 11 of the United States Bankruptcy Code in the Bankruptcy Court. The Company continues to operate its business and manage its properties as debtors in possession under the jurisdiction of the Bankruptcy Court and in accordance with the applicable provisions of the Bankruptcy Code and orders of the Bankruptcy Court.

***Financial Statement Presentation***

Our consolidated financial statements have been prepared in accordance with ASC 852, “Reorganization” (ASC 852) and on a going-concern basis, which contemplates continuity of operations, realization of assets and liquidation of liabilities in the ordinary course of business. However, as a result of our bankruptcy filing, such realization of assets and liquidation of liabilities is subject to uncertainty. While operating as debtors in possession under the protection of Chapter 11 of the Section 365 of the Bankruptcy Code, all or some of the Debtors may sell or otherwise dispose of assets and liquidate or settle liabilities for amounts other than those reflected in the consolidated financial statements, subject to Bankruptcy Court approval or as otherwise permitted in the ordinary course of business. Further, our Plan of Reorganization could materially change the amounts and classification of items reported in our historical consolidated financial statements.



**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

Substantially all of the Debtors' pre-petition debt was in default due to the bankruptcy filing. As described below, the accompanying consolidated financial statements present the Debtors' pre-petition debt of \$7,365,000 within Liabilities subject to compromise.

***Liabilities Subject to Compromise***

As required by ASC 852, the Company has recorded liability amounts for the claims that can be reasonably estimated and which the Company believes are probable of being allowed by the Bankruptcy Court. Such claims are subject to future adjustments that may result from, among other things, negotiations with creditors, and rejection of executory contracts and unexpired leases. Liabilities subject to compromise may change due to reclassifications, settlements or reorganization activities that give rise to new claims or increases in existing claims.

Liabilities subject to compromise in the consolidated balance sheet consisted of the following at December 31, 2009 (in thousands):

Accounts payable	\$ 1,932
Accrued liabilities	1,696
Payroll and benefits related expenses	744
Convertible senior notes	7,365
Total liabilities subject to compromise	<u>\$11,737</u>

***Debtor-In-Possession Credit and Security Agreement with Quest Diagnostics Incorporated***

On October 16, 2009, the Bankruptcy Court gave approval for Vermillion to enter into a Debtor-In-Possession Credit and Security Agreement (the "DIP Loan Agreement") with Quest and to assume under the Bankruptcy Code the Amended Strategic Alliance Agreement. In connection with the assumption of the Amended Strategic Alliance Agreement, Vermillion also assumed certain other agreements with Quest related to the Amended Strategic Alliance Agreement, including the pre-petition warrants for the purchase of Vermillion's common stock. Under the DIP Loan Agreement, Quest agreed to provide a debtor-in-possession loan to Vermillion of up to \$1,500,000 (the "DIP Financing"). The DIP Financing is secured by a first lien on substantially all of Vermillion's assets and bears interest at the prime rate plus 0.5% per annum. The DIP Financing matures at the effective date of a plan of reorganization or February 28, 2010, if earlier. Under the DIP Loan Agreement, Vermillion is bound by customary affirmative and negative covenants, including covenants with respect to the use of the funds provided by Quest, and customary events of default - including non-payment, breach of covenants and material breach of the Amended Strategic Alliance Agreement - that may result in acceleration of outstanding amounts, if any, under the DIP Loan Agreement. The Company received \$400,000 under this agreement on October 27, 2009. On January 22, 2010, the Company repaid the \$400,000 and interest of \$4,000. Professional service fees relating to the DIP Loan Agreement were expensed as incurred and classified as reorganization items in the accompanying consolidated statement of operations.

**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

***Reorganization Items***

Professional advisory fees and other costs directly associated with our reorganization are reported separately as reorganization items pursuant to ASC 852. Professional fees include legal fees, legal fees relating to DIP Financing undertaken as part of the reorganization process. The write-off of debt issuance costs and discounts and the underwriting fees related to the DIP Loan Agreement generally represent one-time charges. Certain actions within the non-Debtor companies have occurred as a result of the Debtors' bankruptcy proceedings. The costs associated with these actions are also reported as reorganization items. The reorganization items in the consolidated statement of operations for year ended December 31, 2009 consisted of the following items:

The Company has incurred certain professional fees and other expenses directly associated with the bankruptcy proceedings. In addition, the Company has made adjustments to the carrying value of certain prepetition liabilities. Such costs and adjustments are classified as "reorganization items" in the accompanying consolidated statement of operations and consisted of the following (in thousands):

	Year Ended December 31,
	2009
Debtors reorganization items	
Professional fees associated with bankruptcy proceedings	\$ 1,146
Write-off of debt issuance costs and discounts related to debt subject to compromise	93
DIP Financing fees	203
Debtors reorganization items	\$ 1,442
Non-Debtors reorganization items	
Professional fees associated with bankruptcy proceedings	\$ 624
Total reorganization items	<u>\$ 2,066</u>

***Plan of Reorganization***

On January 7, 2010, the Bankruptcy Court issued a confirmation order approving the Company's Plan of Reorganization. The Plan of Reorganization contemplates the reorganization of the Company and the discharge of all outstanding claims against and interests in the Company. Pursuant to the Plan of Reorganization, as confirmed, each holder of an allowed priority claim will receive cash in an amount equal to such allowed claim. The secured claim arising from the Quest secured line of credit was reinstated and unimpaired. Holders of the outstanding 4.50% Convertible Senior Notes due 2009 (the "4.50% Notes") received the payment of \$2,195,000 of principle, \$140,000 of unpaid interest and 9,044 shares of common stock in exchange of their claims. \$5,000,000 in principal of the outstanding 7.00% Convertible Senior Notes due 2011 (the "7.00% Notes") were reinstated. Holders of unpaid interest on previously converted 7.00% Notes received \$362,000 in cash and 7,239 shares related to the unpaid interest of the 7.00% Notes. All holders of allowed general unsecured claims elected to receive cash and were paid in full.

Subsequently on January 22, 2010, the confirmation order issued by the Bankruptcy Court for approving Vermillion's Plan of Reorganization became final and all conditions precedent to January 22, 2010 were satisfied or waived. Accordingly, the Company emerged from bankruptcy under Chapter 11. Although the Company has emerged out of bankruptcy, the bankruptcy case will remain open until the resolution of the following matters, which includes approval by the Bankruptcy Courts:

- Molecular Analytical Systems, Inc. Litigation (see Note 9)
- Bio-Rad Laboratories, Inc. Matters (see Note 9)
- \$1,000,000 milestone under the Strategic Alliance Agreement with Quest (see Note 4), and
- Various pre-petition liability objections

**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

**3. Recent Accounting Pronouncements**

In June 2009, Accounting Standards Codification (“ASC”) ASC 105 Generally Accepted Accounting Principles (“ASC 105”) was issued. ASC 105 became the single official source of authoritative, nongovernmental generally accepted accounting principles (“GAAP”) in the United States. The historical GAAP hierarchy was eliminated and the ASC became the only level of authoritative GAAP, other than guidance issued by the Securities and Exchange Commission. Our accounting policies were not affected by the conversion to ASC. However, references to specific accounting standards in the footnotes to our consolidated financial statements have been changed to refer to the appropriate section of ASC.

In April 2009, FASB issued ASC 825 Financial Instruments (“ASC 825”) and ASC 270 Interim Reporting or (“ASC 270”). ASC 825 and ASC 270 requires us to disclose on a quarterly basis, providing quantitative and qualitative information about fair value estimates for all financial instruments not measured in the Consolidated Balance Sheets at fair value. ASC 825 and ASC 270 are effective for interim periods ending after June 15, 2009. We have adopted the provisions of ASC 825 and ASC 270 effective the first quarter of fiscal 2009. See Note 5—Fair Value and Note 8—Debt to Consolidated Financial Statements. The adoption of this guidance did not have a material impact on our consolidated financial statements.

In April 2009, FASB issued ASC 320 Investments—Debt and Equity Securities (“ASC 320”). ASC 320 modifies the other-than-temporary impairment guidance for debt securities through increased consistency in the timing of impairment recognition and enhanced disclosures related to the credit and noncredit components of impaired debt securities that are not expected to be sold. In addition, increased disclosures are required for both debt and equity securities regarding expected cash flows, credit losses, and an aging of securities with unrealized losses. ASC 320 is effective for interim and annual reporting periods that end after June 15, 2009, and early adoption is permitted. We have adopted the provisions of ASC 320 on January 1, 2009. We have considered the guidance provided by ASC 320 in our determination of impairment, and have determined that the impact was not material. See Note 8—Debt to Consolidated Financial Statements.

In October 2009, the FASB issued Accounting Standards Update 2009-13, Revenue Recognition (Topic 605): “*Multiple Deliverable Revenue Arrangements—A Consensus of the FASB Emerging Issues Task Force.*” This update provides application guidance on whether multiple deliverables exist, how the deliverables should be separated and how the consideration should be allocated to one or more units of accounting. This update establishes a selling price hierarchy for determining the selling price of a deliverable. The selling price used for each deliverable will be based on vendor-specific objective evidence, if available, third-party evidence if vendor-specific objective evidence is not available, or estimated selling price if neither vendor-specific or third-party evidence is available. We will be required to apply this guidance prospectively for revenue arrangements entered into or materially modified after January 1, 2011; however, earlier application is permitted. We have not determined the impact that this update may have on our consolidated financial statements.

**Vermillion, Inc.  
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**Notes to Consolidated Financial Statements—(Continued)**

In January 2010, the FASB issued updated guidance related to fair value measurements and disclosures, which requires a reporting entity to disclose separately the amounts of significant transfers in and out of Level 1 and Level 2 fair value measurements and to describe the reasons for the transfers. In addition, in the reconciliation for fair value measurements using significant unobservable inputs, or Level 3, a reporting entity should disclose separately information about purchases, sales, issuances and settlements (that is, on a gross basis rather than one net number). The updated guidance also requires that an entity should provide fair value measurement disclosures for each class of assets and liabilities and disclosures about the valuation techniques and inputs used to measure fair value for both recurring and non-recurring fair value measurements for Level 2 and Level 3 fair value measurements. The updated guidance is effective for interim or annual financial reporting periods beginning after December 15, 2009, except for the disclosures about purchases, sales, issuances and settlements in the roll forward activity in Level 3 fair value measurements, which are effective for fiscal years beginning after December 15, 2010 and for interim periods within those fiscal years. We do not expect adoption of the updated guidance to have a material impact on its consolidated results of operations or financial condition.

**4. Strategic Alliance with Quest Diagnostics Incorporated**

On July 22, 2005, Vermillion and Quest entered into a strategic alliance agreement (the “Strategic Alliance Agreement”) to develop and commercialize up to three diagnostic tests from Vermillion’s product pipeline (the “Strategic Alliance”). The Strategic Alliance Agreement, as amended, was set to end on the earlier of (i) October 7, 2012 and (ii) the date on which Quest makes its third development election. To date, Quest has selected only two diagnostic tests, which are the peripheral artery disease (“PAD”) blood test (“VASCLIR™”) and the OVA1 Test to commercialize. Pursuant to the Strategic Alliance Agreement and as amended, 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.

***Secured Line of Credit with Quest Diagnostics Incorporated***

In connection with the Strategic Alliance Agreement, Quest agreed to provide Vermillion with a \$10,000,000 secured line of credit, which is collateralized by certain of Vermillion’s intellectual property and may only be used for payment of 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% (prime rate was 4.75% at December 31, 2009) and is payable monthly. This secured line of credit also contains provisions for Quest to forgive portions of the amounts borrowed that corresponds to Vermillion’s achievement of certain milestones related to development, regulatory approval and commercialization of certain diagnostic tests. The amounts to be forgiven and the corresponding milestones that Vermillion must achieve are (i) \$1,000,000 for each application that allows a licensed laboratory test to be commercialized with a maximum of three applications for \$3,000,000; (ii) \$3,000,000 for the earlier of FDA clearance of the first diagnostic test kit or commercialization of the first diagnostic test kit; and (iii) \$2,000,000 upon each FDA clearance of up to two subsequent diagnostic test kits but no later than the first commercialization of each such diagnostic test kit, with a maximum forgiveness of \$4,000,000 for two diagnostic test kits. Under the October 7, 2009 amendment of the Strategic Alliance Agreement, in the event Vermillion fails to achieve these certain milestones, the principal amount outstanding related to each milestone not achieved and any unpaid interest of this secured line of credit will become due and payable on October 7, 2012.

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. The outstanding principal balance of this secured line of credit was \$10,000,000 at December 31, 2009 and 2008. Accrued interest payable related to this secured line of credit was \$480,000 and \$35,000 as of December 31, 2009 and 2008, respectively. Interest expense related to this secured line of credit was \$512,000 and \$560,000 for the years ended December 31, 2009 and 2008, respectively. From the inception of the Strategic Alliance through December 31, 2008, Vermillion has 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. On September 11, 2009, the Company achieved the FDA clearance of the OVA1 Test milestone provision in the secured line of credit agreement providing for a reduction in the principal amount of the loan of \$3,000,000 but was only able to apply the milestone once it was no longer in default under the terms of the secured line of credit while under Chapter 11 bankruptcy protection. On January 22, 2010, the Company cured the default upon payment of accrued interest totaling approximately \$472,000. On January 23, 2010, the principal was reduced to \$7,000,000. The Company is in discussions with Quest regarding the achievement of an additional \$1,000,000 forgiveness milestone as a result of the FDA approval of the OVA1 Test under the terms of the Strategic Alliance Agreement.

**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

**5. Fair Value Measurements**

The Company's investments consist of auction rate securities, which were classified as available-for-sale long-term investments due to failed auctions related to these investments through December 31, 2009. The underlying assets of these auction rate securities are private placements of credit linked notes. Our holdings of these private placement investment vehicles are exposed directly and exclusively to credit derivatives. The credit derivatives are synthetic tranches referenced to a portfolio of corporate names on which the investment vehicles sold credit protection. These credit linked notes were valued using a single factor Gaussian copula model and market bids received from Deutsche Bank AG ("Deutsche Bank"). The Company weighted the valuation equally with the market bid sources when developing the final fair value, given the Company's conclusion that both the valuation and bids data points have equal relevance in estimating fair value. The single factor Gaussian copula model is a standard method which uses observable market inputs, most notably credit default swap spreads, and other key inputs like data relating to joint probability of default expressed via default correlation. The default correlation was determined via an expected loss mapping methodology. In essence, this method takes the expected loss of the tranche expressed as a fraction of the expected loss of the whole underlying portfolio and calculates which detachment point on the liquid index, and hence which correlation level, coincides with this expected loss fraction. The second data point used to calculate fair value is actual market bids from Deutsche Bank. The Company has no specific details regarding any auction rate securities being traded at these prices, but considers the indicative bids received from Deutsche Bank as a relevant data point, given their role as brokers trading these types of securities. The maturity dates of these auction rate securities range from June to September 20, 2017. These auction rate securities are intended to provide liquidity via an auction process that resets the applicable interest rate at predetermined calendar intervals, which is generally every 28 days. Upon an auction failure, the interest rates do not reset at a market rate but instead reset based on a formula contained in the security, which is generally higher than the current market rate. The failure of the auctions means the Company may be unable to liquidate its auction rate securities into cash at par value until a future auction of these investments is successful or the auction rate security is refinanced by the issuer into another type of instrument.

During the year ended December 31, 2008, the Company recognized approximately \$659,000 of other-than-temporary impairment charges on its auction rate securities held at December 31, 2008 in its consolidated statement of operations. On January 1, 2009, the Company adopted accounting guidance that established a new method of recognizing and reporting other-than-temporary impairments for debt securities. Upon adoption of this standard, the Company recorded a cumulative effect adjustment, resulting in a reclassification of approximately \$66,000 of non-credit losses related to the previously recognized other-than-temporary impairment charges from accumulated deficit to accumulated other comprehensive loss. The non-credit loss was calculated as the difference between the \$659,000 impairment charges recorded previously for the available-for-sale auction rate securities and the \$593,000 of estimated credit losses as of January 1, 2009.

In estimating the credit losses of the Company's previously recognized impairments as of January 1, 2009, and December 31, 2009, the Company estimated the present value of expected cash flows for each auction rate security compared to the securities' amortized cost basis for the respective period. This process involved significant judgments and estimates specifically around default rates, recovery rates, interest rates and the timing of expected cash flows. In addition, the Company considered other available evidence, including trends in credit ratings and changes in financial market conditions including the general economic environment.

**Vermillion, Inc.  
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**Notes to Consolidated Financial Statements—(Continued)**

Money market cash equivalent and long-term investments at December 31, 2009 and 2008 consist of the following (in thousands):

	Amortized	Gross Unrealized	Gross Unrealized	Fair Value
	Cost	Gain	Loss	
December 31, 2009				
Money market funds	\$ 8	\$ —	\$ —	\$ 8
Long term investments in auction rate securities	407	119	—	526
	<u>\$ 415</u>	<u>\$ 119</u>	<u>\$ —</u>	<u>\$534</u>
	Amortized	Gross Unrealized	Gross Unrealized	Fair Value
	Cost	Gain	Loss	
December 31, 2008				
Money market funds	\$ 9	\$ —	\$ —	\$ 9
Long term investments in auction rate securities	341	—	—	341
	<u>\$ 350</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$350</u>

The scheduled contractual maturity dates for available-for-sale long-term investments at December 31, 2009, are as follows (in thousands):

	Within	After 1 Year Through	After 5 Years Through	After 10 Years	Total
	1 Year	5 Years	10 Years		
Long-term investments:					
Auction rate securities	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 526</u>	<u>\$ —</u>	<u>\$526</u>



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### Vermillion, Inc. (Debtor-in-Possession)

#### Notes to Consolidated Financial Statements—(Continued)

As of December 31, 2009, financial assets measured and recognized at fair value on a recurring basis and classified under the appropriate level of the fair value hierarchy as described above was as follows (in thousands):

	Fair Value Measurements at Reporting Date Using			
	Total Fair	Quoted Prices in	Significant	Significant
		Active Markets	Other	Unobservable
	Value	for Identical	Inputs	Inputs
		Assets	(Level 2)	(Level 3)
		(Level 1)		
Assets:				
Money market funds	\$ 8	\$ 8	\$ —	\$ —
Long term investments in auction rate securities	526	—	—	526
Total	\$ 534	\$ 8	\$ —	\$ 526

The Company's Level 1 financial assets are money market funds.

At December 31, 2009, long-term investments available-for-sale measured at fair value using Level 3 inputs consisted of \$526,000 invested in auction rate securities. The continued failure of auctions and the lack of market activity and liquidity required that these securities be measured using Level 3 inputs. As of December 31, 2009 and 2008, the Company's auction rate securities in credit linked notes were valued using a single factor Gaussian copula model and market bids received from Deutsche Bank (see Long-term Investments note above). The valuation of the Company's investment in auction rate securities is subject to uncertainties that are difficult to predict. Factors that may impact its valuation include changes to credit ratings of the securities as well as to the underlying assets supporting those securities, rates of default of the underlying assets, underlying collateral value, discount rates, liquidity and ongoing strength, and quality of credit markets. If the current market conditions deteriorate further, or the anticipated recovery in market values does not occur, the Company may be required to record additional impairment charges in future quarters. The Company will continue to monitor the value of its auction rate securities and consider the impact, if any, on the fair value of its investment in auction rate securities.

The Company's financial assets measured at fair value on a recurring basis using significant Level 3 inputs as of December 31, 2009, consisted solely of auction rate securities. The reconciliation of financial assets measured at fair value using significant unobservable inputs (Level 3) for the year ended December 31, 2009, was as follows (in thousands):

	Long-Term Investments Available- for-Sale (Level 3) Auction Rate Securities
Balance at January 1, 2009	\$ 341
Total realized losses included in earnings	—
Change in unrealized gain(loss) included in other comprehensive loss	185
Balance at December 31, 2009	\$ 526

The Company measures certain common stock warrants at fair value on a recurring basis (see Note 10). All other financial assets and liabilities are measured at fair value on a nonrecurring basis. These financial assets and liabilities are recognized at fair value when they are deemed to be other-than-temporarily impaired.

**Vermillion, Inc.**  
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**Notes to Consolidated Financial Statements—(Continued)**

The fair value of the Company's long-term debt based on the then-current rates available to the Company for debt of a similar term and remaining maturity. The Company determined the estimated fair value amount by using available market information and commonly accepted valuation methodologies. However, considerable judgment is required in interpreting market data to develop estimates of fair value. Accordingly, the fair value estimate presented herein is not necessarily indicative of the amount that the Company or holders of the instruments could realize in a current market exchange. The use of different assumptions and/or estimation methodologies may have a material effect on the estimated fair value. The convertible senior notes carrying value and estimated fair value at December 31, 2009 and 2008 were as follows (in thousands):

	2009		2008	
	Carrying	Estimated	Carrying	Estimated
	Amount	Fair Value	Amount	Fair Value
4.50% convertible senior notes due September 1, 2009	\$ 2,365	\$ 2,720	\$ 2,500	\$ 1,875
7.00% convertible senior notes due September 1, 2011	5,000	5,750	16,379	12,284
<b>Total</b>	<b>\$ 7,365</b>	<b>\$ 8,470</b>	<b>\$18,879</b>	<b>\$ 14,159</b>

**6. Property and Equipment**

The components of property and equipment as of December 31, 2009 and 2008, were as follows (dollars in thousands):

	2009	2008
Machinery and equipment	\$ 1,797	\$ 1,966
Demonstration equipment	509	552
Leasehold improvements	35	35
Computer equipment and software	418	418
Furniture and fixtures	35	35
Gross property and equipment	2,794	3,006
Accumulated depreciation and amortization	(2,605)	(2,395)
Property and equipment, net	<u>\$ 189</u>	<u>\$ 611</u>

Depreciation expense for property and equipment was \$335,000 and \$928,000 for the years ended December 31, 2009 and 2008, respectively.

**Vermillion, Inc.  
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**Notes to Consolidated Financial Statements—(Continued)**

**7. Accrued Liabilities**

The components of accrued liabilities as of December 31, 2009 and 2008 were as follows (dollars in thousands):

	2009	2008
Payroll and benefits related expenses	\$ 5	\$ 261
Collaboration and research agreements expenses	393	258
Professional services	505	93
Contingencies (See Note 9)	—	923
Tax-related liabilities	160	202
Accrued interest on convertible senior notes and long-term debt owed to related party	840	457
Other accrued liabilities	—	178
Total accrued liabilities	<u>\$1,903</u>	<u>\$2,372</u>

**8. Convertible Senior Notes**

***7.00% Convertible Senior Notes Due September 1, 2011***

On November 15, 2006, Vermillion closed the sale of \$16,500,000 of convertible senior notes due September 1, 2011 (the “7.00% Notes”). Offering costs were \$104,000 and fees of \$514,500, which were paid on behalf of the debt holders, were recorded as debt discount on the 7.00% Notes. Fees paid on behalf of debt holders included the fair value of two warrants issued to underwriters to purchase a total of 20,000 shares of Vermillion’s common stock at \$12.60 per share. The warrants were valued at \$140,000 based on the fair value as determined by a Black-Scholes model using the following assumptions: a risk free interest rate of 4.75%, 5 year contractual life, and 88.00% volatility rate. Interest on the 7.00% Notes is 7.00% per annum on the principal amount, payable semiannually on March 1 and September 1 of each year, beginning March 1, 2007. The 7.00% Notes were sold pursuant to separate exchange and redemption agreements between Vermillion and each of Highbridge International LLC, Deerfield International Limited, Deerfield Partners, L.P., Bruce Funds, Inc. and Professional Life & Casualty, each holders of Vermillion’s existing 4.50% convertible senior notes due September 1, 2008 (the “4.50% Notes”), pursuant to which holders of an aggregate of \$27,500,000 of the 4.50% Notes agreed to exchange and redeem their 4.50% Notes for an aggregate of \$16,500,000 in aggregate principal amount of the 7.00% Notes and \$11,000,000 in cash, plus accrued and unpaid interest on the 4.50% Notes of \$254,000 through and including the day prior to the closing. Debt discount related to the 7.00% Notes are amortized to interest expense using the effective interest method. The amortization of the debt discount related to the 7.00% Notes amounted to \$44,000 and \$182,000 for the years ended December 31, 2009 and 2008, respectively.

The 7.00% Notes are unsecured senior indebtedness of Vermillion and bear interest at the rate of 7.00% per annum, which may be reduced to 4.00% per annum if Vermillion receives approval or clearance for commercial sale of any of its ovarian cancer tests by the United States Food and Drug Administration (the “FDA”). Interest is payable on March 1 and September 1 of each year, commencing March 1, 2007. The effective interest rate is 8.18% per annum. On September 11, 2009, the Company received FDA approval for the OVA1 Test and reduced the interest rate to 4.00% per annum.

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

**Vermillion, Inc.  
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**Notes to Consolidated Financial Statements—(Continued)**

The make-whole premium shall be equal to the principal amount of 7.00% Notes to be converted divided by \$1,000 and multiplied by the applicable number of shares of common stock based upon Vermillion's share prices as of the change of control date. Specifically, as the 7.00% Notes approach their redemption date of September 1, 2011, as discussed below, the make-whole payment decreases. Vermillion is not required to make a make-whole payment if its stock price is less than \$12.00 or greater than \$80.00 as of the date of the change in control. The make-whole premium associated with the 7.00% Notes sets a maximum additional 1,500,000 shares that may be issued on conversion (90.9091 shares per \$1,000 principal amount of 7.00% Notes).

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

Vermillion identified the guaranteed interest payment for any conversion of any 7.00% Note by a holder prior to October 31, 2008, and the written put option permitting the holder to put the debt at 105.0% of principal plus accrued and unpaid interest upon a change of control as embedded derivatives, which need to be separated and measured at fair value. The factors impacting the fair value of the guaranteed interest payment for any conversion of any 7.00% Note by a holder prior to October 31, 2008, is based upon certain factors including Vermillion's stock price, the time value of money and the likelihood holders would convert within the next two years. The provision for the guaranteed interest payment for any conversion of any 7.00% Note elapsed on October 31, 2008. The factors impacting the fair value of the written put option permitting the holder to put the 7.00% Note at 105.0% of principal plus accrued and unpaid interest upon a change of control is contingent upon a change of control. However, due to significant related party holdings of Vermillion's common stock shares and the presence of certain anti-takeover provisions in the bylaws of Vermillion, a change of control is deemed to be remote. The fair values of these features had de minimis fair value on the date of inception and through December 31, 2009.

From October through November 2009, the Company exchanged a total of 220,000 shares of common stock for \$4,400,000 in principal under the terms of the original 7.0% Notes. In November through December 2009, the Company exchanged a total of 421,667 shares of common stock for \$7,100,000 in principal and \$589,000 in unpaid interest. The conversion rate for the November and December 2009 redemption was approximately 55 shares per \$1,000 principal amount. The Company recorded an additional debt conversion expense of \$789,000 relating to the more favorable conversion rates compared to the original conversion rates under the terms of the 7.0% Notes.

Vermillion and the investors entered into a registration rights agreement in which Vermillion agreed to make "reasonable best efforts" to file a shelf registration and keep it effective permitting the 7.00% Note holders to sell the 7.00% Notes or the underlying common stock shares. The 7.00% Notes and common stock issuable upon conversion of the 7.00% Notes were registered with the SEC on Form S-3 on December 15, 2006. The Company was in default of the 7.00% Notes as of December 31, 2009. However, the Company cured the default upon payment of accrued interest totaling approximately \$362,000 upon emergence from bankruptcy on January 22, 2010. At December 31, 2009 and 2008, \$5,000,000 and \$16,500,000, respectively, in aggregate principal amount of the 7.00% Notes remained outstanding.

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**Notes to Consolidated Financial Statements—(Continued)**

***4.50% Convertible Senior Notes Due September 1, 2009***

On August 22, 2003, the Company closed the sale of \$30,000,000 of the 4.50% Notes with an original maturity date of September 1, 2008. Offering costs were \$1,866,000. Interest on the notes is 4.50% per annum on the principal amount, payable semiannually on March 1 and September 1, beginning March 1, 2004. The effective interest rate is 6.28% per annum. The 4.50% Notes are convertible, at the option of the holder, at any time on or prior to maturity of the 4.50% Notes into shares of Vermillion's common stock initially at a conversion rate of 10.88329 shares per \$1,000 principal amount of the 4.50% Notes, which is equal to a conversion price of \$91.88 per share. The conversion price, and hence the conversion rate, is subject to adjustment upon the occurrence of certain events, such as stock splits, stock dividends and other distributions or recapitalizations. Because the market value of the stock rose above the conversion price between the day the 4.50% Notes were priced and the closing date, the Company recorded a discount of \$2,677,000 related to the intrinsic value of the beneficial conversion feature resulting from this price change and the fact that the initial purchaser of the 4.50% Notes was not required to purchase the 4.50% Notes until the closing date. Immediately after the closing, Vermillion's common stock had a market price of \$100.10 per share, or \$8.22 per share higher than the conversion price. The value of the beneficial conversion feature was determined by multiplying this difference in the per share price of Vermillion's common stock by the 326,498 underlying shares. This amount is being amortized to interest expense using the effective interest method over the five-year term of the notes, or shorter period in the event of conversion of the 4.50% Notes. Debt discount related to the 4.50% Notes are amortized to interest expense using the effective interest method. The amortization of the beneficial conversion feature amounted to none and \$29,000 for the years ended December 31, 2009 and 2008, respectively.

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

Vermillion may redeem the 4.50% Notes at its option, in whole or in part, at any time on or after September 1, 2006, at specified redemption prices plus accrued and unpaid interest; provided that the 4.50% Notes will be redeemable only if the closing price of the stock equals or exceeds 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on the trading day before the date of the notice of the redemption. Upon a change of control, each holder of the 4.50% Notes may require Vermillion to repurchase some or all of the 4.50% Notes at specified redemption prices, plus accrued and unpaid interest. The 4.50% Notes contains a put option that entitles the holder to require Vermillion to redeem the 4.50% Notes at a price equal to 105.0% of the principal balance upon a change in control of Vermillion. Vermillion does not anticipate that the put option will have significant value because a change of control is deemed to be remote.

Following the closing of the November 15, 2006, sale of \$16,500,000 of the 7.00% Notes due September 1, 2011, holders of an aggregate of \$27,500,000 of the 4.50% Notes agreed to exchange and redeem their 4.50% Notes for an aggregate of \$16,500,000 in aggregate principal amount of the 7.00% Notes and \$11,000,000 in cash. As a result of negotiations between the holders of the 4.50% Notes and Vermillion, the \$2,500,000 outstanding principal balance related to the 4.50% Notes, was not redeemed by Vermillion on the original maturity date of September 1, 2008. Interest of \$56,000 related to the 4.50% Notes was paid on September 1, 2008. Subsequently on December 11, 2008, the trustee of the Indenture and the holders of the \$2,500,000 outstanding principal balance related to the 4.50% Notes agreed to extend the maturity date of the 4.50% Notes to September 1, 2009, and to waive any past default by Vermillion of its obligation to make payment on the principal of and interest on the 4.50% Notes. Vermillion agreed to extend each holder's rights to require Vermillion to repurchase the 4.50% Notes at 105.00% of such holder's outstanding principal amount upon a change in control, as defined in the indenture governing the 4.50% Notes, and to convert the 4.50% Notes into common stock accordingly. In addition, the holders of the 4.50% Notes agreed to permit the full redemption of the outstanding principal related to the 4.50% Notes at a redemption price of 100.00% on or before August 31, 2009, and Vermillion agreed to adjust the conversion rate for the 4.50% Notes to 20 shares per \$1,000 principal amount of the 4.50% Notes, which is equal to a conversion price of \$50.00 per share. The impact of adjusting the conversion rate was de minimis.

**Vermillion, Inc.**  
**(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

In November 2009, the Company exchanged a total of 6,750 shares of common stock for \$135,000 in principal and \$8,000 in unpaid interest. The conversion rate for redemption was approximately 47 shares per \$1,000 principal amount. The Company recorded an additional debt conversion expense of \$69,000 relating to the more favorable exchange rate.

At December 31, 2009 and 2008, \$2,365,000 and \$2,500,000, respectively, in aggregate principal amount of the 4.50% Notes remain outstanding. The Company was in default of the 4.50% Notes as of December 31, 2009. Upon the emergence from bankruptcy, the Company cured the default with a payment of \$2,365,000 of principal and \$140,000 of unpaid interest with \$2,195,000 of cash and 9,044 shares of common stock.

**9. Commitments and Contingencies**

*Operating Leases*

The Company leases various equipment and facilities to support its business of discovering, developing and commercializing diagnostics tests in the fields of oncology, hematology, cardiology and women's health. On June 3, 2008, the Company entered into a noncancelable operating lease for a new principal facility located in Fremont, California. Under the lease agreement, the term is from July 1, 2008, through June 30, 2010, with an annual base rent of \$87,000 and \$92,000 for the first year and second year, respectively. The Company will also pay common area charges, taxes and insurance with an annual estimated cost of \$21,000. Additionally, under the lease agreement, the Company has pledged a \$100,000 certificate of deposit as collateral on a letter of credit serving as a security deposit for the first year. For the second year, the certificate of deposit pledged as collateral on a letter of credit serving as a security deposit was reduced to \$60,000. As of December 31, 2009, the \$60,000 certificate of deposit is restricted cash and included in prepaid expenses and other current assets of the consolidated balance sheet.

In connection with the Instrument Business Sale, Vermillion entered into a sublease agreement with Bio-Rad, pursuant to which Vermillion subleased approximately 29,000 square feet of its Fremont, California facility. Bio-Rad was permitted to use the sublet premises only for general office, laboratory, research and development, and other uses necessary to conduct its business, and was not permitted to sublet the premises without Vermillion's consent. The lease on the Fremont, California facility and sublease expired on July 31, 2008. Rent under the sublease was payable monthly and consisted 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 were paid directly to Vermillion, and in accordance with the terms of the master lease, all payments received by Vermillion from Bio-Rad under the sublease were paid to the landlord. On September 22, 2008, the Company was refunded its \$553,000 security deposit related to the former principal facility. Rental expense under operating leases for the years ended December 31, 2009 and 2008, were as follows (in thousands):

	<u>2009</u>	<u>2008</u>
Gross rental expense	\$111	\$1,826
Sublease rental income	—	(949)
Net rental expense	<u>\$111</u>	<u>\$ 877</u>

**Vermillion, Inc.  
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**Notes to Consolidated Financial Statements—(Continued)**

As of December 31, 2009, future minimum rental payments under noncancelable operating leases are as follows (in thousands):

2010	\$ 57
Total minimum rental payments	<u>\$ 57</u>

***Noncancelable Collaboration Obligations and Other Commitments***

Under the terms of a research collaboration agreement with The John Hopkins University School of Medicine (“JHU”), 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, Vermillion is required to pay noncancelable contributions of \$600,000, \$618,000 and \$637,000 for the years ending December 31, 2008, 2009 and 2010, respectively. As of December 31, 2009 and 2008, Vermillion owed \$866,000 and \$300,000, respectively, related to the research collaboration agreements with JHU. Collaboration costs under the JHU collaboration, which are included in research and development expenses, were \$616,000 and \$600,000 for the years ended December 31, 2009 and 2008, respectively.

On June 1, 2007, Vermillion entered into a nonexclusive license agreement with the National Cardiovascular Center (“NCVC”), an entity organized and existing under the laws of Japan. Under this agreement, Vermillion obtained a ten year worldwide nonexclusive license with the right to extend the term for the life of the licensed patent, which includes a United States Patent Application, a Japan Patent and a Patent Cooperation Treaty (“PCT”) Application, for technology used in Vermillion’s TTP diagnostic test kit that is under development. Under this agreement, Vermillion will pay NCVC a non-refundable license fee of \$50,000. The payment terms are \$20,000 upon execution of this agreement, \$10,000 upon submission of an in vitro diagnostic test to the FDA for clearance, \$10,000 upon the first commercial sale of such in vitro diagnostic test kit and \$10,000 upon achievement of \$500,000 in net sales of such in vitro diagnostic test kits. Additionally, Vermillion will pay royalties to NCVC for net sales to customers located in the United States, Japan, Europe and China. On July 18, 2007, Vermillion made a payment of \$20,000 related to the execution of this agreement. There have been no subsequent payments made through December 31, 2009.

***Contingent Liabilities***

***Molecular Analytical Systems, Inc. Litigation***

On September 17, 2007, Molecular Analytical Systems (“MAS”) filed a lawsuit in the Superior Court of California for the County of Santa Clara naming Vermillion and Bio-Rad as defendants (the “State Court lawsuit”). Under the State Court lawsuit, MAS seeks an unspecified amount of damages and alleges, among other things, that Vermillion is in breach of its license agreement with MAS relating to SELDI technology as a result of Vermillion’s entry into a sublicense agreement with Bio-Rad. Vermillion filed its general denial and affirmative defense on April 1, 2008. The Company and Bio-Rad thereafter moved to compel arbitration of the State Court lawsuit, which motion was denied in the trial court. Thereafter, the Company appealed the denial of the motion to compel arbitration, which appeal had the effect of staying the State Court lawsuit, which stay was further extended in both the state trial and appellate courts when the Company filed on March 30, 2009, a Voluntary Petition for Relief under Chapter 11 in the United States Bankruptcy Court for the District of Delaware. MAS filed a proof of claim on June 30, 2009, in connection with the Company’s Chapter 11 bankruptcy proceedings. The proof of claim mirrored the MAS lawsuit and asserted that the Company breached the Exclusive License Agreement by transferring certain technologies to Bio-Rad without obtaining MAS’s consent. MAS listed the value of its claim as in excess of \$5,000,000. On December 28, 2009, the Company objected to MAS’s Proof of Claim in the Bankruptcy Court. On January 7, 2010, the Bankruptcy Court confirmed the Company’s plan of reorganization. Per the Court’s order confirming the plan, the Company’s bankruptcy case will be closed after a final, non-appealable judgment is entered on MAS’s claims. After the plan was confirmed, MAS filed a motion with the Bankruptcy Court asking it to abstain from hearing its proof of claim and asked the Bankruptcy Court to grant relief from stay so that MAS could proceed with the State Court lawsuit in California. The Bankruptcy Court granted that motion on March 15, 2010. Thereafter, the California Court of Appeal has set oral argument on the Company’s appeal of the trial court order denying the Company’s motion to compel arbitration for June 17, 2010. Management cannot predict the ultimate outcome of this matter at this time.



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**Notes to Consolidated Financial Statements—(Continued)**

*Health Discovery Corporation Litigation*

On June 26, 2006, Health Discovery Corporation (“HDC”) filed a lawsuit against Vermillion in the United States District Court for the Eastern District of Texas, Marshall Division (the “Court”), claiming that software used in certain Vermillion ProteinChip Systems infringes on three of its United States patents. HDC sought injunctive relief as well as unspecified compensatory and enhanced damages, reasonable attorney’s fees, prejudgment interest and other costs. On August 1, 2006, Vermillion filed an unopposed motion with the Court to extend the deadline for Vermillion to answer or otherwise respond until September 2, 2006. Vermillion filed its answer and counterclaim to the complaint with the Court on September 1, 2006. Concurrent with its answer and counterclaims, Vermillion filed a motion to transfer the case to the Northern District of California. On January 10, 2007, the Court granted Vermillion’s motion to transfer the case to the Northern District of California. The parties met for a scheduled mediation on May 7, 2007. On July 10, 2007, Vermillion entered into a license and settlement agreement with HDC (the “HDC Agreement”) pursuant to which it licensed more than 25 patents covering HDC’s support vector machine technology for use with SELDI technology. Under the terms of the HDC Agreement, Vermillion receives a worldwide, royalty-free, non-exclusive license for life sciences and diagnostic applications of the technology and it has access to any future patents resulting from the underlying intellectual property in conjunction with use of SELDI systems. Pursuant to the HDC Agreement, Vermillion paid to HDC \$200,000 upon entry into the agreement on July 13, 2007, \$100,000 three months following the date of the agreement on October 9, 2007, and \$150,000 twelve months following the date of the agreement on July 9, 2008. The remaining \$150,000 under the HDC Agreement is payable twenty-four months following the date of the agreement on July 10, 2009. The Company paid the remaining \$150,000 upon exiting Chapter 11 bankruptcy in January 2010. The total settlement of \$600,000 was expensed for the year ended December 31, 2007. The HDC Agreement settled all disputes between Vermillion and HDC.

*Bio-Rad Laboratories, Inc. Matters*

On November 13, 2006, the Company completed the Instrument Business Sale to Bio-Rad. The Instrument Business Sale to Bio-Rad included the Company’s Surfaced Enhanced Laser Desorption/Ionization (“SELDI”) technology, ProteinChip arrays and accompanying software. Pursuant to the terms of the sales agreement entered into with Bio-Rad, the total sales price was \$20,000,000, of which \$16,000,000 was paid by Bio-Rad to the Company at the closing of the transaction on November 13, 2006. A total of \$4,000,000 was held back from the sales proceeds contingent upon the Company meeting certain obligations, which \$2,000,000 was subsequently paid to the Company in fiscal 2007 upon the issuance by the United States Patent and Trademark Office a reexamination certificate for United States Patent No. 6,734,022. From the amounts held back, \$2,000,000, subject to certain adjustments, to serve as security for the Company to fulfill certain obligations.

In connection with the Instrument Business Sale, the Company entered into a letter agreement with Bio-Rad pursuant to which the Company 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 its former subsidiary in the United Kingdom in the six-month period immediately following the Instrument Business Sale. On May 4, 2007, Bio-Rad delivered a claim for indemnification under the agreement for \$307,000, which was paid out of \$2,000,000 held in escrow. In August 2009, Bio-Rad also filed a proof of claim in the bankruptcy case for indemnification of the MAS lawsuit. Management is disputing the claim and cannot predict the ultimate outcome of this matter at this time.

In connection with the Instrument Business Sale, the Company also entered into a manufacture and supply agreement with Bio-Rad on November 13, 2006, whereby the Company agreed to purchase ProteinChip Systems and ProteinChip Arrays (collectively, the “Research Tools Products”) from Bio-Rad. Under the terms of the manufacture and supply agreement, the Company agreed to provide Bio-Rad quarterly, non-binding, twelve-month rolling forecasts setting forth the Company’s anticipated needs for Research Tools Products over the forecast period. The Company was permitted to provide revised forecasts as necessary to reflect changes in demand for the products, and Bio-Rad was required to use commercially reasonable efforts to supply amounts in excess of the applicable forecast. Either party was permitted to terminate the agreement for convenience upon 180 days’ prior written notice, or upon default if the other party failed to cure such default within 30 days after notice thereof. In a letter from the Company to Bio-Rad dated May 2, 2008, Vermillion exercised its right to terminate the November 13, 2006, manufacture and supply agreement for convenience upon 180 days’ written notice. Consequently, termination of the agreement became effective on October 29, 2008. In October 2009, Bio-Rad filed a proof of claim in the Company’s bankruptcy case based on certain contract claims for approximately \$1,000,000. The Company is attempting to resolve the contract claims and has accrued for this contingency within general and administrative expense in accordance with ASC 450 *Contingencies* at December 31, 2009 and 2008. Management cannot predict the ultimate outcome of this matter at this time.

**Vermillion, Inc.  
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**Notes to Consolidated Financial Statements—(Continued)**

***Debtor's Incentive Plan***

In connection with the Bankruptcy Filing, on April 21, 2009, the Company filed the Debtor's Motion for Entry of an Order Approving the Debtor's Incentive Plan (the "Incentive Plan") and Authorizing Payments thereunder pursuant to §§ 363(b) and 503(b) of the Bankruptcy Code (the "Incentive Plan Motion") which sought to provide proper incentives to the directors (Gail Page, John Hamilton and James Burns, collectively, the "Directors") to help achieve a successful sale or restructuring of the Company. At a hearing on June 22, 2009, the Court entered an Order approving the Incentive Plan Motion (the "Incentive Plan Order"). The Incentive Plan is only triggered upon the occurrence of a qualified transaction defined as the closing of any sale pursuant to section 363 of the Bankruptcy Code or the effectiveness of a Reorganization Plan confirmed pursuant to section 1129 of the Bankruptcy Code. The Incentive Plan payment was based upon a percentage of (A) the gross proceeds of Asset Sales, both prior to and after the Food and Drug Administration approval of the ovarian tumor triage test, and (B) the value of consideration - cash, debt and equity - distributed pursuant to a confirmed Reorganization Plan. In the end, the Incentive Plan Order provided that the Directors would receive: (i) zero, on Qualified Transaction Proceeds of 3,000,000 or less, (ii) 6% on Qualified Transaction Proceeds of \$3,000,001 to \$10,000,000, and (iii) 8% on Qualified Transaction Proceeds of greater than \$10,000,000. While the Incentive Plan Order provided the Company with the authority to make distributions under the Incentive Plan, the Company agreed as part of the Plan of Reorganization to seek final judicial approval of the amounts to be paid pursuant to the Incentive Plan. On April 13, 2010, counsel for the Company, the Official Committee of the Equity Security Holders, and the Directors submitted a proposed settlement to the Bankruptcy Court. On April 14, 2010, after a hearing, an order was issued by the Bankruptcy Court approving the Management Incentive Plan. Under the Management Incentive Plan, the Company was directed to distribute an aggregate of \$5,000,000 in cash and 302,541 shares of restricted stock in Incentive Plan Payments to the Directors. All such restricted stock is to be distributed, with 1/24th of it to vest on each monthly anniversary of the vesting commencement date, June 22, 2009. The total Incentive Plan Payments are to be allocated to Gail Page, James Burns and John Hamilton on a 60%-20%-20% basis, respectively, or as otherwise may be agreed to in writing by the Directors. The contingency was accounted for upon the occurrence of the qualified transaction on January 7, 2010 when the Bankruptcy Courts issued a confirmation order approving the Company's Reorganization Plan. Accordingly, the Company recorded a charge of \$7,485,000 for the three months ended March 31, 2010 and will record additional charges totaling \$4,141,000 through June 2011 as the underlying restricted stock vests.

In addition, from time to time, the Company is involved in legal proceedings and regulatory proceedings arising out of its operations. The Company establishes reserves for specific liabilities in connection with legal actions that it deems to be probable and estimable. Other than as disclosed above, the Company is not currently a party to any proceeding, the adverse outcome of which would have a material adverse effect on the Company's financial position or results of operations.

**10. Common Stock**

***Stockholders' Rights Plan***

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

**Vermillion, Inc.  
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**Notes to Consolidated Financial Statements—(Continued)**

The rights issued pursuant to Vermillion’s Stockholder Rights Plan will become exercisable the tenth day after a person or group announces acquisition of 15.0% 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 15.0% or more of Vermillion’s common stock. If the rights become exercisable, the holders of the rights (other than the person acquiring 15.0% or more of Vermillion’s common stock) will be entitled to acquire, in exchange for the rights’ exercise price, shares of Vermillion’s common stock or shares of any company in which the Company is merged, with a value equal to twice the rights’ exercise price.

***Authorized Shares***

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

***Private Placement Sale***

On August 29, 2007 (the “Closing Date”), Vermillion completed a private placement sale of 2,451,309 shares of its common stock and warrants to purchase up to an additional 1,961,047 shares of its common stock with an exercise price of \$9.25 per share and expiration date of August 29, 2012, to a group of new and existing investors for \$20,591,000 in gross proceeds (collectively referred to as the “August 29, 2007, Private Placement Sale”). Existing investors included affiliates of the Company, who purchased 964,285 shares of Vermillion’s common stock and warrants to purchase up to an additional 771,428 shares of Vermillion’s common stock for \$8,100,000. In connection with Quest’s participation in this transaction, Vermillion amended a warrant to purchase an additional 220,000 shares of its common stock that was originally issued to Quest on July 22, 2005. Pursuant to the terms of the amendment, the exercise price for the purchase of Vermillion’s common stock was reduced from \$35.00 per share to \$25.00 per share and the expiration date of such warrant was extended from July 22, 2010, to July 22, 2011. For services as placement agent, Vermillion paid Oppenheimer & Co. Inc. (“Oppenheimer”) \$1,200,000 and issued a warrant to purchase up to 92,100 shares of Vermillion’s common stock with an exercise price of \$9.25 per share and expiration date of August 29, 2012. The warrants issued to the investors and Oppenheimer were valued at \$7,194,000 and \$581,000, respectively, based on the fair value as determined by the Black-Scholes model. The amended value of the warrant issued to Quest on July 22, 2005, increased by \$356,000, which is reflected in additional paid-in capital, from the its original value of \$2,200,000. 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	Amendment to
	& Co. Inc.	Quest Diagnostics Incorporated
Dividend yield	— %	— %
Volatility	80.14%	82.92%
Risk-free interest rate	4.31%	4.24%
Expected lives (years)	5.0	3.9

In June 2008, the FASB issued new guidance now codified in ASC 815 that clarifies the determination of whether an instrument (or an embedded feature) is indexed to an entity’s own stock, which would qualify for classification as liabilities. The new guidance in ASC 815 was effective for financial statements issued for fiscal years beginning after December 15, 2008. The adoption of the new guidance on January 1, 2009, resulted in the reclassification of the Company’s outstanding warrants from the August 2007 offering from stockholders’ equity to liabilities, which requires the warrants to be fair valued at each reporting period, with the changes in fair value recognized as interest and other expense in the Company’s consolidated statement of operations.

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### Vermillion, Inc. (Debtor-in-Possession)

#### Notes to Consolidated Financial Statements—(Continued)

At December 31, 2009 and January 1, 2009, the Company had warrants outstanding to purchase 273,467 and 2,053,147 shares of common stock, respectively, which were required to be classified as a liability. The fair value of these warrants on the date of adoption of January 1, 2009 and on December 31, 2009 was determined using a Black Scholes valuation model with the following level 3 inputs:

	<u>December 31, 2009</u>	<u>January 1, 2009</u>
Risk-free interest rate	1.51%	1.18%
Expected life (in years)	2.66	3.66
Dividend yield	— %	— %
Volatility	83.70%	78.35%
Stock price	\$ 27.50	\$ 0.27

On January 1, 2009, the Company recorded a cumulative effect of change in accounting principle adjustment of \$21,000 to its accumulated deficit and a corresponding reclassification of the Company's outstanding warrants from stockholder's deficit to warrant liability. For the year ended December 31, 2009, the Company recorded under ASC 815 a loss of \$12,106,000 in the consolidated statement of operations.

The following table sets forth the Company's financial liabilities, related to warrants subject to fair value measurements as of December 31, 2009:

		<u>Fair Value Measurements at Reporting Date Using</u>		
		<u>Quoted Prices in</u>		
	<u>Total Fair</u>	<u>Active Markets</u>	<u>Significant</u>	<u>Significant</u>
	<u>Value</u>	<u>for Identical</u>	<u>Other</u>	<u>Unobservable</u>
		<u>Assets</u>	<u>Observable</u>	<u>Inputs</u>
		<u>(Level 1)</u>	<u>Inputs</u>	<u>(Level 3)</u>
			<u>(Level 2)</u>	
Liabilities:				
Common stock warrants	\$ 5,659	\$ —	\$ —	\$ 5,659
Total	\$ 5,659	\$ —	\$ —	\$ 5,659

**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

The following table is a reconciliation of the warrant liability measured at fair value using Level 3 inputs (in thousands):

	Long-Term Investments Available for- Sale-(Level 3) Warrant Liabilities
Balance at January 1, 2009	\$ —
Cumulative effect of change in accounting principle for common stock warrants	21
Change in fair value of common stock warrants during 2009	20,062
Issuance of common stock from warrant exercise	(6,468)
Warrant exercise gain during 2009	(7,956)
Balance at December 31, 2009	<u>\$ 5,659</u>

**Warrants**

Warrants outstanding and exercisable as of December 31, 2009 were as follows:

Issuance Date	Expiration Date	Exercise Price per Share	Number of Shares Outstanding under Warrant
July 22, 2005	July 22, 2011	\$ 25.00	220,000
August 3, 2006	August 3, 2011	12.60	6,090
November 15, 2006	November 15, 2011	12.60	6,090
August 29, 2007	August 29, 2012	9.25*	273,467
			<u>505,647</u>

\* The exercise price of the warrants issued on August 29, 2007 is adjustable in accordance with the terms of the warrants.

**11. Accumulated Other Comprehensive Loss**

The components of accumulated other comprehensive loss as of December 31, 2009 and 2008, were as follows (in thousands):

	2009	2008
Net unrealized loss on long-term investments available-for-sale	\$ 119	\$ —
Cumulative translation adjustment	(165)	(162)
Accumulated other comprehensive loss	<u>\$ (46)</u>	<u>\$(162)</u>

**Vermillion, Inc.**  
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**Notes to Consolidated Financial Statements—(Continued)**

**12. Loss Per Share**

The reconciliation of the numerators and denominators of basic and diluted loss per share for the years ended December 31, 2009 and 2008 was as follows (dollars in thousands, except shares and per share amounts):

	Loss (Numerator)	Shares (Denominator)	Per Share Amount
<b>Year ended December 31, 2009:</b>			
Net loss-basic	\$ (22,048)	6,662,231	\$ (3.31)
Dilutive effect of common stock shares issuable upon exercise of stock options, purchase by Employee Stock Purchase Plan, exercise of warrants and conversion of convertible senior notes	—	—	
Net loss-diluted	<u>\$ (22,048)</u>	<u>6,662,231</u>	\$ (3.31)
<b>Year ended December 31, 2008:</b>			
Net loss-basic	\$ (18,330)	6,381,802	\$ (2.87)
Dilutive effect of shares purchasable under the Employee Stock Purchase Plan, stock options, warrants and convertible senior notes	—	—	
Net loss-diluted	<u>\$ (18,330)</u>	<u>6,381,802</u>	\$ (2.87)

Due to net losses for the years ended December 31, 2009 and 2008, diluted loss per share is calculated using the weighted average number of common shares outstanding and excludes the effects of potential common stock shares that are antidilutive. The potential shares of common stock that have been excluded from the diluted loss per share calculation above for the years ended December 31, 2009 and 2008, were as follows:

	2009	2008
Stock options	678,301	815,638
Employee Stock Purchase Plan	—	2,250
Stock warrants	505,647	2,293,147
Convertible senior notes	297,300	875,000
Potential common shares	<u>1,481,248</u>	<u>3,986,035</u>

**13. Employee Benefit Plans**

***1993 Stock Option Plan***

Vermillion has no shares of its common stock reserved for future grants 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 non-statutory 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, 2009 and 2008, no shares of Vermillion’s common stock were subject to repurchase by Vermillion. Since Vermillion’s initial public offering, no options have been granted under the 1993 Plan. There were no option exercises for the years ended December 31, 2009 and 2008.

***2000 Stock Plan***

Under the Amended and Restated 2000 Stock Plan (the “2000 Plan”), options may be granted at prices not lower than 85% and 100% of the fair market value of the common stock for non-statutory and statutory stock options, respectively. Options generally vest monthly over a period of four years and unexercised options generally expire ten years from the date of grant. At December 31, 2009, Vermillion had 6,553,859 shares of its common stock reserved for future stock option grants to employees, directors and consultants under the 2000 Plan. There were no option exercises for the years ended December 31, 2009 and 2008. No additional shares of Vermillion’s common stock were reserved for issuance under the 2000 Plan for the years ended December 31, 2009 and 2008.

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### *2000 Employee Stock Purchase Plan*

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

The 2000 ESPP provides for the purchase of Vermillion’s common stock at the lower of 85.00% of the closing price of Vermillion’s common stock on the first day of the offering period or 85.00% of the closing price of Vermillion’s common stock on the last day of the offering period. No additional Vermillion’s common stock shares were reserved for issuance under the 2000 ESPP for the years ended December 31, 2009 and 2008.

The activity related to shares available for grant under the 1993 Plan, 2000 Plan and 2000 ESPP for the years ended December 31, 2009 and 2008, were as follows:

	1993 Stock Option Plan	2000 Stock Plan	2000 Employee Stock Purchase Plan	Total
Shares available at December 31, 2007	—	6,776,983	1,373,023	8,150,006
Additional shares reserved	—	—	—	—
Options canceled / forfeited	3,000	116,149	—	119,149
Reduction in shares reserved	(3,000)	—	—	(3,000)
Options granted	—	(465,000)	—	(465,000)
Shares purchased	—	—	(3,750)	(3,750)
Shares available at December 31, 2008	—	6,428,132	1,369,273	7,797,405
Additional shares reserved	—	—	—	—
Options canceled	11,610	125,727	—	137,337
Reduction in shares reserved	(11,610)	—	—	(11,610)
Options granted	—	—	—	—
Shares purchased	—	—	—	—
Shares available at December 31, 2009	—	6,553,859	1,369,273	7,923,132



**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

The stock option activity under the 1993 Plan and 2000 Plan for the years ended December 31, 2009 and 2008, was as follows (dollars are in thousands, except weighted average exercise price):

	Number of	Weighted	Aggregate	Weighted
	Shares	Average	Intrinsic	Average
		Exercise	Value	Remaining
		Price		Contractual
				Term
Options outstanding at December 31, 2007	469,675	\$ 26.30	\$ —	7.72
Granted	465,000	1.99		
Exercised	—	—		
Canceled	(119,037)	15.63		
Options outstanding at December 31, 2008	815,638	14.00	—	8.22
Granted	—	—		
Exercised	—	—		
Canceled	(137,337)	12.90		
Options outstanding at December 31, 2009	<u>678,301</u>	\$ 14.22	12,648	5.86
<b>Shares exercisable:</b>				
December 31, 2009	518,704	\$ 17.27	\$ 8,956	5.10
December 31, 2008	411,543	\$ 23.64	\$ —	7.22
<b>Shares expected to vest:</b>				
December 31, 2009	159,597	\$ 4.32	\$ 3,692	8.30
December 31, 2008	329,272	\$ 4.33	\$ —	9.18

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### Vermillion, Inc. (Debtor-in-Possession)

#### Notes to Consolidated Financial Statements—(Continued)

The range of exercise prices for options outstanding and exercisable at December 31, 2009, are as follows:

Exercise Price			Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Life in Years	Options Exercisable	Weighted Average Exercise Price
\$0.01	-	\$ 0.75	49,832	\$ 0.74	4.42	49,832	\$ 0.74
0.76	-	2.04	113,250	2.04	4.87	107,000	2.04
2.05	-	2.30	195,000	2.30	8.55	69,057	2.30
2.31	-	10.20	84,205	9.36	4.36	83,548	9.36
10.21	-	14.70	124,453	13.39	6.18	97,942	13.18
14.71	-	48.60	53,317	24.02	4.12	53,081	24.05
48.61	-	96.00	58,244	89.16	3.04	58,244	89.16
\$0.01	-	\$ 96.00	<u>678,301</u>	\$ 14.22	5.86	<u>518,704</u>	\$ 17.27

	Total Intrinsic Value of Options Exercised	Total Fair Value of Vested Options (in thousands)
Year ended December 31, 2009	\$ —	\$ 644
Year ended December 31, 2008	\$ —	\$ 754

#### Stock-Based Compensation

##### Employee Stock-based Compensation Expense

The assumptions used to calculate the fair value of options granted and shares purchasable under the 2000 Plan and 2000 ESPP that were incorporated in the Black-Scholes pricing model for the year ended December 31, 2008 was as follows:

	2000 Stock Plan	Employee Stock Purchase Plan
	2008	2008
Dividend yield	— %	— %
Volatility	79.01%	74.84%
Risk-free interest rate	3.37%	2.17%
Expected lives (years)	5.26	0.50
Weighted average fair value	\$ 1.33	\$ 0.25

The Company did not grant any stock options to employees or had any employees participate in the 2000 ESPP for the year ended December 31, 2009. The allocation of stock-based compensation expense by functional area for the years ended December 31, 2009 and 2008 was as follows (in thousands):

	2009	2008
Research and development	\$ 34	\$120
Sales and marketing	10	93
General and administrative	280	423
Total	<u>\$324</u>	<u>\$636</u>

**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

The Company has a 100.0% valuation allowance recorded against its deferred tax assets, and as a result SFAS No. 123(R) had no effect on income tax expense in the consolidated statement of operations or the consolidated statement of cash flows. As of December 31, 2009, total unrecognized compensation cost related to nonvested stock option awards was \$292,000 and the related weighted average period over which it is expected to be recognized was 2.23 years.

*Non-employee Stock-based Compensation Expense*

Stock-based compensation expense related to stock options granted to non-employees is recognized as the stock options are earned. As part of the bankruptcy case, certain former employees were converted into consultants to Company whereby their existing stock options continued to vest, under the original terms of their stock option grants, as they provided consulting services to the Company. The values attributable to these options are amortized over the service period and the unvested portion of these options was remeasured at each vesting date. The Company believes that the fair value of the stock options is more reliably measurable than the fair value of the services received. The fair value of the stock options granted were revalued at each reporting date using the Black-Scholes valuation model as prescribed by ASC 505, "Equity," using the following average assumptions:

	Year Ended December 31,
	2009
Dividend yield	— %
Volatility	84.79%
Risk-free interest rate	3.28%
Expected lives (years)	8.22
Weighted average fair value	\$ 11.85

The stock-based compensation expense will fluctuate as the fair market value of the common stock fluctuates. In connection with stock options relating to non-employees, the Company recorded stock-based compensation allocated by functional area for the year ended December 31, 2009, as follows (in thousands).

	2009
Research and development	\$185
Sales and marketing	\$ 14
General and administrative	48
Total	<u>\$247</u>

*Ciphergen Biosystems, Inc. 401(k)*

The Company maintains the Ciphergen Biosystems, Inc. 401(k) Plan (the "401(k) Plan") for its United States employees. The 401(k) Plan allows eligible employees to defer up to an annual limit of the lesser of 90.0% of eligible compensation or a maximum contribution amount subject to the Internal Revenue Service annual contribution limit,. The Company is not required to make contributions under the 401(k) Plan. As of December 31, 2009 and 2008, the Company has not contributed to the 401(k) Plan.

**Vermillion, Inc.**  
**(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

**14. Income Taxes**

Domestic and foreign components of loss from continuing operations before income taxes for the years ended December 31, 2009 and 2008 are as follows (in thousands):

	<u>2009</u>	<u>2008</u>
Domestic	\$(21,927)	\$(17,755)
Foreign	(110)	(615)
	<u>\$(22,037)</u>	<u>\$(18,370)</u>

The components of the benefits (provision) for income attributable to loss from continuing operations before income taxes for the years ended December 31, 2009 and 2008 are as follows (in thousands):

	<u>2009</u>	<u>2008</u>
Federal		
Current	\$—	\$ 235
Deferred	—	(259)
State	—	—
Foreign		
Current	11	(16)
Deferred	—	—
	<u>\$ 11</u>	<u>\$ (40)</u>

Based on the available objective evidence, management believes it is more likely than not that the net deferred tax assets will not be fully realizable. Accordingly, the Company has provided a full valuation allowance against its net deferred tax assets at December 31, 2009 and 2008.

The components of deferred tax assets (liabilities) at December 31, 2009 and 2008 were as follows (in thousands):

	<u>2009</u>	<u>2008</u>
Deferred tax assets:		
Depreciation and amortization	\$ 16,387	\$ 18,912
Other	909	874
Research and development and other credits	179	185
Net operating losses	40,340	31,638
Total deferred tax assets	57,815	51,609
Valuation allowance	(57,777)	(51,529)
Net deferred tax assets	<u>\$ 38</u>	<u>\$ 80</u>
Deferred tax liabilities:		
Investment in foreign subsidiaries	\$ (10)	\$ (49)
Other	(29)	(31)
	<u>\$ (39)</u>	<u>\$ (80)</u>

**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

The reconciliation of the statutory federal income tax rate to the Company's effective tax rate for the years ended December 31, 2009 and 2008 was as follows:

	<u>2009</u>	<u>2008</u>
Tax at federal statutory rate	34%	34%
State tax, net of federal benefit	4	6
Deferred tax not benefited	(28)	(43)
Change in warrant valuation	(9)	—
Other	(1)	3
Effective income tax rate	<u>— %</u>	<u>— %</u>

As of December 31, 2009, the Company has a net operating loss of approximately \$101,000,000 for federal and \$69,000,000 for state tax purposes. If not utilized, these carryforwards will begin to expire beginning in 2026 for federal purposes and 2016 for state purposes.

As of December 31, 2009, the Company has \$5,400,000 million of net operating carryforwards from its Japan operations. If not utilized, this carryforward will begin to expire in 2012.

We believe that it is more likely than not that the benefit from certain deferred tax assets will not be realized due to the history of the operating losses in the Company. In recognition of this risk, we have provided a valuation allowance on the deferred tax assets relating to these assets. The valuation allowance was \$57,777,000 at December 31, 2009, which represents an increase of \$6,248,000 over 2008 primarily due to additional valuation allowance requirements on U.S. deferred tax assets.

The Company is subject to taxation in the US and various state and foreign jurisdictions. As of December 31, 2009 the Company's tax years for 2006, 2007, 2008 and 2009 are subject to examination by the U.S. tax authorities. With few exceptions, as of December 31, 2009, the Company is no longer subject to U.S. federal, state, local or foreign examinations by tax authorities for years before 2004.

Upon adoption of ASC Topic 740-10-50 on January 1, 2007 and also at December 31, 2007 and 2008, the Company had no unrecognized tax benefits. The Company does not expect unrecognized tax benefits to change significantly over the next 12 months.

The Company recognizes interest and penalties related to unrecognized tax benefits within the interest expense line and other expense line, respectively, in the consolidated statement of operations. Accrued interest and penalties are included within the related liability lines in the consolidated balance sheet. The Company has not recorded any interest or penalties as a result of uncertain tax positions as of December 31, 2009 and 2008.

**15. Other Related Party Transactions**

***Consulting Agreement***

On March 26, 2009, the Company entered into a consulting agreement with its former chief executive officer and current Director of the Company. For the year-ended December 31, 2009, the Company incurred \$189,000 in general and administrative expenses under the consultant arrangement. At December 31, 2009, the Company owed the consultant \$377,000, which included amounts owed for severance of \$366,000. On February 1, 2010, the Company re-hired the consultant as its chief executive officer of the Company.

**16. Subsequent Events**

On January 7, 2010, in connection with the Plan of Reorganization, Vermillion completed a private placement sale of 2,327,869 shares of its common stock at a price of \$18.4932 per share to a group of new and existing investors for \$43,050,000 in gross proceeds.

**Vermillion, Inc.  
(Debtor-in-Possession)**

**Notes to Consolidated Financial Statements—(Continued)**

On February 8, 2010, the Board of Directors of the Company approved the Vermillion, Inc. 2010 Stock Incentive Plan (the “2010 Plan”). The 2010 Plan will be administered by the Compensation Committee of the Board. The Company’s employees, directors, and consultants are eligible to receive awards under the 2010 Plan. The 2010 Plan permits the granting of a variety of awards, including stock options, share appreciation rights, restricted shares, restricted share units, and unrestricted shares, deferred share units, performance and cash-settled awards, and dividend equivalent rights. The Company is authorized to issue up to 1,322,983 shares of common stock, par value \$0.001 per share under the 2010 Plan, subject to adjustment as provided in the 2010 Plan.

From January 2010 through May 2010, Vermillion issued 35,923 shares of its common stock for the net exercises of its common stock warrants.

As of May 13, 2010, the fair value of the outstanding common stock warrants dated August 29, 2007, underlying the warrant liability was \$12.95 per share for a total fair value of \$2,919,000, which is a decrease of \$2,740,000 from the December 31, 2009, total fair value of \$5,659,000.

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### Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

### Item 9A (T). Controls and Procedures

**Disclosure Controls and Procedures** . Vermillion, Inc. (“Vermillion”; Vermillion and its wholly owned subsidiaries are collectively referred to as the “Company”), formerly known as CIPHERGEN Biosystems, Inc., has carried out an evaluation, under the supervision and with the participation of the Company’s management, including Vermillion’s Chief Executive Officer and Interim Chief Accounting Officer, of the effectiveness of the design and operation of the Company’s disclosure controls and procedures as of December 31, 2009, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Based upon that evaluation, Vermillion’s Chief Executive Officer and Chief Accounting Officer concluded that the Company’s disclosure controls and procedures as of December 31, 2009 were not effective because of a material weakness in internal control over financial reporting described below.

**Management’s Report on Internal Control over Financial Reporting** . The Company’s management is responsible for establishing and maintaining adequate internal control over financial reporting. As defined in Rule 13a-15(f) under the Exchange Act, internal control over financial reporting is a process designed by or under the supervision of a company’s principal executive and principal financial officers, and effected by a company’s board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. It includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of a company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of a company are being made only in accordance with authorizations of management and board of directors of a company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of a company’s assets that could have a material effect on its financial statements.

Management has assessed the effectiveness of the Company’s internal control over financial reporting as of December 31, 2009. In making its assessment of internal control, management used the criteria described in “Internal Control—Integrated Framework” issued by the Committee of Sponsoring Organizations (“COSO”) of the Treadway Commission. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company’s annual or interim financial statements will not be prevented or detected on a timely basis.

As a result of the Company filing a voluntary petition for relief under Chapter 11 of the United States Bankruptcy Code in the Bankruptcy Court on March 30, 2009, the Company did not maintain sufficient staff with the necessary experience in US GAAP to timely perform its controls procedures relating to the accounting and reporting processes. As a result, the Company was not able to timely file its Forms 10-Q and 10-K in accordance with the Exchange Act’s rules and regulations. This control deficiency, if not corrected, could result in a material misstatement of the Company’s annual or interim consolidated financial statements that would not be prevented or detected on a timely basis. Therefore, management has concluded that this control deficiency constitutes a material weakness.

As a result of the material weakness described above, management concluded that the Company’s internal control over financial reporting was not effective as of December 31, 2009, based on the criteria identified above. This Annual Report on Form 10-K does not include an attestation report of the Company’s independent registered public accounting firm regarding internal control over financial reporting. Management’s assessment of the effectiveness of the Company’s internal control over financial reporting as of December 31, 2009, was not subject to attestation by the Company’s independent registered public accounting firm pursuant to temporary rules of the United States Securities and Exchange Commission (“SEC”) that permit the Company to provide only management’s report in this Annual Report on Form 10-K.



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### ***Remediation Activities***

The Company continues to evaluate its resource requirements to ensure the timely and effective review and management of its accounting and reporting process. On February 1 and May 17, 2010, the Company hired an Interim Vice President, Finance & Chief Accounting Officer and Vice President & Chief Financial Officer, respectively (collectively as “Financial Officers”), to help remedy the staffing deficiency. The Financial Officers are in the process of evaluating the staffing requirements and will to the extent necessary, hire additional finance and accounting staff to allow for the preparation of financial statements to be in accordance with US GAAP, the timely filing of periodic financial reports with the Securities and Exchange Commission and effective internal control over financial reporting.

***Changes in Internal Control Over Financial Reporting*** . The Company has made no change in its internal control over financial reporting that has materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting during the three months ended December 31, 2009.

### **Item 9B. Other Information**

None.

## PART III

### Item 10. Directors, Executive Officers and Corporate Governance

#### *Directors of the Registrant*

During 2009, there were seven directors serving on the Vermillion, Inc.'s ("Vermillion"; Vermillion and its wholly-owned subsidiaries are collectively referred to as the "Company") Board of Directors. On March 30, 2009, Vermillion filed a voluntary petition for relief (the "Bankruptcy Filing") under Chapter 11 of the United States Bankruptcy Code with the United States Bankruptcy Court for the District of Delaware (the "Bankruptcy Court"). In connection with the Bankruptcy Filing, Kenneth J. Conway and James L. Rathmann resigned from their positions as directors on March 25, 2009; John A. Young resigned from his position as a director on March 26, 2009; and Rajen K. Dalal resigned from his position as a director on March 27, 2009. James S. Burns, John F. Hamilton and Gail S. Page continued to serve as directors after the Bankruptcy Filing was made. On March 30, 2009, Ms. Page was elected to and assumed the position of Executive Chair of the Board of Directors. On January 22, 2010, Vermillion emerged from bankruptcy under Chapter 11 of the United States Bankruptcy Code. In connection with Vermillion's emergence from bankruptcy, William C. Wallen, Ph.D. was appointed to the Board of Directors as a Class I Director on February 1, 2010; Peter S. Roddy was appointed to the Board of Directors as a Class II Director on February 18, 2010; and Carl Severinghaus was appointed to the Board of Directors as a Class II Director on March 3, 2010.

The directors were divided into three classes with the three-year term of one class expiring at each annual meeting of stockholders. The terms for the three classes of directors were set to expire as follows:

- Class I Directors at the 2010 annual meeting of stockholders;
- Class II Directors at the 2011 annual meeting of stockholders; and
- Class III Directors at the 2009 annual meeting of stockholders.

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The name, age, positions and offices of each director as of December 31, 2009, as of the time of such director's resignation from the Board of Directors if such resignation occurred during the year ended December 31, 2009, or as of the date of such director's appointment if such appointment occurred after December 31, 2009, are set forth below:

Name	Age	Positions and Offices
<b>Class I Directors through the year ended December 31, 2009:</b>		
None		
<b>Class II Directors through the year ended December 31, 2009:</b>		
James S. Burns	63	Director
<b>Class III Directors through the year ended December 31, 2009:</b>		
John F. Hamilton	66	Director
Gail S. Page	54	Executive Chair of the Board of Directors
<b>Directors resigning during the year ended December 31, 2009:</b>		
James L. Rathmann (through March 25, 2009)	59	Executive Chairman of the Board of Directors; Member of Nominating and Governance Committee
Kenneth J. Conway (through March 25, 2009)	62	Director; Chairman of Compensation Committee
Rajen K. Dalal (through March 27, 2009)	57	Director; Chairman of Nominating and Governance Committee
John A. Young (through March 26, 2009)	78	Lead Outside Director; Member of Nominating and Governance Committee and Compensation Committee
<b>Directors appointed after December 31, 2009:</b>		
William C. Wallen, Ph.D. (appointed February 1, 2010)	67	Director; Chairman of Nominating and Governance Committee, Member of Audit Committee and Compensation Committee
Peter S. Roddy (appointed February 18, 2010)	50	Director; Chairman of Audit Committee
Carl Severinghaus (appointed March 3, 2010)	58	Director; Chairman of Compensation Committee, Member of Audit Committee and Nominating and Governance Committee

A summary of the business experience of each director who served on the Board of Directors during the year ended December 31, 2009 is set forth below:

*James L. Rathmann* served as a director of Vermillion from its inception until his resignation on March 25, 2009, and as its Executive Chairman from December 2005 until his resignation on March 25, 2009. Additionally, he served as a member of its Nominating and Governance Committee. Mr. Rathmann serves as a director of several private companies. Mr. Rathmann has been President of Falcon Technology Management Corporation and a general partner of Falcon Technology Partners, L.P. (collectively referred to as "Falcon Technology") since its founding in 1993. Prior to joining Falcon Technology in 1993, Mr. Rathmann was Senior Vice President of Operations at Soft-Switch, Inc. from 1984 to 1993. Mr. Rathmann received his B.A. in Mathematics from the University of Colorado and M.S. in Computer Science from the University of Wisconsin.

*Kenneth J. Conway* served as a director of Vermillion from April 2006 until his resignation on March 25, 2009. Additionally, he served as Chairman of its Compensation Committee. Mr. Conway also serves as a director of several private companies. Mr. Conway has been President of Starfire Ventures, a private biotech venture capital firm, since 2003. From 2000 to 2003, Mr. Conway served as Chief Executive Officer at Vitivity, Inc., a wholly-owned subsidiary of Millennium Pharmaceuticals focused on predictive medicine. Prior to founding Vitivity, Inc., Mr. Conway was President and Founder of Millennium Predictive Medicine, Inc. from 1997 to 2000. Mr. Conway spent more than 26 years with Chiron Diagnostics Corporation (formerly Ciba Corning), most recently serving as President of the U.S. Group and member of the Office of the President. Mr. Conway has also been the Senior Vice President and General Manager of Immuno Diagnostics, where he led the development and commercialization of the ACS.180, a world-leading system in automated immunodiagnostic testing, and Vice President of several business units at Chiron, as well as being Vice President of manufacturing at Corning Medical Division. Mr. Conway received his B.S. in Ceramic Engineering from Rutgers University, and attended the Dartmouth Institute Executive Program at Dartmouth College's Tuck School of Business Administration.

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*James S. Burns* has been a director of Vermillion since June 2005. Additionally, he served as a member of its Audit Committee. Mr. Burns is currently President, Chief Executive Officer and director of AssureRX, Health, Inc., a personalized medicine company which specializes in pharmacogenetics for neuropsychiatric disorders. Prior to joining AssureRX, Health, Inc., Mr. Burns was the President and Chief Executive Officer of EntreMed, Inc. from June 2004 to December 2008, and a director from September 2004 to December 2008. Mr. Burns was a co-founder and, from 2001 to 2003, served as President and as Executive Vice President of MedPointe, Inc., a specialty pharmaceutical company that develops, markets and sells branded prescription pharmaceuticals. From 2000 to 2001, Mr. Burns 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. Mr. Burns 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 a director of Symmetry Medical Inc. (NYSE: SMA), a supplier of products and services to orthopedic and other medical device companies, and a director of the International BioResources Group and the American Type Culture Collection (“ATCC”). Mr. Burns received his B.S. and M.S. in Biological Sciences from the University of Illinois, and M.B.A. from DePaul University.

*Rajen K. Dalal* served as a director of Vermillion from April 2003 until his resignation on March 27, 2009. Additionally, he served as Chairman of its Nominating and Governance Committee. Mr. Dalal is an industry consultant. Since October 2006, Mr. Dalal has served as Chief Executive Officer of Aviiir, Inc., a molecular diagnostics company. From 2002 to 2005, Mr. Dalal was the President and Chief Executive Officer of Guava Technologies, Inc., a biotechnology company based on mammalian cell profiling and analysis. Prior to joining Guava Technologies, Mr. Dalal was at Chiron Corporation where he was most recently President of its Blood Testing Division. Prior to joining Chiron Corporation in 1991, Mr. Dalal was a leader of McKinsey & Company’s pharmaceuticals and technology management groups. Mr. Dalal received his bachelor’s degree in Chemistry from St. Xavier’s College, the University of Bombay; master’s degree in Biochemical Engineering from the Massachusetts Institute of Technology; and M.B.A. from the University of Chicago.

*John A. Young* served as director of Vermillion from its inception until his resignation on March 25, 2009, its Chairman from 1995 to December 2005, and its Lead Outside Director from December 2005 until his resignation on March 25, 2009. Additionally, he served as a member of its Nominating and Governance Committee and Compensation Committee. Mr. Young was President and Chief Executive Officer of Hewlett-Packard Company from 1978 until his retirement in 1992. Mr. Young serves as a director of another public life science company, Affymetrix, Inc., and also serves as a director of several private companies. Mr. Young received his B.S.E.E. from Oregon State University and M.B.A. from the Stanford Graduate School of Business.

*John F. Hamilton* has been a director of Vermillion since April 2008. Additionally, he was the Chairman of Vermillion’s Audit Committee. From 1997 until his retirement in 2007, Mr. Hamilton served as Vice President and Chief Financial Officer of Depomed, Inc. Mr. Hamilton began his career in international banking with The Philadelphia National Bank and Crocker National Bank, and went on to hold senior financial positions at several biopharmaceutical companies including Glyko, Inc., which is now BioMarin Pharmaceuticals, and Chiron Corporation. Mr. Hamilton sits on the regional Board of Directors of the Association of Bioscience Financial Officers, and is past-president of the Treasurers Club of San Francisco. Mr. Hamilton received his M.B.A. from the University of Chicago and B.A. in International Relations from the University of Pennsylvania.

*Gail S. Page* has been a director of Vermillion since December 2005, and was elected to and assumed the position of Executive Chair of the Board of Directors on March 30, 2009. Ms. Page joined Vermillion in January 2004 as President of the Company’s Diagnostics Division and an Executive Vice President of Vermillion, and was promoted to President and Chief Operating Officer of Vermillion in August 2005. Subsequently, Ms. Page became the President and Chief Executive Officer of Vermillion in December 2005 and served in this capacity until her resignation on March 27, 2009. In connection with Vermillion’s emergence from bankruptcy, Ms. Page was reappointed as President and Chief Executive Officer of Vermillion on February 1, 2010. From October 2000 to January 2003, Ms. Page was Executive Vice President and Chief Operating Officer of Luminex Corporation. From 1988 to 2000, Ms. Page held various senior level management positions with Laboratory Corporation of America (“LabCorp”). In 1993, Ms. Page 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, Ms. Page headed the Cytology and Pathology Services business unit for LabCorp. From 1988 to 2000, Ms. Page was a member of the Scientific Advisory Board at LabCorp and chaired the committee from 1993 to 1997. Prior to her years at LabCorp and its predecessor, Roche Biomedical, Ms. Page worked in various functions in the academic field and the diagnostics industry. Ms. Page received her A.S. in Medical Technology in combination with a Cardiopulmonary Technology Diploma from the University of Florida. Ms. Page also completed an executive management course at the Kellogg School of Management at Northwestern University.

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A summary of the business experience of each director who was appointed to the Board of Directors subsequent to December 31, 2009 is set forth below:

*William C. Wallen, Ph.D.* was appointed to Vermillion's Board of Directors on February 1, 2010 and serves as its Nominating and Corporate Governance Chairman. Additionally, he is a member of Vermillion's Audit Committee and Compensation Committee, and has served on its Scientific Advisory Board since April 2006. Dr. Wallen has been the Senior Vice President and Chief Scientific Officer of IDEXX Laboratories, Inc. ("IDEXX") since September 2003, and will be retiring from IDEXX on March 3, 2010. Since December 2008, Dr. Wallen has also been leading its infectious disease product manufacturing operations. Dr. Wallen led IDEXX's pharmaceutical products business from September 2003 until IDEXX sold certain product lines and restructured that business in 2008. Prior to joining IDEXX, Dr. Wallen held various positions with Bayer Corporation, most recently as Senior Vice President, Research and Development, and Head, Office of Technology for the Diagnostics Division of Bayer Healthcare. From 2001 to 2003, Dr. Wallen served as Senior Vice President and Head of Research, Nucleic Acid Diagnostics Segment; from 1999 to 2001, as Senior Vice President of Research and Development Laboratory Testing Segment; and from 1993 to 1999, as Vice President of Research and Development, Immunodiagnostic and Clinical Chemistry Business Units. Before joining Bayer Corporation, from 1990 to 1993, Dr. Wallen was Vice President, Research and Development at Becton Dickinson Advanced Diagnostics. Dr. Wallen is a member of the American Association of Clinical Chemistry, the American Society for Microbiology, American Association for Cancer Research, The Leukemia society of America, and the New York Academy of Science. Dr. Wallen has authored or co-authored 55 scientific papers and articles covering topics in immunology, virology, oncology and detection methodologies. Dr. Wallen received his B.S. in Zoology and M.S. in Microbiology from Michigan State University, and Ph.D. in Molecular Biology from University of Arizona College of Medicine.

*Peter S. Roddy* was appointed to Vermillion's Board of Directors and Audit Committee on February 18, 2010. Mr. Roddy has served as Vice President and Chief Financial Officer of Pain Therapeutics, Inc. since July 2004 and as its Chief Financial Officer since November 2002. From 1990 to 2002, Mr. Roddy held a variety of senior management positions at COR Therapeutics, Inc. (now part of Takeda Pharmaceutical Company Limited), a biopharmaceutical company, including Senior Vice President, Finance and Chief Financial Officer between 2000 and 2002. Prior to 1990, Mr. Roddy held a variety of positions at Price Waterhouse & Company, Hewlett Packard Company and MCM Laboratories, Inc. Mr. Roddy received his B.S. in Business Administration from the University of California, Berkeley.

*Carl Severinghaus* was appointed to Vermillion's Board of Directors on March 3, 2010 and serves as its Compensation Committee Chairman. In addition, he is a member of its Audit Committee and Nominating and Corporate Governance Committee. Mr. Severinghaus has held the position of President of Tecan Americas since 2009. He is responsible for the sales and operations for the Americas Sales Regions, including U.S., Canada, and South America. From 2007 to 2008, he was Senior Vice President of International Sales, responsible for the worldwide sales and operations of the direct and OEM sales channels. Since 2007, he has served as a member to the Executive Committee of Tecan, an internal Board responsible for implementing the Board of Directors' worldwide strategies and goals. He was President and General Manager of Tecan from 1999 to 2006, and Vice President of Sales and National Sales Manager from 1991 to 1998. Prior to joining Tecan, he held National Sales Manager position at American Monitor Corporation from 1980 to 1991. Mr. Severinghaus received his Bachelor of Fine Arts degree in Communications and Public Speaking from Drake University in 1974. He is a member of the Analytical & Life Science Systems Association, the Association for Laboratory Science, and the American Association for Clinical Chemistry.

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### *Executive Officers of the Registrant*

The name, age, positions and offices of each executive officer of Vermillion as of December 31, 2009, or as of the time of such executive officer's resignation if such resignation occurred during the year ended December 31, 2009, are set forth below:

<u>Name</u>	<u>Age</u>	<u>Positions and Offices</u>
<b>Executive Officers resigning during the year ended December 31, 2009:</b>		
Gail S. Page (through March 27, 2009)	54	Executive Chair of the Board of Directors; President and Chief Executive Officer
Eric T. Fung, M.D., Ph.D. (through March 19, 2009)	40	Vice President and Chief Scientific Officer
Simon C. Shorter, Ph.D. (through March 27, 2009)	49	Vice President, Corporate Business Development
Qun Zhou (through March 27, 2009)	42	Controller and Interim Chief Financial Officer
<b>Executive Officers appointed after December 31, 2009</b>		
Gail S. Page (appointed February 1, 2010)	55	Executive Chair of the Board of Directors; Chief Executive Officer
Eric T. Fung, M.D., Ph.D. . (appointed February 1, 2010)	40	Senior Vice President and Chief Science Officer
John H. Tran (appointed February 1, 2010)	34	Interim Vice President of Finance and Chief Accounting Officer
Sandra A. Gardiner (appointed April 19, 2010)	45	Vice President and Chief Financial Officer

In connection with the Bankruptcy Filing, Ms. Page resigned from her position as President and Chief Executive Officer on March 27, 2009 and was elected to and assumed the position of Executive Chair of the Board of Directors on March 30, 2009. In connection with Vermillion's emergence from bankruptcy, Ms. Page was reappointed as President and Chief Executive Officer of Vermillion on February 1, 2010. Also in connection with the Bankruptcy Filing, Dr. Shorter resigned from his position as Vice President, Corporate Business Development on March 27, 2009; and Ms. Zhou resigned from her position as Interim Chief Financial Officer on March 27, 2009. On March 19, 2009, Dr. Fung, resigned from his position as Vice President and Chief Scientific Officer to pursue another career opportunity. On September 29, 2009, Dr. Fung rejoined Vermillion as an independent consultant, and on February 1, 2010, he was reappointed as Vermillion's Senior Vice President and Chief Scientific Officer. On February 1, 2010, Mr. Tran was appointed as Vermillion's Interim Vice President and Chief Accounting Officer. On April 19, 2010, Ms. Gardiner was appointed as Vermillion's Vice President and Chief Financial Officer.

The following is a business experience summary for each executive officer, who was employed by Vermillion during the year ended December 31, 2009:

*Gail S. Page's* business experience is summarized under "Directors of the Registrant".

*Eric T. Fung, M.D., Ph.D.* served as Vermillion's Vice President and Chief Scientific Officer from June 2006 until his resignation on March 19, 2009 and rejoined Vermillion on September 29, 2009 as an independent consultant. In connection with Vermillion's emergence from bankruptcy, Dr. Fung was reappointed as Senior Vice President and Chief Scientific Officer of Vermillion on February 1, 2010. Dr. Fung joined Vermillion in May 2000 as a lead scientist in the newly formed Biomarker Discovery Centers. From March 2009 to September 2009, Dr. Fung served as Director of Clinical Research at Roche Molecular Systems. Prior to joining Vermillion, Dr. Fung was a Howard Hughes sponsored researcher at Stanford University. Dr. Fung received his B.S. in Biology and graduated with honors from the California Institute of Technology, and his M.D. and Ph.D. from the Johns Hopkins University School of Medicine. Dr. Fung also has anatomic pathology training from Stanford Medical School, and currently holds an Adjunct Assistant Professor position in the Department of Pathology at the Johns Hopkins University School of Medicine.



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*Simon C. Shorter, Ph.D.* joined Vermillion in September 2004 and served as its Vice President, Corporate Business Development until his resignation on March 27, 2009. Prior to joining Vermillion, Dr. Shorter held a series of management positions in Research and Development, Sales and Marketing, and Business Development at Adeza Biomedical Corporation. Over a 12-year period, Dr. Shorter has developed an in-depth, practical understanding of the clinical laboratory and in vitro diagnostics (“IVD”) market segments. Dr. Shorter received his B.S. in Biological Sciences from The King’s College, University of London, United Kingdom, and M.S. in Applied Molecular Biology and Biotechnology from University College, University of London, United Kingdom. At the University of Oxford, United Kingdom, Dr. Shorter received his Ph.D. in Cellular Biology and Immunology of Human Development followed by a post doctoral research fellowship at the University of California, San Francisco in the immunological basis for the survival of fetus during human placental development.

*Qun Zhou* joined Vermillion in February 2007, served as Controller until her resignation on March 27, 2009, and served as the interim Chief Financial Officer from November 1, 2007 to August 25, 2008 and from November 25, 2008 until her resignation on March 27, 2009. Prior to joining Vermillion, 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, most recently as Business Unit Controller, with Philips Medical Systems, a global leader in the medical device and diagnostic industry. Ms. Zhou has over ten years of accounting and corporate finance experience, and received her M.B.A. from Boston College.

A summary of the business experience of each executive officer who was appointed subsequent to December 31, 2009 is set forth below:

*John H. Tran* was appointed to serve as Interim Vice President of Finance and Chief Accounting Officer of Vermillion on February 1, 2010. Prior to joining the Company, Mr. Tran served as Vice President, Finance and Chief Accounting Officer at Anesiva, Inc., a late-stage biopharmaceutical company in the development and commercialization of novel pharmaceutical products for pain management, from May 2008 to January 2010. From September 2004 to April 2008, Mr. Tran served in various roles in finance and was the Director of Finance at Kyphon Inc., a medical device company. Mr. Tran became part of Medtronic, Inc. through its 2007 acquisition of Kyphon Inc. From January 2000 to September 2004, Mr. Tran served as an Audit Manager in the audit and assurance practice with PricewaterhouseCoopers LLP. Mr. Tran received his B.A. in Biology and Business Economics with Accounting Emphasis from the University of California at Santa Barbara. Mr. Tran is also a certified public accountant in the State of California.

*Sandra A. Gardiner* was appointed to serve as Vice President and Chief Financial Officer of Vermillion on April 19, 2010. Prior to joining the Company, she has served as CFO since March 2009 at Bend Research Inc., a company that specializes in the definition, advancement, development and commercialization of pharmaceutical and health science technologies. In April 2009, she was elected to Bend Research Inc.’s board of directors. From 2004 through 2008, Ms. Gardiner served as CFO and Corporate Secretary of Lipid Sciences, Inc., responsible for all decision-making authority for all financial and administrative functions for this development-stage biotechnology company, which is engaged in research and development of products and processes to treat cardiovascular disease and viral infections. She also held positions at Cardima, Inc. and Comac and began her biotechnology career in 1988 with Advanced Cardiovascular Systems, formerly a division of Guidant, holding several positions in the Internal Audit, Accounting and Finance departments. Ms. Gardiner received her Bachelor of Science in Managerial Economics from the University of California at Davis.

### ***Section 16(a) Beneficial Ownership Reporting Compliance***

Section 16(a) of the Exchange Act requires Vermillion’s executive officers and directors, and persons who own more than 10% of a registered class of Vermillion’s equity securities, to file reports of ownership and changes in ownership with the SEC and with any national securities exchange on which such securities are traded or quoted. Executive officers, directors and such stockholders are required by SEC regulation to furnish Vermillion with copies of all Section 16(a) forms they file. As a practical matter, Vermillion assists its directors and officers by completing and filing Section 16 reports on their behalf. Based solely on a review of the copies of such reports furnished to Vermillion, and the written representations of its directors and executive officers, Vermillion believes that its directors and executive officers, and persons who own more than 10% of a registered class of Vermillion’s equity securities, complied with all applicable filing requirements for the year ended December 31, 2009.



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### *Code of Ethics*

The Company has adopted the Vermillion Code of Ethics that applies to all directors, officers and employees of the Company. Any waivers of or amendments to the Vermillion, Inc. Code of Ethics will be disclosed on the Investor Relations section of Vermillion's website, [www.vermillion.com](http://www.vermillion.com). Additionally, the Vermillion, Inc. Code of Ethics may be obtained free of charge through the Investor Relations section of Vermillion's website, or by submitting a written request for a paper copy to the following address:

Investor Relations  
Vermillion, Inc.  
47350 Fremont Blvd.  
Fremont, California 94538

### *Stockholder Procedures to Nominate Directors*

There were no material changes to stockholder procedures for the nomination of directors during the year ended December 31, 2009.

### *Audit Committee*

Vermillion has a separately designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. Prior to the Company's Bankruptcy Filing in March, 2009, the Audit Committee consisted of directors John F. Hamilton and James S. Burns. Due to the Bankruptcy Filing, the Company's Audit Committee was disbanded. Following the Company's emergence from Bankruptcy, on March 11, 2010, the Board of Directors appointed Peter S. Roddy, William C. Wallen, Ph.D. and Carl Severinghaus to the Audit Committee. Mr. Roddy was appointed to serve as the Chairman of Vermillion's Audit Committee. The Board determined that each of the three members of the Audit Committee was an "independent director" as that term is defined by the applicable listing standards of the NASDAQ Capital Market, and had sufficient knowledge in financial and auditing matters. The Board also believed that Mr. Roddy was an "audit committee financial expert" as defined under Item 407(d)(5)(ii) of Regulation S-K.

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### Item 11. Executive Compensation

Vermillion had a 1 for 10 reverse stock split of Vermillion's common stock effective at the close of business on March 3, 2008. Accordingly, all share and per share amounts were adjusted to reflect the impact of the 1 for 10 reverse stock split in this Annual Report on Form 10-K.

#### *Compensation Committee Report*

*The information provided under the heading "Compensation Committee Report" shall not be deemed to be "soliciting material" or "filed" or incorporated by reference in future filings with the SEC, or subject to the liabilities of Section 18 of the Exchange Act, except to the extent that it is specifically incorporated by reference into a document filed under the Securities Act or the Exchange Act*

Vermillion, Inc.'s ("Vermillion"; Vermillion and its wholly-owned subsidiaries are collectively referred to as the "Company") executive compensation program for its named executive officers ("NEOs") is administered by the Compensation Committee of the Board of Directors. The Compensation Committee has reviewed the Compensation Discussion and Analysis and discussed that analysis with management. Based on its review and discussions with management, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Annual Report on Form 10-K.

This report is provided by the following independent directors of the Compensation Committee:

Carl Severinghaus, Chairman  
William C. Wallen, Ph.D.

#### *Compensation Committee Interlocks and Insider Participation*

None of the members of Vermillion's Compensation Committee during the year ended December 31, 2009 was an officer or employee of Vermillion, was formerly an officer of Vermillion or had any relationship with Vermillion requiring disclosure under Item 13, except that the Company has entered into indemnification agreements with each of its directors, which require the Company to indemnify its directors to the fullest extent permitted by law in the State of Delaware.

None of Vermillion's 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 Vermillion's Board of Directors or Compensation Committee.

#### *Compensation Discussion and Analysis*

##### *Named Executive Officers*

The NEOs for the year ended December 31, 2009, were as follows:

<u>Name</u>	<u>Positions and Offices</u>
Gail S. Page	Executive Chair of the Board; President and Chief Executive Officer
Eric T. Fung, M.D., Ph.D.	Vice President and Chief Scientific Officer
Simon C. Shorter, Ph.D.	Vice President, Corporate Business Development

Although Ms. Zhou is not NEOs, she served as the principal financial officers during the year ended December 31, 2009.

#### *Compensation Philosophy and Objectives*

The goal of the Company's compensation program for its NEOs is the same for the overall Company, which is 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; rewards and recognizes superior performance; attracts highly skilled, experienced and capable employees; and is fair and fiscally responsible.

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

Most of the Company's compensation elements simultaneously fulfill one or more performance, alignment or retention objectives.

### *Method for Determining Compensation Amounts*

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

In making compensation decisions, the Compensation Committee considers the following:

- Company Performance. The Compensation Committee reviews the Company's operational performance and the achievement of its pre-established goals for the fiscal year.
- Executives' Performance. The Compensation Committee evaluates an executive's performance during the year including leadership qualities, responsibilities, and contribution to the Company's performance. The relative importance of each factor varies among the Company's NEOs depending on their positions and the particular operations or functions for which they are responsible.
- Compensation Consultant and Survey. For the year ended December 31, 2009, the Compensation Committee relied on general executive compensation information received from the Company's Human Resource Consultant. The Compensation Committee uses formal and informal compensation surveys to benchmark the compensation of the Company's NEOs against the compensation levels for executive officers of companies of similar size and market segments.
- Recommendations of the Chief Executive Officer. The Compensation Committee considers the recommendations of the Company's Chief Executive Officer, who assesses the performance of the other NEOs and adjustments to their base salary and other elements of compensation.

### *Compensation Components*

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

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

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

*Base Salaries.* Overall average base salaries are targeted at the 50th percentile of the companies with which the Company competes for labor talent. The Compensation Committee normally adjusts the base salaries for the NEOs in April of each calendar year. In 2009, due to the Bankruptcy Filing and the drastic cost-cutting measures that the Bankruptcy Filing entailed, base salaries were reduced and/or eliminated and NEOs were terminated and retained as consultants to the extent absolutely critical.

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

- At the beginning of each fiscal year, the Compensation Committee establishes performance measures and goals, which typically include milestones and targets. The Compensation Committee typically assigns a weight value based upon the overall goals in order to ensure a balanced approach to the various factors applied to determining bonus amounts.
- Also at the beginning of each fiscal year, the Compensation Committee establishes payout targets for each NEO. The Compensation Committee generally establishes the individual payout targets for each NEO based on the executive's position, level of responsibility and a review of the compensation information of other companies. Under the terms of the Company's Chief Executive Officer's employment agreement, Ms. Page is eligible for a discretionary bonus of up to 50% of her annual base salary, based on meeting objectives to be established by the Compensation Committee.
- After the close of each fiscal year, the Compensation Committee assesses the performance of each NEO against the pre-established metrics for the Company. Each NEO receives a bonus based on his or her individual payout target and the Company's performance relative to the specific performance goal.

The Company's incentive bonuses are measured against corporate goals which generally include Company targets, product development and management team building. In 2009, however, given that the Company had very little cash, and significant debt and expenses, no incentive bonuses were contemplated. For the year ended December 31, 2009, the Company did not pay any bonuses to the NEOs due to the Bankruptcy Filing.

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

Stock option grants are based on individual performance and contributions toward the achievement of the Company's business objectives, as well as overall Company performance. The number of underlying shares that may be purchased pursuant to the stock options granted to each NEO varies based on the executive's position and responsibilities. In addition, amounts are determined by comparing the level of equity-based compensation that is awarded to executives of competing companies.

*Employee Benefits Programs .* The Company's employee benefits program primarily consists of two components: (1) severance and change in control arrangements and (2) perquisites and other benefits.

*Severance and Change in Control Arrangements .* The Compensation Committee believes that executive officers have a greater risk of job loss or modification as a result of a change in control transaction than other employees. Accordingly, Vermillion has terms for change in control in the employment agreement with the Chief Executive Officer, and change in control agreements with its other executive officers under which they will receive certain payments and benefits upon qualifying terminations that follow a change in control. The principal purpose of the change in control agreements is to provide executive officers with appropriate incentives to remain with the Company before, during and after any change in control transaction by providing the executive officers with security in the event their employment is terminated or materially changed following a change in control. By providing this type of security, the change in control agreements help ensure that the executive officers support any potential change in control transaction that may be in the best interests of Vermillion's stockholders, even while the transaction may create uncertainty in the executive officer's personal employment situation. The Compensation Committee believes that the payment of salary and benefits for one year for the chief executive officer, nine months for other NEOs and six months for other executive officers is reasonable and appropriate to achieve the desired objectives of the agreements.

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Perquisites and Other Benefits . The Company's NEOs participate in its standard employee benefits programs including medical, dental, life, short-term and long-term disability insurance, and flexible spending accounts. In addition, the Company offers a health expense reimbursement program to its NEOs, and its Chief Executive Officer receives a monthly cash car allowance.

### *Interrelationship of Compensation Elements*

The Compensation Committee does not adhere to rigid formulas when determining the amount and mix of compensation elements. Compensation elements for each executive are reviewed in a manner that optimizes the executive's contribution to the Company and reflects an evaluation of the compensation paid by the Company's competitors. 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 its 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.

### *Tax and Accounting Considerations*

Section 162(m) of the Internal Revenue Code (the "Code") disallows a tax deduction to publicly-held companies for certain compensation in excess of \$1,000,000 paid to the corporation's chief executive officer and three other officers (other than the chief financial officer) whose compensation is required to be reported to the Company's stockholders pursuant to the Securities Exchange Act of 1934. Certain performance-based compensation approved by Vermillion's stockholders, including option grants under the 2000 Stock Plan, generally is not subject to the deduction limit. It is the Compensation Committee's policy to maximize the effectiveness of the Company's executive compensation in this regard.

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

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### *Named Executive Officer Compensation*

**President and Chief Executive Officer .** On December 31, 2005, Vermillion entered into an employment agreement with Ms. Page as its President and Chief Executive Officer. Under the terms of her employment agreement, Ms. Page had an initial base salary of \$350,000, as adjusted by the Board of Directors from time to time; was eligible for a bonus of up to 50.0% of her base salary that is based on the achievement of reasonable performance-related goals as determined by the Board of Directors; had an initial option grant to purchase 40,000 shares of Vermillion's common stock at \$9.00 per share; and had an annual car allowance of \$10,000. Ms. Page's employment with Vermillion was for an unspecified duration and constituted "at-will" employment. At the option either of Vermillion or Ms. Page, with or without notice, the employment relationship may be terminated at any time, with or without cause (as defined in the employment agreement) or for any or no cause. If Vermillion terminates Ms. Page's employment for reasons other than for cause or Ms. Page terminates her employment for good reason (as defined in the employment agreement), Ms. Page upon executing a release of claims in favor of Vermillion's common stock at \$9.00 per share; and had an annual car allowance of \$10,000. Ms. Page's employment with Vermillion is for an unspecified duration and constitutes "at-will" employment. At the option either of Vermillion or Ms. Page, with or without notice, the employment relationship may be terminated at any time, with or without cause (as defined in the employment agreement) or for any or no cause. If Vermillion terminates Ms. Page's employment for reasons other than for cause, or if Ms. Page terminates her employment for good reason (as defined in the employment agreement), Ms. Page, upon executing a release of claims in favor of Vermillion, will be entitled to receive (i) continued payment of base salary for a period of 12 months, (ii) immediate vesting of 24-months of any options previously granted by Vermillion in addition to a 24-month period after termination to exercise any or all of her vested options to purchase Vermillion's common stock; and (iii) continued health and dental benefits paid by Vermillion until the earlier of 12-months after termination or the time that Ms. Page obtains employment with reasonably comparable or better health and dental benefits. Additionally, if Ms. Page's employment is terminated by Vermillion for reasons other than for cause or by her for good reason with the 12-month period following a change in control (as defined in the employment agreement), Ms. Page will receive (i) continued payment of base salary for a period of 12 months, (ii) immediate 100% vesting of any then unvested options previously granted by Vermillion in addition to a period after termination at the discretion of Vermillion to exercise any or all of her vested options to purchase Vermillion's common stock; and (iii) continued health and dental benefits paid by Vermillion until the earlier of 12 months after termination or the time that Ms. Page obtains employment with reasonably comparable or better health and dental benefits. Ms. Page's employment agreement also contains a "nonsolicitation" clause, which provides that, in the event that Ms. Page's employment is terminated, she is prohibited from directly or indirectly soliciting or encouraging any employee or contractor of the Company or its affiliates to terminate employment with or cease providing services to the Company or its affiliates; and prohibited from soliciting or interfering with any person engaged by the Company as a collaborator, partner, licensor, licensee, vendor, supplier, customer or client to the Company's detriment. On November 18, 2008, Ms. Page's employment agreement was amended and restated to reflect her current annual base salary of \$364,000 and to comply with (or be exempted from) the applicable requirements of Section 409A of the Internal Revenue Code of 1986, as amended. As a result of the bankruptcy, severance amounts became due to Ms. Page, who was asked to resign from the Company on March 27, 2009. After she was asked to resign, Ms. Page worked as a consultant for Vermillion from March 2009 to January 2010. Pursuant to the terms of the consulting agreement between Vermillion and Ms. Page, she was paid \$230 per hour for her services as a consultant.

**Other Named Executive Officers .** Employment of the other NEOs other than Ms. Page was for an unspecified duration and constituted "at-will" employment, allowed the NEO by notifying the Company or the Company with or without notice to terminate the NEO's employment with the Company at any time and for any reason whatsoever. Accordingly, upon a termination, the NEOs other than Ms. Page would receive their accrued salary, earned bonus, unreimbursed expenses and other entitlements to the date of termination, unless the Compensation Committee determined to provide additional severance payments. In addition to their initial base salaries and initial option grant to purchase shares of Vermillion's common stock, the NEOs were eligible for a bonus as a percentage of their base salary based on the achievement of reasonable performance-related goals as determined by the Board of Directors.

On August 26, 2008, Vermillion entered into separate employee severance agreements with Dr. Fung and Dr. Shorter. Each severance agreement provides certain severance benefits to the employee in the event that Vermillion terminates the employee's employment without cause or the employee resigns from his employment for good reason. The severance benefits provided for in the agreements with Dr. Fung and Dr. Shorter include (i) continued payment of the employee's base salary, as then in effect, payable over a period of nine months following the date of termination, (ii) immediate, accelerated vesting of 24 months of any options previously granted by Vermillion to the employee and (iii) continuation of health and dental benefits through COBRA premiums paid by Vermillion directly to the COBRA administrator for a period of nine months following the date of termination. Each severance agreement also provides that, in the event the employee's employment is terminated by Vermillion for reasons other than cause or by the employee for good reason within the 12-month period following a change in control, then, in addition to the severance benefits described above, any then-unvested shares under Vermillion's stock option plans then held by the employee will fully vest immediately upon the date of such termination. Payment of the severance benefits under these agreements will be conditioned on the employee's continued compliance with the provisions of each employee's proprietary information and inventions agreement and will be delayed as required by Section 409A of the Internal Revenue Code of 1986, as amended.

As a result of the bankruptcy, severance amounts became due to Dr. Shorter, who was asked to resign from the Company on March 27, 2009. No severance amounts became due to Dr. Fung, who resigned from the Company on March 19, 2009. After his resignation, Dr. Fung worked as a consultant for Vermillion from September 2009 to January 2010. Based on the consulting agreement between Vermillion and Dr. Fung, he was paid \$137.50 per hour for his services as a consultant.

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The compensation earned by the NEOs for the years ended December 31, 2009 and 2008 was as follows:

Name and Principal Position	Year	Salary	Bonus	Stock Award	Option Awards (6)	Non-Equity Incentive Plan Compensation (7)	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
Gail S. Page	2009	\$ 87,323	\$—	\$—	\$211,247	\$—	\$—	\$ 611,520(1)	\$910,090
Director, President and Chief Executive Officer (Principal Executive Officer)	2008	364,550	—	—	207,109	—	—	29,278(2)	600,937
Eric T. Fung, M.D., Ph.D.	2009	49,767	—	—	190,194	—	—	79,082(3)	319,043
Vice President and Chief Scientific Officer	2008	220,550	—	—	91,165	—	—	1,203(4)	312,918
Simon C. Shorter, Ph.D.	2009	48,990	—	—	9,246	—	—	179,922(5)	238,157
Vice President, Corporate Business Development	2008	204,550	—	—	49,251	—	—	1,772(4)	255,573

- (1) Amount represents Ms. Page's accrued severance of \$365,753 and consulting income of \$189,856. Due to the Bankruptcy Filing, Ms. Page was not paid for her service as Executive Chair of the Board of Directors.
- (2) Amount represents Ms. Page's health expense reimbursement program of \$538 and car allowance of \$28,740.
- (3) Amount represents Dr. Fung's consulting income of \$45,038 and PTO payout of \$34,044.
- (4) Amount represents health expense reimbursement program.
- (5) Amount represents Dr. Shorter's health care reimbursement payment of \$1,098, PTO payout of \$25,087, and accrued severance of \$153,737.
- (6) For awards of option, the aggregate grant date fair value is computed in accordance with FASB ASC Topic 718 (column (f)). See Stock-Based Compensation section of Note 13, Employee Benefit Plans, of the audited consolidated financial statements and the accompanying notes in Part II Item 8, "Financial Statements and Supplementary Data", of this Annual Report on Form 10-K
- (7) Amount represents annual performance bonus.



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For the years ended December 31, 2009 and 2008, the NEOs did not exercise any stock options. The outstanding equity awards held by the NEOs as of December 31, 2009, were as follows:

Name	Option Awards					Stock Awards			
	Number of Securities Underlying Unexercised	Number of Securities Underlying Unexercised	Equity Incentive Plan Awards: Number of Securities Underlying	Option Exercise Price	Option Expiration Date (1)	Number of Shares or Units of Stock that have not Vested	Market Value of Shares or Units of Stock that have not Vested	Unearned Shares, Units or Other Rights that have not Vested	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights that have not Vested
Gail S. Page	44,270	80,730	—	\$ 2.30	7/17/2018	—	—	—	—
	23,998	12,001	—	14.70	4/25/2017	—	—	—	—
	21,874	3,126	—	12.00	6/6/2016	—	—	—	—
	39,999	—	—	9.00	12/19/2015	—	—	—	—
	12,500	—	—	21.90	8/4/2015	—	—	—	—
	9,999	—	—	29.60	2/8/2015	—	—	—	—
	24,998	—	—	92.70	1/7/2014	—	—	—	—
Eric T. Fung, M.D., Ph.D.	14,166	25,834	—	2.30	7/17/2018	—	—	—	—
	15,998	8,001	—	14.70	4/25/2017	—	—	—	—
	6,562	938	—	12.00	6/6/2016	—	—	—	—
	999	—	—	9.00	12/19/2015	—	—	—	—
	2,000	—	—	21.90	8/4/2015	—	—	—	—
	2,800	199	—	18.00	4/5/2015	—	—	—	—
	999	—	—	37.00	9/15/2014	—	—	—	—
	2,499	—	—	74.70	6/3/2014	—	—	—	—
	1,999	—	—	86.40	4/1/2014	—	—	—	—
	1,000	—	—	96.00	6/5/2013	—	—	—	—
	1,500	—	—	43.50	2/13/2013	—	—	—	—
	500	—	—	45.30	6/6/2012	—	—	—	—
	499	—	—	56.00	11/8/2011	—	—	—	—
	599	—	—	63.80	6/7/2011	—	—	—	—

- (1) Stock options vest ratably on a monthly basis either over a 24 month, 48 month or 60 month period, commencing on the date of the grant. Each option expires 10 years after the date of the grant or, in the case of an incentive stock option, such shorter term as may be provided in the applicable agreement.

### Director Compensation

Outside directors (i.e., non-employee directors) are compensated for their service as (1) a member of the Board of Directors, (2) a member of any committee of the Board of Directors, (3) a chair of any committee of the Board of Directors and (4) the Executive Chairman of the Board of Directors. Periodically, the Compensation Committee reviews and determines the adequacy of the current compensation program for outside directors, and based upon the results of their analysis, the Compensation Committee will make recommendations in regards to the compensation program for outside directors to the Board of Directors. Effective June 11, 2008, the compensation program for outside directors, as approved by the Board of Directors, was as follows:

- each new outside directors receive an option grant to purchase 25,000 shares of Vermillion's common stock, which vests monthly over a 24-month period, upon attendance of their first Board of Directors' meeting;
- continuing outside directors receive an annual option grant to purchase 18,000 shares of Vermillion's common stock, which vests monthly over a 12-month period, on the date of the Annual Meeting of Shareholders;
- the Executive Chairman of the Board of Directors receives an annual option grant to purchase 10,000 shares of Vermillion's common stock, which vests monthly over a 12-month period, on the date of the Annual Meeting of Shareholders;
- the chairperson of the Audit Committee receives an annual option grant to purchase 5,000 shares of Vermillion's common stock, which vests over a 12-month period, on the date of the Annual Meeting of Shareholders;
- the chairperson for each the Compensation Committee, and the Nominating and Governance Committee receives an annual option grant to purchase 2,500 shares of Vermillion's common stock, which vests over a 12-month period, on the date of the Annual Meeting of Shareholders; and
- continuing outside directors receive, at his or her choice, either: (1) payment in the amount of \$20,000 with payments being made on

a quarterly basis on the last day of each calendar quarter, as long as such person continues to act as a director, or (2) an additional option to purchase 12,500 shares of Vermillion's common stock.

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The 2008 compensation program was not followed during the Company's Bankruptcy Filing in 2009. After the resignation of four directors in March, 2009, the Board was composed of Ms. Page, Mr. Burns and Mr. Hamilton. None of them were compensated for cash, nor were they granted any option awards, except for Mr. Hamilton, who was paid \$5,000 for the year of 2009. In recognition of their services during the Bankruptcy Filing, the Bankruptcy Court approved a Management Incentive Plan on April 14, 2010. Under the Management Incentive Plan, Vermillion is directed to distribute an aggregate of \$5,000,000 in cash and 302,541 shares of restricted stock in Incentive Plan to these three directors. The total Management Incentive Plan cash payments and restricted stock awards are to be allocated to Ms. Page, Mr. Burns and Mr. Hamilton on a 60%-20%-20% basis, respectively. Such Management Incentive Plan compensation is not attributable to the three directors as compensation for the year of 2009 because the Company did not receive approval to make the awards (and did not in fact make any cash or restricted stock awards) until April 2010. The restricted stock awards do, however, provide for retroactive vesting credit for 1/24th of the total award on each monthly anniversary of the vesting commencement date (June 22, 2009). The Company will report all Management Incentive Plan compensation in relevant SEC filings for the year 2010.

The compensation earned by Vermillion's outside directors for the year ended December 31, 2009 was as follows:

<u>Name</u>	<u>Fees Earned or Paid in Cash (1)</u>	<u>Stock Awards</u>	<u>Option Awards (2)</u>	<u>Non-Equity Incentive Plan Compensation</u>	<u>Nonqualified Deferred Compensation Earnings</u>	<u>All Other Compensation</u>	<u>Total</u>
James S. Burns	\$ —	\$ —	\$ 12,100	\$ —	\$ —	\$ —	\$12,100
Kenneth L. Conway	—	—	4,260	—	—	—	4,260
Rajen K. Dalal	—	—	4,260	—	—	—	4,260
John F. Hamilton	5,000	—	19,853	—	—	—	24,853
James L. Rathmann	—	—	5,410	—	—	—	5,410
John A. Young	—	—	3,877	—	—	—	3,877
<b>Total</b>	<b>\$ 5,000</b>	<b>\$ —</b>	<b>\$ 49,760</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$54,760</b>

- (1) All outside directors, except John F. Hamilton, elected to receive their fees for the year ended December 31, 2009, in the form of options to purchase Vermillion's common stock in lieu of cash.
- (2) For awards of option, the aggregate grant date fair value is computed in accordance with FASB ASC Topic 718 (column (f)). See Stock-Based Compensation section of Note 13, Employee Benefit Plans, of the audited consolidated financial statements and the accompanying notes in Part II Item 8, "Financial Statements and Supplementary Data", of this Annual Report on Form 10-K

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### Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The following table sets forth certain information known to Vermillion, Inc. (“Vermillion”) regarding beneficial ownership of its common stock on a post 1-for-10 reverse split basis as of December 31, 2009, by (i) each person known by Vermillion to be the beneficial owner of more than five percent of the outstanding shares of its common stock as of December 31, 2009, (ii) each director of Vermillion as of December 31, 2009, (iii) each named executive officer of Vermillion as of December 31, 2009, and (iv) the directors and executive officers of Vermillion as of December 31, 2009 as a group. All shares are subject to the named person’s sole voting and investment power unless otherwise indicated.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission (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 December 31, 2009, and, in any event, solely for purposes of calculating that person’s percentage ownership of Vermillion’s common stock (and not for purposes of calculating the percentage ownership of any other person).

The number of shares of Vermillion’s common stock deemed outstanding and used in the denominator for determining percentage ownership for each person equals (i) 7,918,705 shares of common stock outstanding as of December 31, 2009, 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, warrants and convertible securities held by other persons) which may be exercised within 60 days of December 31, 2009.

Name and Address of Beneficial Owner	Number of Common Stock	Percentage of Outstanding
	Shares Beneficially Owned	Shares Beneficially Owned
<b>Beneficial Owners more than 5%:</b>		
Black Horse Capital LP <sup>(1)</sup> 338 S. Sharon Amity Rd., #202 Charlotte NC 28211.	602,819	7.38
Falcon Technology Partners, L.P. <sup>(1)(2)</sup> 102 Atlee Circle Berwyn, PA 19312	430,686	5.44
Phronesis Partners, L.P. <sup>(1)(3)</sup> 180 E. Broad Street #1704 Columbus, OH 43215	662,943	8.37
Quest Diagnostics Incorporated <sup>(1)(4)</sup> 1290 Wall Street West Lyndhurst, NJ 07071	1,271,071	15.26
<b>Directors and Named Executive Officers:</b>		
James S. Burns <sup>(5)</sup>	40,400	*
John F. Hamilton <sup>(6)</sup>	25,833	*
Eric T. Fung, M.D., Ph.D. <sup>(7)</sup>	57,456	*
Gail S. Page <sup>(8)</sup>	188,768	*
Qun Zhou <sup>(9)</sup>	10,510	*
<b>All Directors and Executive Officers as a Group (5 persons)</b>	<b>322,967</b>	<b>3.92</b>

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\* Less than 1%.

- (1) Based on filings by such owner with the SEC.
- (2) Includes 250,000 shares issuable upon the conversion of Notes which are convertible within 60 days of December 31, 2009. Mr. Rathmann, the Executive Chairman of Vermillion's Board of Directors from December 2005 to March 25, 2009, 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) 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.
- (4) Includes 410,476 shares issuable pursuant to warrants exercisable within 60 days of December 31, 2009. Quest Diagnostics Incorporated is a publicly-held company. Quest Diagnostics Incorporated's executive officers are responsible for running the business of the company and thus, exercise voting and investment control over the shares and warrants are owned by Quest Diagnostics Incorporated.
- (5) Includes 40,400 shares issuable upon exercise of options exercisable within 60 days of December 31, 2009.
- (6) Includes 25,833 shares issuable upon exercise of options exercisable within 60 days of December 31, 2009.
- (7) Includes 55,196 shares issuable upon exercise of options exercisable within 60 days of December 31, 2009.
- (8) Includes 185,386 shares issuable upon exercise of options exercisable within 60 days of December 31, 2009.
- (9) Includes 10,260 shares issuable upon exercise of options exercisable within 60 days of December 31, 2009.

**Item 13. Certain Relationships and Related Transactions, and Director Independence**

For the years ended December 31, 2009 and 2008, Vermillion, Inc. (“Vermillion”) and subsidiaries’ (collectively referred to as the “Company”) did not engage in nor does the Company currently proposes 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 Vermillion’s 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 in Part III Item 11, “Executive Compensation”, under the section entitled “Compensation Discussion and Analysis - Named Executive Officer Compensation” of this Annual Report on Form 10-K, and (2) the transactions described below.

***Relationship with Quest Diagnostics Incorporated******Strategic Alliance Agreement***

Quest Diagnostics Incorporated (“Quest”) is a significant stockholder of Vermillion. On July 22, 2005, Vermillion and Quest entered into a strategic alliance agreement (the “Strategic Alliance Agreement”) to develop and commercialize up to three diagnostic tests from Vermillion’s product pipeline (the “Strategic Alliance”). The Strategic Alliance Agreement was set to expire on the earlier of (i) the three-year anniversary of the agreement, which was July 22, 2008, and (ii) the date on which Quest commercializes three diagnostic tests. On July 21, 2008, Vermillion and Quest amended the Strategic Alliance Agreement to extend the term of the agreement to end on the earlier of (i) September 1, 2008 and (ii) the date on which Quest commercializes the three diagnostic tests. On October 24, 2008, Vermillion and Quest amended the Strategic Alliance Agreement to extend the term of the agreement to end on the earlier of (i) September 1, 2009 and (ii) the date on which Quest makes its third development election. On October 7, 2009, Vermillion and Quest amended the Strategic Alliance Agreement (the Strategic Alliance Agreement and the July 21, 2008, October 24, 2008 and October 7, 2009, amendments are collectively referred to as the “Amended Strategic Alliance Agreement”) to extend the term of the agreement to end on the earlier of (i) October 7, 2012 and (ii) the date on which Quest makes its third development election. On October 7, 2009, Vermillion and Quest amended the strategic alliance agreement to extend the term of the agreement to end on the earlier of (i) October 7, 2012 and (ii) the date on which Quest commercializes the three diagnostic tests. To date, Quest has selected only two diagnostic tests, which are the peripheral artery disease (“PAD”) blood test (“VASCLIR<sup>™</sup>”) and the OVA1<sup>™</sup> ovarian tumor triage test (the “OVA1 Test”), to commercialize. Pursuant to the Strategic Alliance 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 diagnostic services, and Vermillion will pay royalties to Quest based on Vermillion’s revenue from applicable diagnostic products. To date, no such royalties have been earned by either party. The Company has also agreed to enter into a supply agreement with Quest under which the Company will sell instruments and consumable supplies to Quest (to be used for performing diagnostic services), which the Company will purchase from Bio-Rad Laboratories, Inc. (“Bio-Rad”) under the manufacture and supply agreement.

Under this Strategic Alliance Agreement, Quest has the exclusive right to perform up to three analyte specific reagent (“ASR”) laboratory tests. Upon obtaining clearance from the United States Food and Drug Administration (“FDA”), Vermillion will begin manufacturing in vitro diagnostic (“IVD”) test kits that Quest will purchase. Quest will have the exclusive right for up to five years, following commercialization of each respective diagnostic test kit (the “Exclusive Period”), to perform such ASR laboratory tests and market IVD test kits purchased from Vermillion in the United States, Mexico, the United Kingdom and other countries where Quest operates a clinical laboratory, and non-exclusive rights to commercialize these diagnostic test kits in the rest of the world, subject to a royalty payable to Vermillion.

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

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### *Credit Agreement*

In connection with the Strategic Alliance Agreement, Quest agreed to provide Vermillion with a \$10,000,000 secured line of credit, which is collateralized by certain of Vermillion's intellectual property and may only be used for payment of 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. This secured line of credit also contains provisions for Quest to forgive portions of the amounts borrowed that corresponds to Vermillion's achievement of certain milestones related to development, regulatory approval and commercialization of certain diagnostic tests. The amounts to be forgiven and the corresponding milestones that Vermillion must achieve are (i) \$1,000,000 for each application that allows a licensed laboratory test to be commercialized with a maximum of three applications for \$3,000,000; (ii) \$3,000,000 for the earlier of FDA clearance of the first diagnostic test kit or commercialization of the first diagnostic test kit; and (iii) \$2,000,000 upon each FDA clearance of up to two subsequent diagnostic test kits but no later than the first commercialization of each such diagnostic test kit, with a maximum forgiveness of \$4,000,000 for two diagnostic test kits. In the event Vermillion fails to achieve these certain milestones, the principal amount outstanding related to each milestone not achieved and any unpaid interest of this secured line of credit will become due and payable on October 7, 2012. 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. The outstanding principal balance of this secured line of credit was \$10,000,000 at December 31, 2008 and 2007. Accrued interest payable related this secured line of credit was \$35,000 and \$67,000 as of December 31, 2008 and 2007, respectively. Interest expense related to this secured line of credit was \$560,000 and \$790,000 for the years ended December 31, 2008 and 2007, respectively. From the inception of the Strategic Alliance through December 31, 2008, Vermillion has 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. Under the Amended Strategic Alliance Agreement, the term and the maturity of the pre-petition \$10,000,000 secured line of credit agreement with Quest were extended through October 7, 2012. Quest also agreed to honor the milestone provisions in the secured line of credit agreement providing for a reduction in the principal amount of the loan upon the achievement of certain milestones (including a reduction of \$3,000,000 in connection with the recent FDA clearance of the OVA1 Test) once accrued but unpaid interest on the secured line of credit is paid in full.

In connection with the Company's Chapter 11 bankruptcy filings, on October 16, 2009, the Bankruptcy Court gave final approval for Vermillion to enter into a Debtor-In-Possession Credit and Security Agreement (the "Loan Agreement") with Quest and to assume under Section 365 of the United States Bankruptcy Code (the "Bankruptcy Code") the Amended Strategic Alliance Agreement. In connection with the assumption of the Amended Strategic Alliance Agreement, Vermillion also assumed certain other agreements with Quest related to the Amended Strategic Alliance Agreement, including the pre-petition warrants for the purchase of Vermillion's common stock. Under the Loan Agreement, Quest has agreed to provide a debtor-in-possession loan to Vermillion of up to \$1,500,000 (the "DIP Financing"). The DIP Financing is secured by a first lien on substantially all of Vermillion's assets and bears interest at the prime rate plus 0.5% per annum. The DIP Financing matures at the effective date of a plan of reorganization or February 28, 2010, if earlier. Under the Loan Agreement, Vermillion is bound by customary affirmative and negative covenants, including covenants with respect to the use of the funds provided by Quest, and customary events of default—including non-payment, breach of covenants and material breach of the Amended Strategic Alliance Agreement—that may result in acceleration of outstanding amounts, if any, under the Loan Agreement. The Company received \$400,000 under this agreement on October 27, 2009. On January 22, 2010, the Company repaid the \$400,000 and interest of \$4,000.



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### *Amendments to 2005 Stock Purchase Agreement*

In connection with the Strategic Alliance Agreement, Vermillion sold 622,500 shares of its common stock and a warrant to purchase up to an additional 220,000 shares of its common stock with an exercise price of \$35.00 per share and expiration date of July 22, 2010, to Quest for net proceeds of \$14,954,000. The related stock purchase agreement provided certain registration rights, whereby Quest may demand that its shares of Vermillion's common stock be registered under the Securities Act of 1933 by Vermillion, or Quest may elect that its shares of Vermillion's common stock be included in another registration statement under the Securities Act of 1933 if filed by Vermillion, subject to various conditions. On January 12, 2006, the warrant to purchase 220,000 shares of Vermillion's common stock held by Quest was amended to clarify that the total number of shares of Vermillion's common stock purchased pursuant to the stock purchase agreement and issuable upon exercise of the warrant will at no time exceed 19.90% of the total number of outstanding shares of Vermillion's common stock, provided that Quest may, prior to or concurrently with the exercise of the warrant, sell such number of shares of Vermillion's common stock that, after the exercise of the warrant and such sale of shares, Quest would not own more than 19.90% of Vermillion's common stock.

On August 29, 2007, Vermillion completed a private placement sale of 2,451,309 shares of its common stock and warrants to purchase up to an additional 1,961,047 shares of its common stock with an exercise price of \$9.25 per share and expiration date of August 29, 2012, to a group of new and existing investors for \$20,591,000 in gross proceeds (collectively referred to as the "August 29, 2007, Private Placement Sale"). In connection with Quest's participation in the August 29, 2007, Private Placement Sale, Vermillion amended the warrant to purchase an additional 220,000 shares of Vermillion's common stock that was originally issued to Quest on July 22, 2005. Pursuant to the terms of the amendment, the exercise price for the warrant to purchase 220,000 shares of Vermillion's common stock was reduced from \$35.00 per share to \$25.00 per share and the expiration date of was extended from July 22, 2010, to July 22, 2011.

### *2007 Securities Purchase Agreement*

On August 29, 2007, Vermillion completed a private placement sale of 2,451,309 shares of its common stock and warrants to purchase up to an additional 1,961,047 shares of its common stock with an exercise price of \$9.25 per share and expiration date of August 29, 2012, to a group of new and existing investors for \$20,591,000 in gross proceeds (collectively referred to as the "August 29, 2007, Private Placement Sale"). In connection with the August 29, 2007 Private Placement Sale, Quest acquired an additional 238,095 shares of Vermillion's common stock and an additional warrant to purchase 190,476 shares of Vermillion's common stock for \$2,000,000. The related stock purchase agreement provided certain registration rights, whereby Quest may demand that its shares of Vermillion's common stock be registered under the Securities Act by Vermillion, or Quest may elect that its shares of Vermillion's common stock be included in another registration statement under the Securities Act if filed by Vermillion, subject to various conditions. On August 29, 2007, Vermillion entered into a letter agreement with Quest whereby (i) Vermillion agreed that the shares of its common stock, including the shares of its common stock issuable upon the exercise of warrants, issued in the July 22, 2005, private placement sale to Quest would be deemed "registrable securities" under the registration rights provisions of the July 22, 2005 stock purchase agreement with Quest, and (ii) Quest waived its registration rights with respect to such shares under the August 29, 2007, securities purchase agreement.

### *Relationship with Phronesis Partners, L.P.*

In connection with the August 29, 2007, Private Placement Sale, Phronesis Partners, L.P. ("Phronesis") purchased 486,928 shares of Vermillion's common stock and a warrant to purchase 389,542 shares of Vermillion's common stock for \$4,090,000. Additionally, Vermillion amended its 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 its common stock and the warrant to purchase additional shares of its common stock held by Phronesis. On October 12, 2007, at the request of Phronesis, Vermillion amended the warrant to purchase 389,542 shares of its common stock to remove the provision limiting Phronesis' ability to exercise its warrant to purchase additional shares of Vermillion's common stock if it would beneficially own more than 4.99% of Vermillion's outstanding common stock following such exercise. The related stock purchase agreement provided certain registration rights, whereby Phronesis may demand that its shares of Vermillion's common stock be registered under the Securities Act by Vermillion, or Phronesis may elect that its shares of Vermillion's common stock be included in another registration statement under the Securities Act if filed by Vermillion, subject to various conditions. Phronesis has exercised this right in connection with the filing of Vermillion's registration statement related to the August 29, 2007 Private Placement Sale.

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### ***Relationship with Falcon Technology Partners, L.P.***

In connection with the August 29, 2007, Private Placement Sale, Falcon Technology Partners, L.P. (“Falcon Technology Partners”) purchased 178,571 shares of Vermillion’s common stock and a warrant to purchase 142,857 shares of Vermillion’s common stock for \$1,500,000. James L. Rathmann is a general partner of Falcon Technology Partners and the Executive Chairman of Vermillion’s Board of Directors. The related stock purchase agreement provided certain registration rights, whereby Falcon Technology Partners may demand that its shares of Vermillion’s common stock be registered under the Securities Act by Vermillion, or Falcon Technology Partners may elect that its shares of Vermillion’s common stock be included in another registration statement under the Securities Act if filed by Vermillion, subject to various conditions. Falcon Technology Partners has exercised this right in connection with the filing of Vermillion’s registration statement related to the August 29, 2007 Private Placement Sale.

### ***Directors and Executive Officers***

The Company has entered into indemnification agreements with each of its directors and officers, which require the Company to indemnify its directors and officers to the fullest extent permitted by law in the State of Delaware.

### ***Review and Approval of Transactions with Related Persons***

The Company’s written corporate governance guidelines require all members of the Board of Directors to inform the Audit Committee of the Board of Directors 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. Vermillion’s corporate governance guidelines are posted under the Investor Relations section of its website, [www.vermillion.com](http://www.vermillion.com).

### ***Director Independence***

All directors, except for Ms. Page, are an independent director as defined by Rule 4200(a)(15) of the NASDAQ Stock Market listing standards. There is no family relationship between any director or executive officer of the Company, on the one hand, and any other director or executive officer of the Company, on the other hand. Additionally, there are no arrangements or understandings between any director or executive officer and any other person pursuant to which he or she is or was to be selected as a director or officer of the Company.

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### Item 14. Principal Accounting Fees and Services

Fees for professional services rendered by PricewaterhouseCoopers LLP, independent registered public accounting firm, to Vermillion, Inc. (“Vermillion”) and its wholly owned subsidiaries (collectively the “Company”) for the years ended December 31, 2009 and 2008, were as follows:

	2009	2008
Audit fees <sup>(1)</sup>	\$ —	\$556,000
Audit-related fees <sup>(2)</sup>	—	23,000
Tax fees <sup>(3)</sup>	—	—
All other fees <sup>(4)</sup>	2,500	2,000
Total	<u>\$2,500</u>	<u>\$581,000</u>

- (1) Audit fees include fees for professional services rendered in connection with the annual audit of the Company’s Annual Report on Form 10-K, the reviews of the Company’s Quarterly Reports on Form 10-Q, and review of the Company’s Registration Statements on Form S-1 and Form S-3.
- (2) Audit-related fees include assurance related services not included in audit fees, including certain complex transactions entered into or proposed by the Company.
- (3) Tax fees include fees for tax compliance, tax planning and advisory services to the Company and its international subsidiaries.
- (4) All other fees include fees for reference materials and publications.

All audit, audit-related, tax and other services, which include all permissible non-audit services, provided to the Company by PricewaterhouseCoopers LLP for the year ended December 31, 2008, were pre-approved by the Audit Committee. Additionally, the Audit Committee concluded that the provision of those services by PricewaterhouseCoopers LLP was compatible with the maintenance of the independent registered public accounting firm’s independence.

The Audit Committee is responsible for appointing, compensating, and overseeing the work of the independent auditor. The Audit Committee has established a pre-approval procedure for all audit and permissible non-audit services to be performed by PricewaterhouseCoopers LLP. The pre-approval policy requires that requests for services by the independent registered public accounting firm be submitted to the Company’s Chief Financial Officer (“CFO”) or Chief Accounting Officer for review and approval. Any requests that are approved by the CFO or Chief Accounting Officer are then aggregated and submitted to the Audit Committee for approval at a meeting of the Audit Committee. Requests may be made with respect to either specific services or a type of service for predictable or recurring services.

**PART IV**

**Item 15. Exhibits, Financial Statement Schedules**

(a) The following documents are filed as part of this Annual Report on Form 10-K.

1. The following consolidated financial statements of Vermillion, Inc. and subsidiaries are filed as part of this Annual Report on Form 10-K under Part II Item 8—Financial Statements and Supplementary Data:

	<u>Page</u>
Report of Independent Registered Public Accounting Firm	44
Consolidated Balance Sheets as of December 31, 2009 and 2008	45
Consolidated Statements of Operations for the years ended December 31, 2009 and 2008	46
Consolidated Statements of Changes in Stockholders' Deficit and Comprehensive Loss for the years ended December 31, 2009 and 2008	47
Consolidated Statements of Cash Flows for the years ended December 31, 2009 and 2008	48
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2. All financial schedules have been omitted because the information is inapplicable or presented in the consolidated financial statements or notes thereto under Part II Item 8 - Financial Statements and Supplementary Data.

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### 3. Exhibits:

#### Index to Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
2.1	Disclosure Statement for Debtor's (Vermillion, Inc.'s) Plan of Reorganization Under Chapter 11 of the Bankruptcy Code dated November 24, 2009	8-K	000-31617	99.1	November 25, 2009	
2.2	Disclosure Statement for Debtor's (Vermillion, Inc.'s) First Amended Plan of Reorganization Under Chapter 11 of the Bankruptcy Code dated December 3, 2009	8-K	000-31617	99.1	December 4, 2009	
2.3	Findings of Fact, Conclusions of Law and Order Confirming Debtor's (Vermillion Inc.'s) Second Amended Plan of Reorganization Under Chapter 11 of the Bankruptcy Code dated January 7, 2010	8-K	000-31617	2.1	January 12, 2010	
3.1	Fourth Amended and Restated Certificate of Incorporation of Vermillion, Inc. dated January 22, 2010	8-K	000-31617	3.1	January 25, 2010	
3.2	Third Amended and Restated Certificate of Incorporation of Vermillion, Inc.	8-K	000-31617	3.1	March 3, 2008	
3.3	Second Amended and Restated Certificate of Incorporation of Vermillion, Inc.	S-1	333-146354	3.1	September 27, 2007	
3.4	Amended and Restated Bylaws of Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.)	S-1/A	333-32812	3.4	August 24, 2000	
4.1	Form of Vermillion, Inc.'s (formerly CIPHERGEN Biosystems, Inc.) Common Stock Certificate	S-1/A	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	First Supplemental Indenture between Vermillion, Inc. and U.S. Bank National Association dated December 11, 2008	8-K	000-31617	10.1	December 17, 2008	
4.4	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	
4.5	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	

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### Index to Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
4.6	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	
4.7	Second Amendment to Rights Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Wells Fargo Bank, N.A. dated September 30, 2005	8-K	000-31617	4.5	October 4, 2005	
4.8	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	
10.1	Fourth Amended and Restated Investors Rights Agreement dated March 3, 2000	S-1	333-32812	10.2	March 20, 2000	
10.2	1993 Stock Option Plan	S-1	333-32812	10.3	March 20, 2000	
10.3	Form of Stock Option Agreement	S-1/A	333-32812	10.4	August 24, 2000	
10.4	2000 Stock Plan and related form of Stock Option Agreement	S-1/A	333-32812	10.5	August 4, 2000	
10.5	Amended and Restated 2000 Employee Stock Purchase Plan	10-Q	000-31617	10.6	November 14, 2007	
10.6	Vermillion, Inc. 2010 Stock Incentive Plan	8-K	000-31617	10.1	February 12, 2010	
10.7	CIPHERGEN Biosystems, Inc. 401(k) Plan	10-K	000-31617	10.7	March 22, 2005	
10.8	Registration Rights Agreement dated August 22, 2003, of Vermillion, Inc.'s (formerly CIPHERGEN Biosystems, Inc.) 4.50% Convertible Senior Notes due September 1, 2008	S-3	333-109556	10.1	October 8, 2003	
10.9	Form of Exchange and Redemption Agreement dated November 3, 2006, between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and certain holders of its 4.50% Convertible Senior Notes due September 1, 2008	8-K	000-31617	10.55	November 6, 2006	
10.10	Registration Rights Agreement dated November 15, 2006, between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Initial Purchasers of its 7.00% Convertible Senior Notes due September 1, 2011	8-K	000-31617	10.1	November 21, 2006	
10.11	Letter Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Oppenheimer & Co. Inc. dated August 3, 2006	S-1/A	333-146354	10.46	November 27, 2007	
10.12	Warrant with Oppenheimer & Co. Inc. dated August 3, 2006	S-1/A	333-146354	10.47	November 27, 2007	

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### Index to Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.13	Warrant with Oppenheimer & Co. Inc. dated November 15, 2006	S-1/A	333-146354	10.48	November 27, 2007	
10.14	Engagement Letter between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Oppenheimer & Co. Inc. dated August 3, 2006	S-1/A	333-146354	10.49	November 27, 2007	
10.15	Placement Agent Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Oppenheimer & Co. Inc. dated March 28, 2007	S-1/A	333-146354	10.61	November 27, 2007	
10.16	Securities Purchase Agreement by and among Vermillion, Inc. and the purchasers party thereto dated August 23, 2007	S-1	333-146354	10.57	September 27, 2007	
10.17	Form of Warrant	10-Q	000-31617	10.51	November 14, 2007	
10.18	Form of Securities Purchase Agreement between Vermillion, Inc. and the purchasers party thereto dated December 24, 2009	8-K	000-31617	10.1	December 29, 2009	
10.19	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	
10.20	Amended and Restated Employment Agreement between Gail S. Page and Vermillion, Inc. dated November 13, 2008	8-K	000-31617	10.1	November 19, 2008	
10.21	Employment Agreement with Sandra A. Gardiner and Vermillion, Inc. dated April 9, 2010	8-K	000-31617	10.1	April 22, 2010	
10.22	Form of Severance Agreement between key executive employees and Vermillion, Inc.	8-K	000-31617	10.1	August 29, 2008	
10.23	Separation Agreement and Release between Debra A. Young and Vermillion, Inc. dated November 1, 2007	8-K	000-31617	10.1	November 5, 2007	
10.24	Form of Proprietary Information Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and certain of its employees	S-1/A	333-32812	10.9	August 24, 2000	
10.25	Consulting Agreement between Richard G. Taylor and Vermillion, Inc. dated August 26, 2008	8-K	000-31617	10.1	August 29, 2008	



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### Index to Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.26	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/A	333-32812	10.12	September 27, 2000	
10.27	MAS License Agreement with IllumiSys Pacific, Inc. dated April 7, 1997	S-1/A	333-32812	10.23	August 24, 2000	
10.28	MAS License Agreement with CIPHERGEN Technologies, Inc. (formerly ISP Acquisition Corporation) dated April 7, 1997	S-1	333-32812	10.24	August 24, 2000	
10.29	Settlement Agreement and Mutual General Release by and among Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.), IllumiSys 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	
10.30	Assignment Agreement by and among Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.), IllumiSys Pacific, Inc., CIPHERGEN Technologies, Inc., Molecular Analytical Systems, Inc., LumiCyte, Inc. and T. William Hutchens dated May 28, 2003 †	8-K	000-31617	99.3	June 11, 2003	
10.31	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	
10.32	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	
10.33	Distribution and Marketing Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and CIPHERGEN Biosystems KK dated March 24, 1999	S-1/A	333-32812	10.26	September 22, 2000	
10.34	Strategic Alliance Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Quest Diagnostics Incorporated dated July 22, 2005	8-K	000-31617	10.44	July 28, 2005	

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### Index to Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.35	Amendment to Strategic Alliance Agreement between Vermillion, Inc. and Quest Diagnostics Incorporated dated October 7, 2009	8-K	000-31617	10.2	October 21, 2009	
10.36	Stock Purchase Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Quest Diagnostics Incorporated dated July 22, 2005	8-K	000-31617	10.45	July 28, 2005	
10.37	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	
10.38	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	
10.39	Letter Agreement between Vermillion, Inc. and Quest Diagnostics Incorporated dated August 29, 2007	S-1	333-146354	10.38	September 27, 2007	
10.40	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	
10.41	Debtor-In-Possession Credit and Security Agreement between Vermillion, Inc. and Quest Diagnostics Incorporated dated October 7, 2009	8-K	000-31617	10.1	October 21, 2009	
10.42	Memorialization Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Quest Diagnostics Incorporated dated January 12, 2006	S-1	333-146354	10.40	September 27, 2007	
10.43	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	
10.44	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	S-1	333-146354	10.47	September 27, 2007	

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### Index to Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.46	Stock Purchase Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006	S-1	333-146354	10.48	September 27, 2007	
10.47	Transition Services Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006 †	S-1/A	333-146354	10.53	November 27, 2007	
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	S-1	333-146354	10.50	September 27, 2007	
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	S-1	333-146354	10.51	September 27, 2007	
10.50	Manufacture and Supply Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006 †	S-1/A	333-146354	10.56	November 27, 2007	
10.51	Amendment No. 1 to Manufacture and Supply Agreement between Vermillion, Inc. and Bio-Rad Laboratories, Inc. dated August 27, 2007	S-1	333-146354	10.53	September 27, 2007	
10.52	Cross License Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006 †	S-1/A	333-146354	10.58	November 27, 2007	
10.53	Sublicense Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006	S-1	333-146354	10.13	September 27, 2007	
10.54	Letter Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006	S-1	333-146354	10.55	September 27, 2007	
10.55	Sublease Agreement between Vermillion, Inc. (formerly CIPHERGEN Biosystems, Inc.) and Bio-Rad Laboratories, Inc. dated November 13, 2006 †	S-1/A	333-146354	10.60	November 27, 2007	
21.0	Subsidiaries of Registrant					☒

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### Index to Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		File		Filing		
		Form	No.	Exhibit	Date	
31.1	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					<input checked="" type="checkbox"/>
31.2	Certification of the Chief Accounting Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					<input checked="" type="checkbox"/>
32.0	Certification of the Chief Executive Officer and Chief Accounting Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					(1)

(1) Furnished herewith

† 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.

## SIGNATURES

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

### Vermillion, Inc.

Date: May 20, 2010

/ s / G AIL S. P AGE

Gail S. Page  
Executive Chairperson, President and  
Chief Executive Officer  
(Principal Executive Officer)

Date: May 20, 2010

/ s / J OHN H. T RAN

John H. Tran  
Vice President of Finance and  
Chief Accounting Officer  
(Principal Financial and Accounting Officer)

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

<u>Name</u>	<u>Title</u>	<u>Date</u>
/ s / G AIL S. P AGE Gail S. Page	Executive Chairperson, President and Chief Executive Officer (Principal Executive Officer)	May 20, 2010
/ s / J OHN H. T RAN John H. Tran	Vice President of Finance and Chief Accounting Officer (Principal Financial and Accounting Officer)	May 20, 2010
/ s / J AMES S. B URNS James S. Burns	Director	May 20, 2010
/ s / J OHN F. H AMILTON John F. Hamilton	Director	May 20, 2010
/ s / P ETER S. R ODDY Peter S. Roddy.	Director	May 20, 2010
/ s / W ILLIAM C. W ALLEN , P H.D. William C. Wallen, Ph.D.	Director	May 20, 2010
/ s / C ARL S EVERINGHAUS Carl Severinghaus	Director	May 20, 2010

**Vermillion, Inc. Subsidiaries**

December 31, 2009

Subsidiary	State/Country of Incorporation/Formation
IllumeSys Pacific, Inc.	California
Ciphergen Technologies, Inc.	California
Ciphergen Biosystems Ltd.	United Kingdom
Ciphergen Biosystems A/S	Denmark
Ciphergen Biosystems AG	Switzerland
Ciphergen Biosystems KK	Japan
Ciphergen Biosystems International, Inc.	Delaware
Ciphergen (Beijing) Biosystems Co., Ltd.	China

**Ciphergen Biosystems International, Inc. Subsidiaries**

December 31, 2009

Subsidiary	State/Country of Incorporation/Formation
Ciphergen Biosystems GmbH	Germany
Ciphergen Biosystems S.r.l.	Italy
Ciphergen Biosystems EURL	France

**Certification of the Chief Executive Officer Pursuant to Section 302 of  
the Sarbanes-Oxley Act Of 2002**

I, Gail S. Page, certify that:

1. I have reviewed this annual report on Form 10-K of Vermillion, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures [as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)] and internal control over financial reporting [as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)] for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 20, 2010

/s/ Gail S. Page

Gail S. Page

Executive Chairperson, President and Chief Executive Officer



**Certification of the Chief Accounting Officer Pursuant to Section 302 of  
the Sarbanes-Oxley Act Of 2002**

I, John H. Tran, certify that:

1. I have reviewed this annual report on Form 10-K of Vermillion, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures [as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)] and internal control over financial reporting [as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)] for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 20, 2010

/s/ John H. Tran

John H. Tran

Vice President of Finance and Chief Accounting Officer

**Certification of the Chief Executive Officer and Chief Accounting Officer  
Pursuant to 18 U.S.C. Section 1350,  
as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002  
with Respect to the Annual Report on Form 10-K  
for the Year Ended December 31, 2009**

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, Chapter 63 of Title 18, United States Code), each of the undersigned officers of Vermillion, Inc., a Delaware corporation (the "Company"), does hereby certify, to the best of such officer's knowledge, that:

1. The Company's annual report on Form 10-K for the year ended December 31, 2009, (the "Form 10-K") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"); and
2. Information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 20, 2010

/s/ Gail S. Page

Gail S. Page

Executive Chairperson, President and Chief Executive Officer  
(Principal Executive Officer)

Date: May 20, 2010

/s/ John H. Tran

John H. Tran

Vice President of Finance and Chief Accounting Officer  
(Principal Financial and Accounting Officer)

The certification set forth above is being furnished as an Exhibit solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and is not being filed as part of the Form 10-K or as a separate disclosure document of the Company or the certifying officers.