EMISPHERE TECHNOLOGIES INC
Form 10-K
March 25, 2010

Table of Contents

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

Form 10-K

(Mark One)

þ **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

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to

Commission file number 0-17758

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

Delaware	**13-3306985**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification Number)*
240 Cedar Knolls Road, Suite 200 Cedar Knolls, NJ *(Address of principal executive offices)*	**07927** *(Zip Code)*

(973) 532-8000

(Registrant s telephone number, including area code)

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

Securities registered pursuant to Section 12(g) of the Act:
Common Stock $.01 par value

Preferred Stock Purchase Rights

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

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

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 Registrant was required to file such reports) and (2) has been subject to such filing requirements for at least the past 90 days. Yes þ No o

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 o No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

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

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

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No þ

As of June 30, 2009 (the last business day of the registrant s most recently completed second quarter), the aggregate market value of the common stock held by non-affiliates of the Registrant (i.e. excluding shares held by executive officers, directors, and control persons) was $26,084,325 computed at the closing price on that date.

The number of shares of the Registrant s common stock, $.01 par value, outstanding as of March 11, 2010 was 42,070,401.

TABLE OF CONTENTS

Table of Contents

PART I

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements made under the captions Business (Item 1) and Management s Discussion and Analysis of Financial Condition and Results of Operations (Item 7), the notes to our audited financial statements (Item 8) and elsewhere in this Annual Report on Form 10-K, as well as statements made from time to time by our representatives may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, without limitation, statements regarding planned or expected studies and trials of oral formulations that utilize our Eligen® Technology; the timing of the development and commercialization of our product candidates or potential products that may be developed using our Eligen® Technology; the potential market size, advantages or therapeutic uses of our potential products; variation in actual savings and operating improvements resulting from restructurings; and the sufficiency of our available capital resources to meet our funding needs. We do not undertake any obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise, except as required by law. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results or achievements to be materially different from any future results or achievements expressed or implied by such forward-looking statements. Such factors include the factors described under Item 1A. Risk Factors and the other factors discussed in connection with any forward-looking statements.

ITEM 1. *BUSINESS*

Overview of Emisphere

Introduction and History

Emisphere Technologies, Inc. (Emisphere, the Company, our, us, or we) is a biopharmaceutical company that fo on a unique and improved delivery of therapeutic molecules or nutritional supplements using its Eligen® Technology. These molecules could be currently available or under development. Such molecules are usually delivered by injection and in many cases, their benefits are limited due to poor bioavailability, slow on-set of action or variable absorption. In those cases, our technology may increase the benefit of the therapy by improving bioavailability or absorption or by increasing the rate of absorption and accelerating the onset of action. The Eligen® Technology can be applied to the oral route of administration as well other delivery pathways, such as buccal, rectal, inhalation, intra-vaginal or transdermal. Our core business strategy is to develop oral forms of drugs or nutrients that are not currently available or have poor bioavailability in oral form, either alone or with corporate partners, by applying the Eligen® Technology to those drugs or nutrients. Typically, the drugs that we target have received regulatory approval, have demonstrated safety and efficacy, and are currently available on the market. Our website is www.emisphere.com. The contents of that website are not incorporated herein by reference thereto. Investor related questions should be directed to info@emisphere.com.

Emisphere was originally founded as Clinical Technologies Associates, Inc. in 1986. We conducted an initial public offering in 1989 and were listed on NASDAQ under the ticker symbol CTAI . In 1990 we decided to focus on our oral drug delivery technology, now known as the Eligen® Technology. In 1991, we changed our name to Emisphere Technologies, Inc., and we continued to be listed on NASDAQ under the new ticker symbol EMIS . The Company s securities were suspended from trading on The NASDAQ Capital Market effective at the open of business on Tuesday, June 9, 2009, and NASDAQ delisted the Company s securities thereafter. The delisting resulted from the Company s non-compliance with the minimum market value of listed securities requirement for continued listing.

Simultaneously, the Company s securities began trading on the Over-the-Counter Bulletin Board (the OTCBB), an electronic quotation service maintained by the Financial Industry Regulatory Authority, effective with the open of business on Tuesday, June 9, 2009. The Company s trading symbol remains EMIS, however, it is our understanding that, for certain stock quote publication websites, investors may be required to key EMIS.OB to obtain quotes.

Table of Contents

Since our inception in 1986, substantial efforts and resources have been devoted to understanding the Eligen® Technology and establishing a product development pipeline that incorporates this technology with selected molecules. Since 2007, Emisphere has undergone many positive changes. A new senior management team, led by Michael V. Novinski, was hired; the Eligen® Technology was reevaluated and our corporate strategy was refocused on commercializing the Eligen® Technology as quickly as possible, building high-value partnerships and reprioritizing the product pipeline. Spending was redirected and aggressive cost control initiatives were implemented. These changes resulted in redeployment of resources to programs, one of which, yielded the introduction of our first commercial product during 2009. We continue to develop potential product candidates in-house and the value of our Eligen® Technology was demonstrated and enhanced through the progress made by our development partners Novo Nordisk A/S (Novo Nordisk) and Novartis Pharma AG (Novartis) on their respective product development programs. Further development, exploration and commercialization of the technology entail risk and operational expenses. However, we have made significant progress on refocusing our efforts on strategic development initiatives and cost control and continue to aggressively seek to reduce non-strategic spending.

The Eligen® Technology

The Eligen® Technology is a broadly applicable proprietary oral drug delivery technology based on the use of proprietary synthetic chemical compounds known as EMISPHERE® delivery agents, or carriers. These delivery agents facilitate and enable the transport of therapeutic macromolecules (such as proteins, peptides, and polysaccharides) and poorly absorbed small molecules across biological membranes in the gastrointestinal tract, including the stomach, which is where most of the eligen mediated absorption is thought to occur. We believe no other carrier system or drug delivery company can do this. The result is rapid absorption. The stomach as an absorptive organ also contradicts normal absorption mechanisms and makes the proposition easy to understand, but at the same time difficult to believe. Another characteristic that distinguishes Eligen® from the competition is that this permeability in the stomach takes place through a transcellular, not paracellular pathway. This underscores the safety of Eligen® as the passage of the Eligen® carrier and the molecule preserve the integrity of the tight junctions within the cell and reduces any likelihood of inflammatory processes and autoimmune gastrointestinal diseases. Furthermore, because Eligen® Technology carriers are rapidly absorbed, metabolized and eliminated from the body, they do not accumulate in the organs and tissues and are considered safe at anticipated dose and dosing regimens.

The Eligen® Technology was extensively reevaluated in 2007 by our scientists, senior management and expert consultants. Based on this analysis, we believe that our technology can enhance overall healthcare, including patient accessibility and compliance, while benefiting the commercial pharmaceutical marketplace and driving company valuation. The application of the Eligen® Technology is potentially broad and may provide for a number of opportunities across a spectrum of therapeutic modalities.

Implementing the Eligen® Technology is quite simple. It only requires co-mixing a drug or nutritional supplement and an Eligen® carrier to produce an active formulation. The carrier does not alter the chemical properties of the drug nor its biological activity. Some therapeutic molecules are better suited for use with the Eligen® Technology than others. Drugs or nutritional supplements whose bioavailability is limited by poor membrane permeability or chemical or biological degradation, and which have a moderate-to-wide therapeutic index, appear to be the best candidates. Drugs or nutritional supplements with a narrow therapeutic window or high molecular weight may not be favorable with the technology.

We believe that our Eligen® Technology makes it possible to safely deliver a therapeutic macromolecule orally or increase the absorption of a poorly absorbed small molecule without altering its chemical composition or compromising the integrity of biological membranes. We believe that the key benefit of our Eligen® Technology is that it improves the ability of the body to absorb small and large molecule drugs.

Emisphere Today

During 2009, the Company continued to focus on efforts to apply the Eligen® Technology and realize its value by developing profitable commercial applications. In November 2009 the Company launched its first

Table of Contents

commercially available product, oral Eligen® B12 (100 mcg), which had been specifically developed to help improve Vitamin B12 absorption and bioavailability with a patented formulation, in partnership with Life Extension®. Life Extension® has certain exclusivity in the USA for distribution via the internet and at specialty health food and nutritional retail outlets including The Vitamin Shoppe, GNC and Vitamin World. Oral Eligen® B12 (100mcg) tablets have been available for sale since November 2009. We continue to develop our product pipeline utilizing the Eligen® Technology with prescription and nonprescription product candidates. We prioritized our development efforts based on overall potential returns on investment, likelihood of success, and market and medical need. Additionally, we continue to improve operational effectiveness and efficiency. Our goal is to implement our Eligen® Technology to enhance overall healthcare, including patient accessibility and compliance, while benefiting the commercial pharmaceutical marketplace.

To accelerate commercialization of the technology, Emisphere embarked on a two-pronged strategy. First, we concentrated on unique prescription molecules and nutritional supplements obtained through partnerships with other pharmaceutical companies for molecules where oral absorption is difficult yet substantially beneficial if proven. With prescription molecules, we are working to generate new interest in the Eligen® Technology with new potential partners and attempt to expand our current collaborative relationships to take advantage of the critical knowledge that others have gained by working with our technology. Second, we continue to pursue commercialization of product candidates developed internally. We believe that these internal candidates need to be developed with reasonable investment in an acceptable time period and with a reasonable risk-benefit profile.

To support our internal development programs, the Company implemented its new commercialization strategy for the Eligen® Technology. Using extensive safety data available for its SNAC carrier, the Company obtained GRAS (Generally Recognized as Safe) status for its SNAC carrier, and then applied the Eligen® Technology with B12, another GRAS substance where bioavailability and absorption is difficult and improving such absorption would yield substantial benefit and value. Using this strategy, the Company launched its first commercially available product, oral Eligen® B12 (100 mcg). Given sufficient time and resources, the Company intends to apply this strategy to develop other commercial products. Examples of other GRAS substances that may be developed into additional commercial products using this strategy would include vitamins such as Vitamin D; minerals such as iron; and other supplements such as the polyphenols and catechins, among others. Our planned second product, a higher dose formulation of Eligen® B12, for use by patients who are Vitamin B12 deficient, is under development and we anticipate launching the product during the second half 2010.

Funding required to continue developing our product pipeline may be partially paid by income-generating license arrangements whose value tends to increase as product candidates move from pre-clinical into clinical development. It is our intention that investments that may be required to fund our research and development will be approached incrementally in order to minimize disruption or dilution.

The Company also continues to focus on improving operational efficiency. By terminating the lease of our research and development facility in Tarrytown, NY in April 2009, and by utilizing independent contractors to conduct research and development, we reduced our annual operating costs by approximately 55% from 2008 levels. Annual cash expenditures were reduced by approximately $11 million, and the resulting cash burn rate to support continuing operations is approximately $8 million per year. Additionally, we expect to accelerate the commercialization of the Eligen® Technology in a cost effective way and to gain operational efficiencies by tapping into advanced scientific processes offered by independent contractors.

Overall Product Pipeline

Emisphere has a deep and varied pipeline that includes prescription and nutritional supplement product candidates in varying stages of development. We have one nutritional supplement product using Eligen® Technology on the US

market. We have two prescription products in Phase III studies, several in Phase I and a number of pre-clinical (research stage) projects. Some of the pre-clinical projects are partnered; others are Emisphere-initiated.

Table of Contents

Vitamin B12

B12 is an important nutrient that is poorly absorbed in the oral form. In most healthy people, Vitamin B12 is absorbed in a receptor-mediated pathway in the presence of an intrinsic factor. A large number of people take B12 supplements by the oral route, many in megadoses, and by injection. Currently, it is estimated that at least five million people in the U.S. are taking 40 million injections of Vitamin B12 per year to treat a variety of debilitating medical condition. Another estimated five million are consuming more than 600 million tablets of Vitamin B12 orally. The international market is larger than the U.S. market. Many B12 deficient patients suffer from pernicious anemia and neurological disorders and many of them are infirm or elderly. Vitamin B12 deficiency can cause severe and irreversible damage, especially to the brain and nervous system. At levels only slightly lower than normal, a variety of symptoms such as fatigue, depression, and poor memory may be experienced.

During November 2009, the Company launched its first commercially available product, oral Eligen® B12 (100 mcg), which was specifically developed to help improve Vitamin B12 absorption and bioavailability with a patented formulation, in partnership with Life Extension®. Life Extension® has certain exclusivity in the USA for distribution via the internet and at specialty health food and nutritional retail outlets including The Vitamin Shoppe, GNC and Vitamin World. Oral Eligen® B12 (100mcg) tablets have been available for sale since November 2009.

Also in November 2009, the Company announced that interim data from an ongoing study demonstrated its oral Eligen® B12 (1000mcg) restored B12 to normal levels in individuals with Vitamin B12 deficiency. Normal levels of serum B12 and active B12 were achieved by 100 percent of those study participants who had taken Eligen® B12 (1000mcg) 15 days into the 90-day study when the first blood samples were taken. As part of an interim analysis in this randomized, multi-center study, levels of serum B12, active B12, homocysteine and methyl malonic acid were measured on day 15, at which point a total of 18 participants (8 on IM injection and 10 on oral) had received either five 1000mcg intramuscular injections of Vitamin B12 or once daily tablets of oral Eligen® B12 (1000mcg). Study subjects taking Eligen® B12 also had a marked decrease in homocysteine, which is a known risk factor for cardiovascular disease. This clinical study with Eligen® B12 (1000mcg) is expected to be completed within the first half of 2010. It is estimated that as many as 10 million people in the U.S. and over 100 million people worldwide may be B12 deficient. Emisphere s Eligen® B12 product (1000mcg) is planned to be available in 2010. Oral Eligen® B12 and the foregoing statements have not been evaluated by the Food and Drug Administration. Oral Eligen® B12 is not intended to diagnose, treat, cure, or prevent any disease.

Emisphere developed Eligen® B12 independently, as a nutritional supplement product candidate. Following our proof of concept animal studies of the absorption of Vitamin B12 using our Eligen® Technology, additional preclinical studies using dogs further demonstrated that the Eligen® Technology enhances the absorption of oral B12 and confirmed earlier proof of concept studies conducted in rats. We completed our first clinical study testing our new Vitamin B12 formulation in 20 normal healthy males.

The data from our first pharmacokinetic study showed mean Vitamin B12 peak blood levels were more than 10 times higher for the Eligen® B12 5mg formulation than for the 5mg commercial formulation. The mean time to reach peak concentration (Tmax) was reduced by over 90%; to 0.5 hours for the Eligen® B12 5mg from 6.8 hours for the commercial 5mg product. Improvement in bioavailability was approximately 240%, with absorption time at 30 minutes and a mean bioavailability of 5%. The study was conducted with a single administration of Eligen® B12; there were no adverse reactions, and Eligen® B12 was well-tolerated.

The data from our first Eligen® B12 clinical study demonstrated a new, more bioavailable oral form of Vitamin B12 and a potential new avenue for addressing the problems with B12 supplementation. Eligen® B12 avoids the normal specialized absorption process that limits absorption of Vitamin B12 from current formulations.

In May 2009, the Company was informed by an independent expert panel of scientists that its SNAC carrier has been provisionally designated as Generally Recognized as Safe (GRAS) for its intended application in combination with nutrients added to food and dietary supplements. Following a comprehensive

Table of Contents

evaluation of research and toxicology data, Emisphere s SNAC was found to be safe at a dosage up to 250 mg per day when used in combination with nutrients to improve their dietary availability. In July 2009, concurrent with the publication of two papers in the July/August issue of the peer reviewed journal, *International Journal of Toxicology*, which describes the toxicology of its SNAC carrier, SNAC achieved GRAS status for its intended use in combination with nutrients added to food and dietary supplements. The publication of those two papers in the *International Journal of Toxicology* was the final, necessary step in the process of obtaining GRAS status for its SNAC carrier. Since SNAC achieved GRAS status, it is exempt from pre-market approval for its intended use in combination with nutrients added to food and dietary supplements. This opens the way for the potential commercialization of the Eligen® Technology with other substances such as vitamins. The Company s first product is its oral Eligen® Vitamin B12.

During April 2009 we announced a strategic alliance with AAIPharma, Inc. intended to expand the application of Emisphere s Eligen® Technology and AAIPharma s drug development services. AAIPharma is a global provider of pharmaceutical product development services that enhance the therapeutic performance of its clients drugs. AAIPharma works with many pharmaceutical and biotech companies and currently provides drug product formulation development services to Emisphere. This relationship expands our access to new therapeutic candidates for the Eligen® Technology, which potentially could lead to new products and to new alliance agreements as well.

We have obtained patents for the carrier we are using in the oral B12 formulation and have filed applications covering the combination of the carrier and many other compounds, including Vitamin B12.

Phase III Programs

On the prescription side of our business, both of our products in Phase III are with our partner Novartis, which is using our drug delivery technology in combination with salmon calcitonin, parathyroid hormone, and human growth hormone. Their most advanced programs are testing oral formulations of salmon calcitonin to treat osteoarthritis and osteoporosis. Novartis is conducting two Phase III clinical studies for osteoarthritis and one Phase III clinical study for osteoporosis.

During the third quarter 2008, Novartis completed enrollment for the first trial for osteoarthritis; a multi-center Phase III study exploring the safety and efficacy of an oral formulation of salmon calcitonin using Emisphere s proprietary Eligen® Technology to treat patients with osteoarthritis of the knee. This study, which will be used to support the filing with health authorities worldwide, includes more than 1,100 patients between the ages of 51 and 80 years with a medical history and symptoms of knee osteoarthritis. This study will be conducted mainly in Europe and is estimated to be completed during the second half 2010. In June 2009 Emisphere announced that Novartis Pharma AG and Nordic Bioscience had completed recruitment for a second multi-center Phase III study exploring the safety and efficacy of an oral formulation of salmon calcitonin using Emisphere s proprietary Eligen® Technology to treat patients with osteoarthritis of the knee. This study, which is intended to be used to support a regulatory filing in the U.S., includes more than 900 patients between the ages of 51 and 80 with a medical history and symptoms of knee osteoarthritis. The two year study is being conducted in Europe, the U.S., and other countries and is estimated to be completed during the second half 2011. Approximately 21 million patients are managed for osteoarthritis in the U.S. alone, and that number is expected to increase as the baby boomer generation continues to age. Assuming a successful outcome of the Phase III program, this product candidate will also fulfill a substantial unmet need. Pre-clinical and Phase II data indicate that oral calcitonin could become the first disease-modifying osteoarthritis drug.

Novartis is also conducting a Phase III trial for osteoporosis. This Phase III trial is a multi-center study exploring the safety and efficacy of oral Eligen® salmon calcitonin to treat vertebral fractures in postmenopausal women with osteoporosis, aged 60-80. The last of over 4,500 patients were recruited for the osteoporosis study in the final week of June 2008, and the three-year study is being conducted in North and South America, Europe and Asia. Since all three Phase III studies are fully enrolled, over 5,500 clinical study patients used the Eligen® Technology during 2009 and

are expected to continue to use it during 2010 as these trials progress. According to the National Osteoporosis Foundation, 10 million people in the U.S. are estimated to have the disease with 34 million more estimated to have low bone mass and are, therefore, at risk. If

Table of Contents

successful, this product candidate for the treatment of osteoporosis would satisfy an unmet market need, with oral salmon calcitonin expected to offer a safe, effective, and convenient alternative to existing therapies.

During December 2009, the Company announced that an independent Data Monitoring Committee (DMC) informed Novartis and its partner Nordic Bioscience of their recommendation to proceed with the Osteoporosis Phase III Study 2303 and the Osteoarthritis Phase III Study 2301 exploring the safety and efficacy of an oral formulation of salmon calcitonin to treat patients with osteoporosis and osteoarthritis of the knee. This recommendation is based on a futility analysis of one-year data for all patients enrolled in the study for 12 months and includes both an assessment of safety and efficacy parameters. Based on this interim analysis, the DMC is of the opinion that there are no major or unexpected safety concerns and recommended proceeding with the studies to evaluate the efficacy and safety profile of oral calcitonin at two years as planned.

Also during December 2009, the Company announced a meta-analysis published in the December 2009 edition of *Rheumatology Reports* examining independent evidence of the analgesic action of the hormone calcitonin. This publication restated the potential of calcitonin in filling a significant unmet need for alternative treatments for persistent musculoskeletal pain. Scientists from Nordic Bioscience were involved in the preparation of this meta-analysis. Non-malignant musculoskeletal pain is the most common clinical symptom that causes patients to seek medical attention and is a major cause of disability in the world. Musculoskeletal pain can arise from a variety of common conditions including osteoarthritis, rheumatoid arthritis, osteoporosis, surgery, low back pain and bone fracture. The meta-analysis, conducted by researchers at the Center for Sensory-Motor Interaction in the Department of Health Science and Technology at Aalborg University in Denmark, examined independent pre-clinical and clinical studies spanning nearly 45 years of the possible intrinsic analgesic properties of calcitonin, with special focus on the challenges in the musculoskeletal system. The authors concluded that well-designed clinical trials should be conducted to further validate evidence of calcitonin s analgesic action and its promising potential role in the management of musculoskeletal pain. The effects of calcitonin on clinical pain conditions have received increasing attention in the past decades, although a consensus on mechanism-of-action and potential indications has not been reached. The analgesic activity of oral salmon calcitonin has been shown in several controlled prospective double-blind studies; besides pain management in osteoporosis, calcitonin has shown analgesic action in painful conditions such as phantom limb pain, diabetic neuropathy, complex regional pain syndrome, adhesive capsulitis, rheumatoid arthritis, vertebral crush fractures, spondylitis, tumor metastasis, cancer pain, migraine, Paget s disease of bone as well as post-operative pain. An ideal treatment with an optimal efficacy, safety and convenience profile is not available for the musculoskeletal pain associated with such conditions as osteoporosis and osteoarthritis. This review of the literature highlights the clear unmet medical need that could be addressed by Emisphere s oral salmon calcitonin product.

Phase I Programs

Emisphere also has several products in Phase I and a number of pre-clinical (research stage) projects. Some of the pre-clinical projects are partnered others are Emisphere-initiated.

Novartis conducted a Phase I study in postmenopausal women to determine the safety and tolerability of oral PTH 1-34, a combination of human PTH 1-34 and Emisphere s delivery agent 5-CNAC, for the treatment of postmenopausal osteoporosis. The study is designed to assess the bioavailability profile of increasing doses of PTH 1-34 combined with different amounts of 5-CNAC administered orally. Study results demonstrating that a single dose of the novel oral parathyroid hormone PTH 1-34, which utilizes Emisphere s proprietary Eligen® Drug Delivery Technology and absorption-enhancing carrier molecule 5-CNAC, achieved potentially therapeutically relevant exposure and safety profiles similar to those of the currently available injectable formulation in healthy postmenopausal women. The results, from a single-center, partially-blinded, incomplete cross-over study conducted by Emisphere s partner Novartis, were presented October 19, 2009 in a poster session at the 73rd Annual Scientific

Meeting of the American College of Rheumatology in Philadelphia. This study, designed to assess the exposure and safety of orally administered doses of PTH1-34 and different amounts of the absorption enhancer 5-CNAC was conducted in 32 healthy postmenopausal women. The subjects were randomized to receive a single dose of placebo, 20 mcg of subcutaneously injected parathyroid

Table of Contents

hormone PTH1-34 (FORTEO®), or one of several orally administered doses of PTH1-34 formulated with either 100 or 200 mg of Emisphere s absorption-enhancer 5-CNAC. While all doses of oral PTH1-34 were rapidly absorbed and showed appreciable blood concentrations in a dose-dependent manner, the 2.5 and 5 mg doses of oral PTH1-34 containing 200 mg 5-CNAC achieved exposure levels closest to those of 20 mcg injectable PTH1-34, with a comparable incidence of adverse events. Ionized calcium remained within normal limits in all treatment groups. The results of this study indicate we may be able to provide women with postmenopausal osteoporosis a more convenient oral option for parathyroid hormone therapy, which is now available only as an injection. There were no serious adverse events in the study. Nine participants withdrew from the study due to treatment-related AEs. Of those, five (one on placebo, one on FORTEO® and three on either 2.5 or 5 mg PTH1-34) withdrew because of symptomatic hypotension. Three patients on either 2.5 or 5 mg PTH1-34 withdrew because of delayed vomiting. One patient on 2.5mg PTH1-34 (100 mg 5-CNAC) withdrew because of symptomatic, but unconfirmed, hypercalcemia. PTH is produced by the parathyroid glands to regulate the amount of calcium and phosphorus in the body. When used therapeutically, it increases bone density and bone strength to help prevent fractures. It is approved to treat osteoporosis, a disease associated with a gradual thinning and weakening of the bones that occurs most frequently in women after menopause. Untreated postmenopausal osteoporosis can lead to chronic back pain, disabling fractures, and lost mobility.

Novartis has also conducted Phase I studies with oral salmon calcitonin. During September 2009, Novartis and its partner, Nordic Bioscience, issued study results in which twice-daily oral salmon calcitonin using Emisphere s proprietary Eligen® Drug Delivery Technology significantly suppressed markers of cartilage and bone degradation versus placebo in men and women with osteoarthritis, the most common form of arthritis. The study, a Phase I, placebo-controlled, double-blind, double-dummy, randomized, gender-stratified clinical trial, was conducted on behalf of Emisphere s partner Novartis by Nordic Bioscience, and published online in the September 2009 issue of *Osteoarthritis and Cartilage*. A total of 73 male and female subjects aged 57 to 75 years with painful osteoarthritis of the knee received twice-daily 0.6 mg or 0.8 mg doses of oral salmon calcitonin with the Eligen® Technology or placebo administered over 14 days. Doses of 0.8mg compared with 0.6mg produced significantly higher Cmax and AUC(0-4 hrs), of calcitonin, P=0.03. This resulted in significant reductions in CTX-I and CTX-II which are biochemical markers of bone degradation and of cartilage degradation, respectively. Gender had no observable influence on results. Oral sCT doses were well tolerated; 44 adverse events and no serious adverse events were reported in this study. For further details please consult the original publication which is available online (Karsdal MA et al; The effect of oral salmon calcitonin delivered with 5-CNAC on bone and cartilage degradation in osteoarthritic patients: a 14-day randomized study; *Osteoarthritis and Cartilage*; available online September 1, 2009). Emerging data continue to indicate oral salmon calcitonin in combination with the Company s absorption-enhancing Eligen® Technology may be a potential therapeutic option for women and men with osteoarthritis, which affects more than 20 million people in the United States.

A study conducted by Novartis and Nordic Bioscience published in the December 2008 issue of BMC Clinical Pharmacology demonstrated that orally administered salmon calcitonin using Emisphere s carrier, (5-CNAC) an Eligen® oral delivery technology, is effective in reducing bone breakdown. The randomized, double-blind, double-dummy, placebo-controlled study among 81 subjects in Copenhagen was conducted on behalf of Emisphere s partner Novartis by Nordic Bioscience by M.A. Karsdal, I. Byrjalsen, B.J. Riis and C. Christiansen. The study suggests that orally administered 0.8 mg of salmon calcitonin was effective in suppression of Serum CTX irrespective of time of dosing. Serum CTX-1 (Serum C-terminal telo-peptide of collagen type I) is the biochemical marker used to measure bone resorption. There were no safety concerns with the salmon calcitonin oral formulation using Emisphere s carrier 5-CNAC, which had been previously demonstrated in earlier studies.

A study conducted by Novartis and Nordic Bioscience published in the October 2008 issue of *BMC Clinical Pharmacology* demonstrated that oral salmon calcitonin using Emisphere s proprietary Eligen® Technology taken 30 to 60 minutes before meals with 50 ml of water results in improved absorption and improved efficacy measured by the

biomarker of reduced bone resorption (sCTX-I) compared to the commonly

Table of Contents

prescribed nasal formulation. The study was a randomized, partially-blind, placebo-controlled, single-dose exploratory crossover clinical trial conducted with 56 healthy postmenopausal women.

For the treatment of Diabetes, research using the Eligen® Technology and GLP-1 (Glucagon-Like Peptide-1) , a potential treatment for Type 2 Diabetes is being conducted by Novo Nordisk A/S (Novo Nordisk) and by Dr. Christoph Beglinger, M.D., of the Clinical Research Center, Department of Biomedicine Division of Gastroenterology, and Department of Clinical Pharmacology and Toxicology at University Hospital in Basel, Switzerland. We had previously conducted extensive tests on oral insulin for Type 1 Diabetes and concluded that a more productive pathway is to move forward with GLP-1 and its analogs, an oral form of which might be used to treat Type 2 Diabetes and related conditions. Our research indicated that the development of oral formulations of Novo Nordisk proprietary GLP-1 receptor agonists may represent an opportunity for Emisphere. Consequently, on June 21, 2008 we entered into an exclusive Development and License Agreement with Novo Nordisk focused on the development of oral formulations of Novo Nordisk s proprietary GLP-1 receptor agonists. Under such Agreement Emisphere could receive more than $87 million in contingent product development and sales milestone payments including a $10 million non-refundable license fee which was received during June 2008. Emisphere would also be entitled to receive royalties in the event Novo Nordisk commercializes products developed under such Agreement. Under the terms of the Agreement, Novo Nordisk is responsible for the development and commercialization of the products. Initially Novo Nordisk is focusing on the development of oral formulations of its proprietary GLP-1 receptor agonists.

During January 2010, we announced that Novo Nordisk had initiated its first Phase I clinical trial with a long-acting oral GLP-1 analogue (NN9924). This milestone released a $2 million payment to Emisphere, whose proprietary Eligen® Technology is used in the formulation of NN9924. GLP-1 is a natural hormone involved in controlling blood sugar levels. It stimulates the release of insulin only when blood sugar levels become too high. GLP-1 secretion is often impaired in people with Type 2 Diabetes. The aim of this trial, which is being conducted in the UK, is to investigate the safety, tolerability and bioavailability of NN9924 in healthy volunteers. The trial will enroll approximately 155 individuals and results from the trial are expected in 2011. There are many challenges in developing an oral formulation of GLP-1, in particular obtaining adequate bioavailability. NN9924 addresses some of these key challenges by utilizing Emisphere s Eligen® Technology to facilitate absorption from the gastrointestinal tract.

Genta released final results from the Company s Phase I clinical trial of G4544, a new tablet formulation of a proprietary small molecule intended as a treatment for diseases associated with accelerated bone loss using Emisphere s Eligen® Technology. Results showed that the drug was very well-tolerated, and that blood levels were achieved in a range that is known to be clinically bioactive. The data were featured in a poster session at the Annual meeting of the American Society of Clinical Oncology (ASCO) in Chicago during May 2008.

Preclinical Programs

Our preclinical programs focus on the development of oral formulations of potentially new treatments for Diabetes and products in the areas of cardiovascular and pain and on the development and potential expansion of nutritional supplement products.

An early stage human study of an oral formulation that combines PYY and native GLP-1 with Emisphere s proprietary delivery agent known as SNAC was conducted at University Hospital in Basel, Switzerland by Professor Beglinger. The study demonstrated the oral delivery of the GLP-1 peptide was safe and effective and that the oral formulation of GLP-1 stimulated an early increase in fasting insulin and a decrease in fasting glucose as compared to placebo.

An article published in the September 2009 issue of *Clinical Pharmacology and Therapeutics*, describes previously reported findings of an independent clinical study designed to assess the pharmacokinetics, pharmacodynamics (PK/PD) and safety of oral administration of the peptide GLP-1 utilizing Emisphere s Eligen® carrier technology. The study was conducted at the University Hospital in Basel, Switzerland by Professor Beglinger. The paper, titled Orally Administered Glucagon-Like Peptide-1 Affects Glucose Homeostasis Following an Oral Glucose Tolerance Test in Healthy Male Subjects, was published by Steinert,

Table of Contents

et.al. Publication of this data in a prominent peer reviewed journal underscores the potential of the Eligen® Technology to transform oral peptide delivery. Specifically, the data further supports the concept of the potential advantages of utilizing GLP-1 and similar molecules as therapeutic agents in the treatment of Type 2 Diabetes. As described in the publication, a randomized, double-blind, placebo-controlled, two-way crossover trial was conducted in 16 healthy male subjects between the ages of 20 and 43. The study was designed to investigate the PK/PD effects of a single dose (2 mg) of oral GLP-1 formulated with Emisphere s Sodium N-[8-(2-hydroxybenzoyl) Amino] Caprylate (SNAC) carrier (150 mg) administered 15 minutes prior to an oral glucose tolerance test. The published data show that the orally administered peptide, when administered with Emisphere s SNAC® carrier, is rapidly absorbed from the gastrointestinal tract, leading to tenfold higher plasma concentrations compared to control. The pharmacodynamic effects were consistent with the known pharmacology of GLP-1, resulting in significantly increased basal insulin release (P< 0.027), and marked effects on glucose levels. The postprandial glucose peak was delayed with GLP-1, suggesting an effect on gastric emptying. No adverse events were reported.

During May 2009 the Company announced data from a clinical study conducted by Dr. Beglinger designed to assess the effect of oral administration of two peptides, GLP-1 and PYY3-36, utilizing Emisphere s Eligen® Technology on appetite suppression. The randomized, double-blind, placebo-controlled trial was conducted in 16 normal weight males between the ages of 18 and 40. The study was designed to investigate the effects of orally administered GLP-1 and PYY3-36 formulated with Emisphere s Sodium N-[8-(2-hydroxybenzoyl) Amino] Caprylate (SNAC) carrier and their potential effect in the control of food intake and satiety. Prior studies have shown the ability of both peptides to reduce appetite and food consumption in healthy subjects and in patients with obesity. The study concluded that these orally administered peptides, when delivered with Emisphere s SNAC carrier, were rapidly absorbed from the gastrointestinal tract, leading to concentrations several times higher than endogenous hormone levels achieved after a standard test meal. Specifically, results showed that oral GLP-1 (2 mg tablet) alone and the combination of oral GLP-1 (2 mg tablet) plus PYY3-36 (1 mg tablet) induced a significant reduction in calorie intake although there was no synergistic effect when the two peptides were used in combination. Oral PYY3-36 at a 1 mg dose by itself, did not significantly reduce calorie intake. Oral GLP-1 (2 mg tablet) and oral PYY3-36 (1 mg tablet) were both shown to induce a rapid increase in plasma GLP-1 concentrations and plasma PYY concentrations, respectively. This new data represents further evidence of the ability of the Eligen® Technology, and the SNAC carrier, to enhance oral absorption of peptides which normally exhibit low oral bioavailability. In this case, GLP-1 alone, and the combination of the two peptides together, were able to cross the gastrointestinal tract into the bloodstream in high enough concentrations to significantly affect appetite.

In October 2008, Professor Beglinger published the results of another study assessing the oral delivery of GLP-1 and PYY3-36 using Emisphere s proprietary delivery technology. The study was conducted at University Hospital in Basel, Switzerland and showed, for the first time, that satiety peptides such as GLP-1 and PYY3-36 can be delivered orally in humans with safety and efficiency. The study, conducted in 12 healthy subjects, was designed to establish the pharmacokinetics and pharmacodynamics of increasing oral doses of GLP-1 and PYY3-36. Emisphere s delivery agent, known as SNAC, was formulated as a tablet with GLP-1 or PYY3-36. Both oral GLP-1 and PYY3-36 induce rapid and dose-dependent increases in plasma drug concentrations; GLP-1 induces a relevant insulin release; and, both peptides suppressed ghrelin secretion in healthy male volunteers. This clinical study of the compound confirms Professor Beglinger s earlier results that SNAC allows for rapid oral absorption of GLP-1 or PYY3-36. The study results were published in the October 2008 issue of Clinical Pharmacology & Therapeutics.

Intravenous or subcutaneous applications of GLP-1 are cumbersome and impractical for chronic treatment regimens. Current oral application of peptides is ineffective because peptides have a low oral bioavailability due to their molecular size and physico-chemical characteristics. Professor Beglinger s studies show that Emisphere s Eligen® Technology can overcome some of these oral delivery issues safely and efficiently.

During June 2009 the Company entered into a research agreement with Syracuse University to combine Emisphere s proprietary Eligen® Technology with a new oral drug delivery system developed in the laboratory of Robert Doyle, Assistant Professor of Chemistry in Syracuse University s College of Arts and Sciences. The experiments will test whether the combination of Eligen® and Doyle s oral drug delivery technology will

Table of Contents

enhance the absorption of an appetite-suppressing hormone. Dr. Doyle and his colleagues have successfully developed innovative methods for the oral delivery of both proteins and peptides using novel methods. There may be significant potential for innovation in this partnership and an opportunity for further expansion for the use of the Eligen® Technology in the drug delivery arena. Researchers in Doyle s lab are trying to find a way to create an appetite-suppressing drug using PYY that can be taken orally rather than by injection. PYY is a hormone that is released by the cells lining the small intestine after people eat, which signals feelings of fullness. Recent research has shown that the higher the level of PYY in the bloodstream, the greater the feeling of fullness. The Eligen® Technology platform has shown great promise for improving the body s ability to absorb both small and large molecule drugs. Dr. Doyle and his colleagues at Syracuse University are interested in assessing its ability to overcome the limited natural absorption of their vitamin based carrier to achieve significant advancements in oral protein/peptide delivery.

Our other product candidates in development are in earlier or preclinical research phases, and we continue to assess them for their compatibility with our technology and market need. Our intent is to seek partnerships with pharmaceutical and biotechnology companies for certain of these products as we continue to expand our pipeline with product candidates that demonstrate significant opportunities for growth. Our focus is on molecules that meet the criteria for success based on our increased understanding of our Eligen® Technology.

Business Financing

Since our inception in 1986, we have generated significant losses from operations. However, during 2009 we introduced our first commercial product and anticipate introducing our second commercial product during 2010. Although we cannot assure the commercial success of these products, at some point in the future, potential combined sales or partnerships may generate sufficient net proceeds to offset a part of continuing losses from operations for the foreseeable future. As of December 31, 2009, our accumulated deficit was approximately $436.7 million. Our loss from operations was $14.6 million, $26.3 million and $20.7 million for the years ended December 31, 2009, 2008 and 2007, respectively. Our net loss was $21.2 million, $24.4 million and $16.9 million for the years ended December 31, 2009, 2008 and 2007, respectively. Our net cash outlays from operations and capital expenditures were $11.9 million, $6.8 million and $14.7 million for the years ended December 31, 2009, 2008 and 2007, respectively. Net cash outlays for 2008 include $11.3 million receipts of deferred revenue and 2007 included $11.9 million receipts from the settlement of lawsuit. Our stockholders deficit was $47.9 million, $37.0 million and $13.7 million as of December 31, 2009, 2008 and 2007, respectively. On December 1, 2004 we issued a $10 million convertible note (the Novartis Note) to Novartis in connection with a research collaboration option relating to the development of PTH-1-34. The Novartis Note was originally due December 1, 2009. On November 27, 2009, Novartis agreed to extend the maturity date of the Novartis Note to February 26, 2010. Subsequently, on February 23, 2010, Novartis agreed to further extend the maturity date of the Novartis Note to May 26, 2010.

We have limited capital resources and operations to date have been funded with the proceeds from collaborative research agreements, public and private equity and debt financings and income earned on investments. We anticipate that our existing capital resources will enable us to continue operations through approximately June 2010 or earlier if unforeseen events or circumstances arise that negatively affect our liquidity. While our plan is to raise capital when needed and/or to pursue partnering opportunities, we cannot be sure that our plans will be successful. These conditions raise substantial doubt about our ability to continue as a going concern. The audit reports prepared by our independent registered public accounting firms relating to our financial statements for the years ended December 31, 2009, 2008 and 2007 include an explanatory paragraph expressing the substantial doubt about our ability to continue as a going concern.

If we are successful in raising additional capital to continue operations, our business will still require substantial additional investment that we have not yet secured. Further, we will not have sufficient resources to fully develop new products or technologies unless we are able to raise substantial additional financing on acceptable terms or secure

funds from new or existing partners. We cannot assure you that financing will be available on favorable terms or at all. See Item 1A-Risk Factors.

Table of Contents

Overview of Drug Delivery Industry

The drug delivery industry develops technologies for the improved administration of therapeutic molecules with the goal of expanding markets for existing products and extending drug franchises. Drug delivery companies also seek to develop products on their own that would be patent-protected by applying proprietary technologies to off-patent pharmaceutical products. Primarily, drug delivery technologies are focused on improving safety, efficacy, ease of patient use and/or patient compliance. Pharmaceutical and biotechnology companies consider improved drug delivery as a means of gaining competitive advantage over their peers.

Therapeutic macromolecules, of which proteins are the largest sub-class, are prime targets for the drug delivery industry for a number of reasons. Most therapeutic macromolecules must currently be administered by injection (most common) or other device such as an inhaler or nasal spray system. Many of these compounds address large markets for which there is an established medical need. These drugs are widely used, as physicians are familiar with them and accustomed to prescribing them. Therapeutic macromolecules could be significantly enhanced through alternative delivery. These medicines are comprised of proteins and other large or highly charged molecules (carbohydrates, peptides, ribonucleic acids) that, if orally administered using traditional oral delivery methods, would degrade in the stomach or intestine before they are absorbed into the bloodstream. Also, these molecules are typically not absorbed following oral administration due to their poor permeability. Therefore, the vast majority are administered parenterally. However, for many reasons, parenteral administration is undesirable, including patient discomfort, inconvenience and risk of infection. Poor patient acceptance of parenteral therapies can lead to medical complications. In addition, parenteral therapies can often require incremental costs associated with administration in hospitals or doctors offices.

Previously published research indicates that patient acceptance of and adherence to a dosing regimen is higher for orally delivered medications than it is for non-orally delivered medications. Our business strategy is partly based upon our belief that the development of an efficient and safe oral delivery system for therapeutic macromolecules represents a significant commercial opportunity. We believe that more patients will take orally delivered drugs more often, spurring market expansion.

Leading Current Approaches to Drug Delivery

Transdermal (via the skin) and Needleless Injection

The size of most macromolecules makes penetration into or through the skin inefficient or ineffective. Some peptides and proteins can be transported across the skin barrier into the bloodstream using high-pressure needleless injection devices. Needleless devices, which inject proteins through the skin into the body, have been in development for many years. We believe these devices have not been well accepted due to patient discomfort, relatively high cost, and the inconvenience of placing the drugs into the device.

Nasal (via the nose)

The nasal route (through the membranes of the nasal passage) of drug administration has been limited by low and variable bioavailability for proteins and peptides. As a result, penetration enhancers often are used with nasal delivery to increase bioavailability. These enhancers may cause local irritation to the nasal tissue and may result in safety concerns with long-term use. A limited number of peptides delivered nasally have been approved for marketing in the U.S. including MIACALCIN®, developed by Novartis as an osteoporosis therapy, a therapeutic area we have targeted.

Pulmonary (via the lung)

Pulmonary delivery (through the membranes of the lungs) of drugs is emerging as a delivery route for large molecules. Although local delivery of respiratory drugs to the lungs is common, the systemic delivery (i.e., delivery of the drugs to the peripheral vasculature) of macromolecular drugs is less common because it requires new formulations and delivery technologies to achieve efficient, safe and reproducible dosing. Only one protein using pulmonary delivery has been approved for marketing in the U.S., which is EXUBERA®, an

Table of Contents

insulin product developed by Pfizer and Nektar, as a Diabetes therapy, a therapeutic area we have targeted. However after market acceptance of EXUBERA® was demonstrated to be limited, Pfizer withdrew from further commercialization of, and terminated its license with Nektar for EXUBERA®.

Intraoral (via the membranes in the mouth)

Intraoral delivery is also emerging as a delivery route for large molecules. Buccal delivery (through the membrane of the cheek) and sublingual delivery (through the membrane under the tongue) are forms of intraoral delivery. Some Vitamin B12 manufactures sell and distribute sublingual versions of their product.

Oral (via the mouth)

We believe that the oral method of administration is the most patient-friendly option, in that it offers convenience, is a familiar method of administration that enables increased compliance and, for some therapies, may be considered the most physiologically appropriate. We, and other drug delivery and pharmaceutical companies, have developed or are developing technologies for oral delivery of drugs. We believe that our Eligen® Technology provides an important competitive advantage in the oral route of administration because it does not alter the chemical composition of the therapeutic macromolecules. We have conducted over 140,000 human dosings and have witnessed no serious adverse events that can be attributed to the EMISPHERE® delivery agents dosed or the mechanism of action of the Eligen® Technology.

In general, we believe that oral administration will be preferred to other methods of administration. However, such preference may be offset by possible negative attributes of orally administered drugs such as the quantity or frequency of the dosage, the physical size of the capsule or tablet being swallowed or the taste. For example, in our previous Phase III trial with heparin as an oral liquid formulation, patient compliance was hindered by patients distaste for the liquid being administered. In addition, patients and the marketplace will more likely respond favorably to improvements in absorption, efficacy, safety, or other attributes of therapeutic molecules. It is possible that greater convenience alone may not lead to success.

The Eligen® Technology

The Eligen® Technology is a broadly applicable proprietary oral drug delivery technology based on the use of proprietary synthetic chemical compounds known as EMISPHERE® delivery agents, or carriers. These delivery agents facilitate and enable the transport of therapeutic macromolecules (such as proteins, peptides, and polysaccharides) and poorly absorbed small molecules across biological membranes targeted in the stomach; enabling the therapeutic molecules to exert their desired pharmacological effect. The delivery agents have no known pharmacological activity themselves at the intended clinical dose levels. Emisphere s Eligen® Technology makes it possible to deliver therapeutic molecules orally without altering their chemical form or biological integrity.

Proposed Delivery Agent Mechanism

The Eligen® Technology facilitates absorption in the stomach and takes place through a transcellular, not paracellular, pathway. This underscores the safety of Eligen® as the passage of the Eligen® carrier and the molecule preserve the integrity of the tight junctions within the cell and reduces any likelihood of inflammatory processes and autoimmune gastrointestinal diseases. Furthermore, because Eligen® Technology carriers are rapidly absorbed, metabolized and eliminated from the body; they do not accumulate in the organs and tissues and are considered safe at anticipated dose and dosing regimens.

Drug molecules exist in many different shapes, or conformations. Some conformations can be transported across the cell membranes while others are too large or too charged to do so. The Eligen® Technology uses the body s natural passive transcellular transport process to enable large or highly charged molecules to cross cell membranes. Once the drug molecule crosses the membrane, the EMISPHERE® delivery agent dissociates from the drug molecule, which then reestablishes its natural conformation and returns to its therapeutically active state. Studies have shown that this process does not involve chemical modification of the drug molecule and the integrity of cell membrane and cytoskeletal structure are maintained.

Table of Contents

We have designed and synthesized a library of approximately 4,000 delivery agents and continue to evaluate our delivery agents for their ability to facilitate the delivery of therapeutic macromolecules across biological membranes.

Ongoing Collaborative Agreements

We are a party to certain collaborative agreements with corporate partners to provide development and commercialization services relating to the products under collaboration. These agreements are in the form of research and development collaborations and licensing agreements. Under these agreements, we have granted licenses or the rights to obtain licenses to our oral drug delivery technology. In return, we are entitled to receive certain payments upon the achievement of milestones and royalties on the sales of the products should a product ultimately be commercialized. We also are entitled to be reimbursed for certain research and development costs that we incur.

All of our collaborative agreements are subject to termination by our corporate partners, without significant financial penalty to them. Under the terms of these agreements, upon a termination we are entitled to reacquire all rights in our technology at no cost and are free to re-license the technology to other collaborative partners.

Novartis Pharma AG Oral Salmon Calcitonin (sCT) Program for Osteoporosis and Osteoarthritis

During December 2009, the Company announced that an independent Data Monitoring Committee (DMC) informed Novartis and its partner Nordic Bioscience about their recommendation to proceed with the Osteoporosis Phase III Study 2303 and the Osteoarthritis Phase III Study 2301 exploring the safety and efficacy of an oral formulation of salmon calcitonin to treat patients with osteoporosis and osteoarthritis of the knee. This recommendation is based on a futility analysis of one-year data for all patients enrolled in the study for 12 months and includes both an assessment of safety and efficacy parameters. Based on this interim analysis, the DMC is of the opinion that there are no major or unexpected safety concerns and recommended proceeding with the studies to evaluate the efficacy and safety profile of oral calcitonin at two years as planned.

Within the various Phase III trials with Novartis, over 5,500 patients are using the Eligen® Technology during 2010.

To date, we have received $12.4 million in payments from Novartis under the sCT programs. Under the terms of the sCT agreement, we may receive up to $5 million in additional milestone payments, as well as royalties based on sales.

Osteoporosis

In December 1997, we entered into a collaboration agreement with Novartis to develop an oral form of sCT, currently used to treat osteoporosis. sCT is a hormone that inhibits the bone-tissue resorbing activity of specialized bone cells called osteoclasts, enabling the bone to retain more of its mass and functionality. sCT has demonstrated efficacy in increasing lumbar spine bone mineral density and in reducing vertebral fractures. sCT is estimated to be about 30 times more potent than the human version. Synthetic sCT, which is identical to the naturally occurring one, currently is available only as a nasal spray or injectable therapy. Novartis markets synthetic sCT in the U.S. as MIACALCIN® nasal spray, which is indicated for the treatment of post-menopausal osteoporosis in women greater than five years post menopause with low bone mass.

Treatment with sCT has been shown to increase bone mineral density in the spine and reduce the risk of new vertebral fractures in post-menopausal women with osteoporosis. It is also used to treat Paget s disease, a disease that results in, among other things, bone pain and breakdown. In its nasal spray forms, it is believed that sCT s major advantages are its efficacy resulting from a lack of serious side effects, excellent long-term safety profile and ease of administration. Some studies even suggest that sCT produces an analgesic effect. Worldwide market sales for products to treat osteoporosis are forecasted to reach $10.4 billion by 2011, from approximately $5.0 billion in 2003.

Table of Contents

In February 2003, we announced favorable results of a Phase IIa study conducted by Novartis evaluating the performance in post-menopausal women of an oral tablet form of sCT. The purpose of the study was to assess the efficacy and safety of various doses of an oral tablet of sCT in post-menopausal women and to confirm the activity of sCT when given orally, as reflected by changes in markers of bone formation or resorption. Oral sCT was dosed for 90 days in the study, the longest time period that the Eligen® Technology has been dosed in human testing. The study demonstrated activity on bone markers over a three month dosing period when the peptide was delivered in combination with the EMISPHERE® delivery agent. Only two serious adverse events were reported, neither of which were related to the EMISPHERE® delivery agent or to sCT. The side effects (mainly gastrointestinal in nature) seen with the highest doses of sCT were consistent with those normally seen with high plasma levels of sCT when administered by injection. These results were presented by Novartis at the American Society of Bone and Mineral Research in September of 2003.

The randomized, double-blind, placebo-controlled, parallel study was conducted for three months in OA patients to assess the efficacy of this novel form of sCT in patients suffering from knee OA. Patients received daily either a placebo (n=16), 0.5 mg of oral sCT (n=17) or 1 mg of oral sCT (n=18).

In February 2007, Novartis and its development partner Nordic Bioscience notified us of the initiation of a Phase III clinical trial for the treatment of osteoporosis with an oral form of salmon calcitonin (referred to as SMC021), a new drug candidate, using the Company s Eligen® Technology. The Phase III program that started in 2007 is a three year trial with enrollment of over 4,500 patients completed in June 2008. The study is exploring the safety and efficacy of salmon calcitonin and Emisphere s proprietary Eligen® Technology in the treatment of vertebral fractures in postmenopausal women aged 60-80 with osteoporosis. It will be conducted in North and South America, Europe and Asia. This product candidate, if successful, will meet an unmet market need, with oral calcitonin expected to offer a safe, effective, and convenient alternative to existing therapies.

A study conducted by Novartis and its partner Nordic Bioscience published in the December 2008 issue of *BMC Clinical Pharmacology* demonstrated that orally administered salmon calcitonin using Emisphere s carrier, (5-CNAC) an Eligen® oral delivery technology, is effective in reducing bone breakdown. The randomized, double-blind, double-dummy, placebo-controlled study among 81 subjects in Copenhagen was conducted on behalf of Emisphere s partner Novartis Pharma AG by Nordic Bioscience by M.A. Karsdal, I. Byrjalsen, B.J. Riis and C. Christiansen. The study suggests that orally administered 0.8 mg of salmon calcitonin was effective in suppression of Serum CTX irrespective of time of dosing. Serum CTX-1 (Serum C-terminal telo-peptide of collagen type I) is the biochemical marker used to measure bone resorption. There were no safety concerns with the salmon calcitonin oral formulation using Emisphere s carrier 5-CNAC, which had been previously demonstrated in earlier studies.

A study conducted by Novartis and its partner Nordic Bioscience published in the October 2008 issue of *BMC Clinical Pharmacology* demonstrated that oral salmon calcitonin using Emisphere s proprietary Eligen® Technology taken 30 to 60 minutes before meals with 50 ml of water results in improved absorption and improved efficacy measured by the biomarker of reduced bone resorption (sCTX-I) compared to the commonly prescribed nasal formulation. The study was a randomized, partially-blind, placebo-controlled, single-dose exploratory crossover clinical trial using 56 healthy postmenopausal women.

According to the National Osteoporosis Foundation, 10 million people in the U.S. are estimated to have the disease with 34 million more estimated to have low bone mass and are, therefore, at risk. If successful, this product candidate for the treatment of osteoporosis would satisfy an unmet market need, with oral salmon calcitonin expected to offer a safe, effective, and convenient alternative to existing therapies.

Under the sCT agreements, Novartis has an option to an exclusive worldwide license to develop in conjunction with us, make, have made, use and sell products developed under this program. Novartis also had the right to exercise an

option to commence a research collaboration with us on a second compound under this agreement. Novartis rights to certain specified financial terms concerning a license of a second compound have since expired. We have no payment obligations with respect to this program; we are, however, obligated to collaborate with Novartis by providing access to our technology that is relevant to this program. We are also obligated to help to manage this program through a joint steering committee with Novartis.

Table of Contents

Osteoarthritis

On a parallel track, Novartis is also pursuing an osteoarthritis indication for salmon calcitonin. Approximately 21 million patients are managed for osteoarthritis in the U.S. alone, and that number is expected to increase as the baby boomer generation continues to age. Osteoarthritis (OA) is a clinical syndrome in which low-grade inflammation results in joint pain, caused by a wearing-away of cartilage that cushions the joints and the destruction or decrease of synovial fluid that lubricates those joints. As OA progresses, pain can result when the patient bears weight upon the joints, including walking and standing. OA is the most common form of arthritis, and affects nearly 21 million people in the U.S., accounting for 25% of visits to primary care physicians, and half of all non-steroidal anti-inflammatory drug prescriptions. It is estimated that 80% of the population will have radiographic evidence of OA by age 65.

Novartis is engaged in two, simultaneous Phase III trials for salmon calcitonin in the treatment of osteoarthritis. During September 2008, Novartis and Nordic Bioscience completed recruitment for a multi-center Phase III study exploring the safety and efficacy of an oral formulation of salmon calcitonin using Emisphere s proprietary Eligen® Technology to treat patients with osteoarthritis of the knee. This study, which will be used to support the filing with health authorities worldwide, includes more than 1,100 patients between 51 and 80 years old with a medical history and symptoms of knee osteoarthritis. The study will be conducted mainly in Europe and is estimated to be completed during second half 2010.

During October 2008, Novartis and Nordic Bioscience initiated a second multi-center Phase III study exploring the safety and efficacy of an oral formulation of salmon calcitonin using Emisphere s proprietary Eligen® Technology to treat patients with osteoarthritis of the knee. This second study, designed to meet FDA requirements for U.S. registration, will examine patients between 51 and 80 years old suffering from painful symptoms of knee osteoarthritis. The study will be conducted in multiple sites, including the U.S. Enrollment is scheduled to be completed during 2009 with an estimated completion during the second half of 2011.

During September 2009, Novartis and its partner, Nordic Bioscience, issued study results in which twice-daily oral salmon calcitonin using Emisphere s proprietary Eligen® Technology significantly suppressed markers of cartilage and bone degradation versus placebo in men and women with osteoarthritis, the most common form of arthritis. The study, a Phase I, placebo-controlled, double-blind, double-dummy, randomized, gender-stratified clinical trial, was conducted on behalf of Emisphere s partner Novartis Pharma AG by Nordic Bioscience, and published online in the September 2009 issue of *Osteoarthritis and Cartilage*. A total of 73 male and female subjects aged 57 to 75 years with painful osteoarthritis of the knee received twice-daily 0.6 mg or 0.8 mg doses of oral salmon calcitonin with the Eligen® Technology or placebo administered over 14 days. Doses of 0.8mg compared with 0.6mg produced significantly higher Cmax and AUC(0-4 hrs), of calcitonin, P=0.03. This resulted in significant reductions in CTX-I and CTX-II which are biochemical markers of bone degradation and of cartilage degradation, respectively. Gender had no observable influence on results. Oral sCT doses were well tolerated; 44 adverse events and no serious adverse events were reported in this study. For further details please consult the original publication which is available online (Karsdal MA et al; The effect of oral salmon calcitonin delivered with 5-CNAC on bone and cartilage degradation in osteoarthritic patients: a 14-day randomized study; *Osteoarthritis and Cartilage*; available online September 1, 2009). Emerging data continue to indicate oral salmon calcitonin in combination with the Company s absorption-enhancing Eligen® Technology may be a potential therapeutic option for women and men with osteoarthritis, which affects more than 20 million people in the United States.

In December 2005, we announced positive clinical data generated by Drs. Daniel Manicourt and Jean-Pierre Devogelaer from the Department of Rheumatology at the University Hospital St-Luc, Universite Catholique de Louvain, Brussels, Belgium. The results of this study, which evaluated oral salmon calcitonin supplied by Novartis using our Eligen® Technology in treating osteoarthritis (OA) were presented at the 10th World Congress of the Osteoarthritis Research Society International in Boston, MA. Results of this study suggest that oral sCT (enabled by

our proprietary Eligen® Technology licensed to Novartis for use with sCT) exhibits not only clinical efficacy but also reduces the levels of several biochemical markers of joint metabolism, which all have been shown to have a pejorative prognostic value of the OA disease process in longitudinal studies including large cohorts of patients.

Table of Contents

Assuming a successful outcome of the Phase III program, this product candidate will also fulfill a substantial unmet medical need. Pre-clinical and Phase II data indicate that oral salmon calcitonin could become the first disease modifying osteoarthritis drug.

Other Potential Applications of Salmon Calcitonin (sCT)

During December 2009, the Company announced a meta-analysis published in the December 2009 edition of Rheumatology Reports examining independent evidence of the analgesic action of the hormone calcitonin. This publication restated the potential of calcitonin in filling a significant unmet need for alternative treatments for persistent musculoskeletal pain. Scientists from Nordic Bioscience were involved in the preparation of this meta-analysis. Non-malignant musculoskeletal pain is the most common clinical symptom that causes patients to seek medical attention and is a major cause of disability in the world. Musculoskeletal pain can arise from a variety of common conditions including osteoarthritis, rheumatoid arthritis, osteoporosis, surgery, low back pain and bone fracture. The meta-analysis, conducted by researchers at the Center for Sensory-Motor Interaction in the Department of Health Science and Technology at Aalborg University in Denmark, examined independent pre-clinical and clinical studies spanning nearly 45 years of the possible intrinsic analgesic properties of calcitonin, with special focus on the challenges in the musculoskeletal system. The authors concluded that well-designed clinical trials should be conducted to further validate evidence of calcitonin s analgesic action and its promising potential role in the management of musculoskeletal pain. The effects of calcitonin on clinical pain conditions have received increasing attention in the past decades, although a consensus on mechanism-of-action and potential indications has not been reached. The analgesic activity of oral salmon calcitonin has been shown in several controlled prospective double-blind studies; besides pain management in osteoporosis, calcitonin has shown analgesic action in painful conditions such as phantom limb pain, diabetic neuropathy, complex regional pain syndrome, adhesive capsulitis, rheumatoid arthritis, vertebral crush fractures, spondylitis, tumor metastasis, cancer pain, migraine, Paget s disease of bone as well as post-operative pain. An ideal treatment with an optimal efficacy, safety and convenience profile is not available for the musculoskeletal pain associated with such conditions as osteoporosis and osteoarthritis. This review of the literature highlights the clear unmet medical need that could be addressed by Emisphere s oral salmon calcitonin product.

Novartis Pharma AG Oral PTH-1-34 Program

On December 1, 2004, we entered into a Research Collaboration Option and License Agreement with Novartis whereby Novartis obtained an option to license our existing technology to develop oral forms of PTH-1-34. At the time we entered this new agreement, Novartis also purchased from us a $10 million convertible note (the Novartis Note) which was originally due December 1, 2009 that we may repay, at our option, in either stock or cash. On March 7, 2006, Novartis exercised its option to the license. Based on the terms of the agreement, we may receive milestone payments totaling up to a maximum of $30 million, plus royalties on sales of product developed using our Eligen® Technology. Novartis will fund all necessary pre-clinical, clinical and manufacturing costs for all products. The Novartis Note was originally due December 1, 2009. On November 27, 2009, Novartis agreed to extend the maturity date to February 26, 2010. On February 23, 2010, Novartis agreed to extend the maturity date to May 26, 2010.

Parathyroid hormone continues on a progressive clinical development path in collaboration with Novartis. During June 2008, Novartis launched a Phase I study in postmenopausal women to determine the safety and tolerability of oral PTH-1-34, a combination of human PTH-1-34 and the absorption enhancer 5-CNAC using Emisphere s proprietary Eligen® Technology, for the treatment of postmenopausal osteoporosis. The study is designed to assess the bioavailability profile of increasing doses of PTH-1-34 combined with different amounts of 5-CNAC administered orally. The trial was conducted in Switzerland and its first interpretable results were released during November 2008.

The results of the study demonstrated the achievement of a suitable PK profile of a new oral formulation of Parathyroid Hormone (PTH) using Emisphere s Eligen® Technology. This initial study of 20 healthy postmenopausal female patients aged 40 to 70 years resulted in peak concentrations (Cmax) in the range of those obtained with the commercially available subcutaneous formulation FORTEO (teriparatide). This initial

Table of Contents

trial reported no significant adverse affects, no hypocalcaemia, and no drug-exposure related discontinuation. The plan is to continue the development program. Recombinant PTH, currently approved for the treatment of osteoporosis, is available only by injection. PTH exists naturally in the body; it increases bone density and bone strength to help prevent fractures. It may also be used to treat osteoporosis in patients at high risk of bone fracture.

Novartis also conducted a Phase I study in postmenopausal women to determine the safety and tolerability of oral PTH 1-34, a combination of human PTH 1-34 and Emisphere s delivery agent 5-CNAC, for the treatment of postmenopausal osteoporosis. The study was designed to assess the pharmacokinetic profile of increasing doses of PTH 1-34 combined with different amounts of 5-CNAC administered orally. Study results demonstrated that a single dose of the novel oral parathyroid hormone PTH 1-34, which utilizes Emisphere s proprietary Eligen® Technology and absorption-enhancer carrier molecule 5-CNAC, achieved potentially therapeutically relevant exposure and safety profiles similar to those of the currently available injectable formulation in healthy postmenopausal women. The results from this single-center, partially-blinded, incomplete cross-over study conducted by Emisphere s partner Novartis, were presented October 19, 2009 in a poster session at the 73rd Annual Scientific Meeting of the American College of Rheumatology in Philadelphia. This study, designed to assess the exposure and safety of orally administered doses of PTH1-34 and different amounts of the absorption enhancer 5-CNAC was conducted in 32 healthy postmenopausal women. The subjects were randomized to receive a single dose of placebo, 20 mcg of subcutaneously injected parathyroid hormone PTH1-34 (FORTEO®), or one of several orally administered doses of PTH1-34 formulated with either 100 or 200 mg of Emisphere s absorption-enhancer 5-CNAC. While all doses of oral PTH1-34 were rapidly absorbed and showed appreciable blood concentrations in a dose-dependent manner, the 2.5 and 5 mg doses of oral PTH1-34 containing 200 mg 5-CNAC achieved exposure levels closest to those of 20 mcg injectable PTH1-34, with a comparable incidence of adverse events. Ionized calcium remained within normal limits in all treatment groups. The results of this study indicates we may be able to provide women with postmenopausal osteoporosis a more convenient oral option for parathyroid hormone therapy, which is now available only as an injection. There were no serious adverse events in the study. Nine participants withdrew from the study due to treatment-related AEs. Of those, five (one on placebo, one on FORTEO® and three on either 2.5 or 5 mg PTH1-34) withdrew because of symptomatic hypotension. Three patients on either 2.5 or 5 mg PTH1-34 withdrew because of delayed vomiting. One patient on 2.5mg PTH1-34 (100 mg 5-CNAC) withdrew because of symptomatic, but unconfirmed, hypercalcemia. PTH is produced by the parathyroid glands to regulate the amount of calcium and phosphorus in the body. When used therapeutically, it increases bone density and bone strength to help prevent fractures. It is approved to treat osteoporosis, a disease associated with a gradual thinning and weakening of the bones that occurs most frequently in women after menopause. Untreated postmenopausal osteoporosis can lead to chronic back pain, disabling fractures, and lost mobility.

Novartis Pharma AG Oral Recombinant Human Growth Hormone Program

From 1998 through August 2003, we developed oral rhGH in collaboration with Eli Lilly and Company (Lilly). As of August 2003, Lilly returned to us all rights to the oral rhGH program pursuant to the terms of our license agreement. On September 23, 2004 we announced a new partnership with Novartis to develop our oral rhGH program. Under this collaboration, we are working with Novartis to initiate clinical trials of a convenient oral human growth hormone product using the Eligen® Technology. On May 1, 2006, we announced that Novartis will initiate the development of an oral rhGH product using Emisphere s Eligen® Technology.

Under this agreement, Novartis has an exclusive worldwide license to develop, make, have made, use and sell products developed under this program. We have no payment obligations with respect to this program; we are, however, obligated to collaborate with Novartis by providing access to our technology that is relevant to this program. We are also obligated to help to manage this program through a joint steering committee with Novartis.

Table of Contents

To date, we have received $6 million in non-refundable payments from Novartis under this program, including the $5 million milestone payment received in 2006. We may receive up to $28 million in additional milestone payments during the course of product development and royalties based on sales.

Novo Nordisk AS Agreement

On June 21, 2008, we entered into an exclusive Development and License Agreement with Novo Nordisk pursuant to which Novo Nordisk will develop and commercialize oral formulations of Novo Nordisk proprietary products in combination with Emisphere carriers. Under such agreement Emisphere could receive more than $87 million in contingent product development and sales milestone payments, including a $10 million non-refundable license fee which was received in June 2008. Emisphere would also be entitled to receive royalties in the event Novo Nordisk commercializes products developed under such Agreement. Under the Agreement, Novo Nordisk is responsible for the development and commercialization of the products.

During January 2010, we announced that Novo Nordisk had initiated its first Phase I clinical trial with a long-acting oral GLP-1 analogue (NN9924). This milestone released a $2 million payment to Emisphere, whose proprietary Eligen® Technology is used in the formulation of NN9924. GLP-1 (Glucagon-Like Peptide-1) is a natural hormone involved in controlling blood sugar levels. It stimulates the release of insulin only when blood sugar levels become too high. GLP-1 secretion is often impaired in people with Type 2 Diabetes. The aim of this trial, which is being conducted in the UK, is to investigate the safety, tolerability and bioavailability of NN9924 in healthy volunteers. The trial will enroll approximately 155 individuals and results from the trial are expected in 2011. There are many challenges in developing an oral formulation of GLP-1, in particular obtaining adequate bioavailability. NN9924 addresses some of these key challenges by utilizing Emisphere s Eligen® Technology to facilitate absorption from the gastrointestinal tract.

Genta, Incorporated Oral Gallium Program

In March 2006, we announced that we have entered into an exclusive worldwide licensing agreement with Genta, Incorporated (Genta) to develop an oral formulation of a gallium-containing compound. Under the agreement, we will utilize our Eligen® Technology to supply a finished oral dosage form to Genta. Genta will be responsible for toxicology, clinical development, regulatory submissions, and worldwide commercialization. In addition to royalties on net sales of the product, Genta has agreed to fund Emisphere s development activities and to pay performance milestones related to the filing and approval of regulatory applications. An Investigational New Drug application was filed by Genta on gallium on July 31, 2007. Genta released final results from the Company s Phase I clinical trial of G4544, a new tablet formulation of a proprietary small molecule intended as a treatment for diseases associated with accelerated bone loss using delivery technology developed by Emisphere Technologies, Inc. Results showed that the drug was very well-tolerated, and that blood levels were achieved in a range that is known to be clinically bioactive. The data were featured in a poster session at the annual meeting of the American Society of Clinical Oncology (ASCO) in 2008.

Revenue Recognized From Significant Collaborators 2007 through 2009 (in thousands)

Collaborator	2009	2008	2007
Novartis Pharma AG	$	$	$ 2,666
Roche			73
Novo Nordisk AS		46	
Genta		118	1,159

Research and Development Costs

We have devoted substantially all of our efforts and resources to research and development conducted on our own behalf (self-funded) and in collaborations with corporate partners (partnered). Generally, research and development expenditures are allocated to specific research projects. Due to various uncertainties and risks, including those described in Item 1A. Risk Factors below, relating to the progress of our product candidates

Table of Contents

through development stages, clinical trials, regulatory approval, commercialization and market acceptance, it is not possible to accurately predict future spending or time to completion by project or project category.

The following table summarizes research and development spending to date by project category:

	Year Ended December 31,			Cumulative Spending
	2009	2008	2007	2009(1)
	(In thousands)			
Research(2)	$ 70	$ 1,143	$ 1,954	$ 51,918
Feasibility projects				
Self-funded	1,287	1,688	457	11,044
Partnered	38	425	178	4,224
Development projects				
Oral heparin (self-funded)	148	392	3,834	99,437
Oral insulin (self-funded)	3	53	1,184	21,287
Partnered	2	59	611	12,157
Other(3)	2,498	9,025	12,858	103,956
Total all projects	$ 4,046	$ 12,785	$ 21,076	$ 304,023

(1) Cumulative spending from August 1, 1995 through December 31, 2009.

(2) Research is classified as resources expended to expand the ability to create new carriers, to ascertain the mechanisms of action of carriers, and to establish computer based modeling capabilities, prototype formulations, animal models, and *in vitro* testing capabilities.

(3) Other includes indirect costs such as rent, utilities, training, standard supplies and management salaries and benefits.

Patents and Other Forms of Intellectual Property

Our success depends, in part, on our ability to obtain patents, maintain trade secret protection, and operate without infringing the proprietary rights of others (see Risk Factors- Our business will suffer if we cannot adequately protect our patent and proprietary rights). We seek patent protection on various aspects of our proprietary chemical and pharmaceutical delivery technologies, including the delivery agent compounds and the structures which encompass Emisphere s delivery agents, their method of preparation, the combination of our compounds with a pharmaceutical, and use of our compounds with therapeutic molecules to treat various disease states. We have patents and patent applications in the U.S. and certain foreign countries. As of March 25, 2010, we had 121 granted U.S. Patents as well as 109 patent families with pending patent applications.

We intend to file additional patent applications when appropriate, and to aggressively prosecute, enforce, and defend our patents and other proprietary technology.

We have five trademarks granted by the U.S. Patent and Trademark office. They include EMISPHERE®, Elaprin® (oral heparin), the Emisphere logo, Emigent® and Eligen®.

We also rely on trade secrets, know-how, and continuing innovation in an effort to develop and maintain our competitive position. Patent law relating to the patentability and scope of claims in the biotechnology and pharmaceutical fields is evolving and our patent rights are subject to this additional uncertainty. Others may independently develop similar product candidates or technologies or, if patents are issued to us, design around any products or processes covered by our patents. We expect to continue, when appropriate, to file product and other patent applications with respect to our inventions. However, we may not file any such applications or, if filed, the patents may not be issued. Patents issued to or licensed by us may be infringed by the products or processes of others.

Table of Contents

Defense and enforcement of our intellectual property rights can be expensive and time consuming, even if the outcome is favorable to us. It is possible that the patents issued to or licensed to us will be successfully challenged, that a court may find that we are infringing validly issued patents of third parties, or that we may have to alter or discontinue the development of our products or pay licensing fees to take into account patent rights of third parties.

Manufacturing

The primary raw materials used in making the delivery agents for our product candidates are readily available in large quantities from multiple sources. In the past we manufactured delivery agents internally using our own facilities on a small scale for research purposes and for early stage clinical supplies. We believed that our manufacturing capabilities complied with the FDA s current Good Manufacturing Practice (GMP). Beginning in 2004, we manufactured early stage clinical supplies under GMP conditions for our oral insulin program and heparin multiple arm studies. The FDA inspected our in-house facilities in 2003 and again in 2005. The 2003 inspection resulted in only minor observations on Form 483 which were quickly resolved to FDA s satisfaction, while the 2005 inspection yielded no Form 483 observations.

Currently, EMISPHERE® delivery agents are manufactured by third parties in accordance with GMP regulations. We have identified other commercial manufacturers meeting the FDA s GMP regulations that have the capability of producing EMISPHERE® delivery agents and we do not rely on any particular manufacturer to supply us with needed quantities.

During April 2009 we announced a strategic alliance with AAIPharma intended to expand the application of Emisphere s Eligen® Technology and AAIPharma s drug development services. AAIPharma Inc. is a global provider of pharmaceutical product development services that enhance the therapeutic performance of its clients drugs. AAIPharma works with many pharmaceutical and biotech companies and currently provides drug product formulation development services to Emisphere. This relationship expands our access to new therapeutic candidates for the Eligen® Technology, which potentially could lead to new products and to new alliance agreements as well. We are also pleased that a global provider of pharmaceutical product development services with the stature of AAI has chosen to combine with Emisphere in a synergistic alliance that will benefit both organizations. This strategic alliance supports AAI s strategy to offer drug delivery options to its pharmaceutical and biotech customers.

Competition

Our success depends in part upon maintaining a competitive position in the development of product candidates and technologies in an evolving field in which developments are expected to continue at a rapid pace. We compete with other drug delivery, biotechnology and pharmaceutical companies, research organizations, individual scientists and non-profit organizations engaged in the development of alternative drug delivery technologies or new drug research and testing, and with entities developing new drugs that may be orally active. Our product candidates compete against alternative therapies or alternative delivery systems for each of the medical conditions our product candidates address, independent of the means of delivery. Many of our competitors have substantially greater research and development capabilities, experience, marketing, financial and managerial resources than we have. In many cases we rely on our development partners to develop and market our product candidates.

Oral Osteoporosis Competition

An injectable form of PTH-1-34 is manufactured and sold by Eli Lilly, as FORTEO®. Unigene Laboratories, Inc. (Unigene) has reported that, in collaboration with GlaxoSmithKline plce (GSK), it is developing an oral form of PTH-1-34. Unigene also reported that it is developing an oral form of sCT. Both candidates are in early stage clinical testing.

Novartis currently offers a nasal dosage form of sCT, MIACALCIN®. Other companies are currently developing pulmonary forms of PTH-1-34. Other osteoporosis therapies include estrogen replacement therapy, selective estrogen receptor modulators, bisphosphonates and several new biologics that are under development.

Table of Contents

Oral Osteoarthritis Competition

There has been no cure for osteoarthritis, as cartilage has not been induced to regenerate. Current treatment is with NSAIDs, local injections of glucocorticoid or hyaluronan, and in severe cases, with joint replacement surgery. Future potential treatments might include Autologous Chondrocyte Implantation and cartilage regeneration.

If Novartis succeeds in developing its oral treatment for osteoarthritis, we believe it could face competition from existing and potentially future products and treatment regimens under development.

Oral Diabetes Competition Type 2 Diabetes

In diabetes, there are a number of unmet needs which amplify the need for further product development in the area. There are three main areas of drug therapy, oral anti-diabetes, Insulin, and Injectable in which companies are attempting to develop innovative products for the treatment of patients.

The need for new medicines due to unmet treatment needs recently resulted in two new products; Amylin s Byetta and Symlin. These products initially performed exceedingly well in the market place. However due to pancreatitis associated with Byetta, the trajectory for the Amylin s franchise has leveled off as of the third quarter 2008.

There are four leading classes for new product development in the area of diabetes. All four seek to take advantage of the potential to improve upon currently available products:

GLP-1 Agonists

Pulmonary Insulin

DPP-IV Inhibitors

PPAR modulators.

The objective of our collaboration with Novo Nordisk is to develop an orally available GLP-1 agonist for the treatment of Type 2 diabetes and potentially obesity. A product with the benefits of glucose control, promotion of weight loss, low risk of hypoglycemia, and other benefits is expected to significantly improve therapeutic options and can be expected to perform as well as or better than the existing competition.

Oral Vitamin B12 Competition

Emisphere s potential competition in the Vitamin B12 market will depend on the direction the company takes in the development and commercialization of the product. In the event that Emisphere pursues the nutritional supplements market, competition would include a number of companies selling generic Vitamin B12 in a variety of dosage strengths and methods of delivery (e.g., oral, transdermal, nasal, sublingual) many of which have substantial distribution and marketing capabilities that exceed and will likely continue to exceed our own. In addition, our competition is likely to include many sellers, distributors, and others who are in the business of marketing, selling, and promoting multiple vitamins, vitamin-mineral, and specialized vitamin combinations. Many of these competitors are engaged in low cost, high volume operations that could provide substantial market barriers or other obstacles for a higher cost, potentially superior product that has no prior market history.

If Emisphere pursues the Vitamin B12 medical food market, the Company would need to successfully demonstrate to physicians, nurse-practitioners and payors that an oral dose would be safe, efficacious, readily accessible and improve

compliance. These factors will likely require the Company to engage in a substantial educational and promotional product launch and a marketing outreach initiative, the time, cost, and outcome of which are uncertain.

Table of Contents

Competition Summary

Although we believe that our oral formulations, if successful, will likely compete with well established injectable versions of the same drugs, we believe that we will enjoy a competitive advantage because physicians and patients prefer orally delivered forms of products over injectable forms. Oral forms of products enable improved compliance, and for many programs, the oral form of products enable improved therapeutic regimens.

Government Regulation

Our operations and product candidates under development are subject to extensive regulation by the FDA, other governmental authorities in the U.S. and governmental authorities in other countries.

The duration of the governmental approval process for marketing new pharmaceutical substances, from the commencement of pre-clinical testing to receipt of governmental approval for marketing a new product, varies with the nature of the product and with the country in which such approval is sought. The approval process for new chemical entities could take eight to ten years or more. The process for reformulations of existing drugs is typically shorter, although a combination of an existing drug with a currently unapproved carrier could require extensive testing. In either case, the procedures required to obtain governmental approval to market new drug products will be costly and time-consuming to us, requiring rigorous testing of the new drug product. Even after such time and effort, regulatory approval may not be obtained for our products.

The steps required before we can market or ship a new human pharmaceutical product commercially in the U.S. include pre-clinical testing, the filing of an Investigational New Drug Application (IND), the conduct of clinical trials and the filing with the FDA of either a New Drug Application (NDA) for drugs or a Biologic License Application (BLA) for biologics.

In order to conduct the clinical investigations necessary to obtain regulatory approval of marketing of new drugs in the U.S., we must file an IND with the FDA to permit the shipment and use of the drug for investigational purposes. The IND sets forth, in part, the results of pre-clinical (laboratory and animal) toxicology testing and the applicant s initial Phase I plans for clinical (human) testing. Unless notified that testing may not begin, the clinical testing may commence 30 days after filing an IND.

Under FDA regulations, the clinical testing program required for marketing approval of a new drug typically involves three clinical phases. In Phase I, safety studies are generally conducted on normal, healthy human volunteers to determine the maximum dosages and side effects associated with increasing doses of the substance being tested. Phase II studies are conducted on small groups of patients afflicted with a specific disease to gain preliminary evidence of efficacy, including the range of effective doses, and to determine common short-term side effects and risks associated with the substance being tested. Phase III involves large-scale trials conducted on disease-afflicted patients to provide statistically significant evidence of efficacy and safety and to provide an adequate basis for product labeling. Frequent reports are required in each phase and if unwarranted hazards to patients are found, the FDA may request modification or discontinuance of clinical testing until further studies have been conducted. Phase IV testing is sometimes conducted, either to meet FDA requirements for additional information as a condition of approval. Our drug product candidates are and will be subjected to each step of this lengthy process from conception to market and many of those candidates are still in the early phases of testing.

Once clinical testing has been completed pursuant to an IND, the applicant files an NDA or BLA with the FDA seeking approval for marketing the drug product. The FDA reviews the NDA or BLA to determine whether the drug is safe and effective, and adequately labeled, and whether the applicant can demonstrate proper and consistent manufacture of the drug. The time required for initial FDA action on an NDA or BLA is set on the basis of user fee

goals; for most NDA or BLAs the action date is 10 months from receipt of the NDA or BLA at the FDA. The initial FDA action at the end of the review period may be approval or a request for additional information that will be needed for approval depending on the characteristics of the drug and whether the FDA has concerns with the evidence submitted. Once our product candidates reach this stage, we will be subjected to these additional costs of time and money.

Table of Contents

The FDA has different regulations and processes governing and regulating food products, including vitamin supplements and nutraceuticals. These products are variously referred to as dietary supplements , food additives , dietary ingredients , medical foods , and, most broadly, food . These foods products do not require the IND, NDA or BLA process outlined above.

The facilities of each company involved in the commercial manufacturing, processing, testing, control and labeling of pharmaceutical products must be registered with and approved by the FDA. Continued registration requires compliance with GMP regulations and the FDA conducts periodic establishment inspections to confirm continued compliance with its regulations. We are subject to various federal, state and local laws, regulations and recommendations relating to such matters as laboratory and manufacturing practices and the use, handling and disposal of hazardous or potentially hazardous substances used in connection with our research and development work.

While we do not currently manufacture any commercial products ourselves, if we did, we would bear additional cost of FDA compliance.

Employees

As of December 31, 2009, we had 17 employees, 6 of whom are engaged in scientific research and technical functions and 11 of whom are performing accounting, information technology, engineering, facilities maintenance, legal and regulatory and administrative functions. Of the 6 scientific employees, 4 hold Ph.D. and/or D.V.M. degrees. We believe our relations with our employees are good.

Available Information

Emisphere files annual, quarterly, and current reports, proxy statements, and other documents with the Securities and Exchange Commission, (the SEC) under the Securities Exchange Act of 1934 (the Exchange Act). The public may read and copy any materials that we file with the SEC at the SEC s Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Also, the SEC maintains an internet website that contains reports, proxy and information statements, and other information regarding issuers, including Emisphere, that file electronically with the SEC. The public can obtain any documents that Emisphere files with the SEC at www.sec.gov.

We also make available free of charge on or through our internet website (www.emisphere.com) our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, Section 16 filings, and, if applicable, amendments to those reports filed or furnished pursuant to Section 13(a) or Section 16 of the Exchange Act as soon as reasonably practicable after we or the reporting person electronically files such material with, or furnishes it to, the SEC. Our internet website and the information contained therein or connected thereto are not intended to be incorporated into the Annual Report or this Form 10-K.

Our Board of Directors has adopted a Code of Business Conduct and Ethics which is posted on our website at http://ir.emisphere.com/documentdisplay.cfm?DocumentID=4947.

ITEM 1A. ***RISK FACTORS***

From time to time, information provided by us, statements made by our employees or information included in our filings with the Securities and Exchange Commission (including this Report) may contain statements that are not historical facts, so-called forward-looking statements, which involve risks and uncertainties. Such forward-looking statements are made pursuant to the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as

amended. In some cases you can identify forward-looking statements by terminology such as may, should, could, wi expect, intend, plans, predict, anticipate, estimate, continue, believe or the negative of these terms or ot words. These statements discuss future expectations, contain projections of results of operations or of financial condition or

Table of Contents

state other forward-looking information. When considering forward-looking statements, you should keep in mind the risk factors and other cautionary statements in this Report.

Our actual future results may differ significantly from those stated in any forward-looking statements. Factors that may cause such differences include, but are not limited to, the factors discussed below. Each of these factors, and others, are discussed from time to time in our filings with the Securities and Exchange Commission.

Our operating results may fluctuate because of a number of factors, many of which are beyond our control. If our operating results are below the expectations of public market analysts or investors, then the market price of our common stock could decline. Some of the factors that affect our quarterly and annual results, but which are difficult to control or predict, are:

We have a history of operating losses and we may never achieve profitability. If we continue to incur losses or we fail to raise additional capital or receive substantial cash inflows from our partners by June 2010, we may be forced to cease operations.

As of December 31, 2009, we had approximately $3.8 million in cash and restricted cash, approximately $20.4 million in working capital deficiency, a stockholders deficit of approximately $47.9 million and an accumulated deficit of approximately $436.7 million. Our operating and net loss for the year ended December 31, 2009 was approximately $14.6 million and $21.2 million, respectively. Since our inception in 1986, we have generated significant losses from operations. We anticipate that we will continue to generate significant losses from operations for the foreseeable future, and that our business will require substantial additional investment that we have not yet secured. These conditions raise substantial doubt about our ability to continue as a going concern. The audit reports prepared by our independent registered public accounting firms relating to our financial statements for the years ended December 31, 2007, 2008 and 2009, respectively included an explanatory paragraph expressing substantial doubt about our ability to continue as a going concern.

We anticipate that our existing capital resources will enable us to continue operations through approximately June 2010, or earlier if unforeseen events or circumstances arise that negatively affect our liquidity. If we fail to raise additional capital or obtain substantial cash inflows from existing partners prior to June 2010, we will be forced to cease operations.

While our plan is to raise capital when needed and/or to pursue product partnering opportunities, we cannot be sure how much we will need to spend in order to develop, market, and manufacture new products and technologies in the future. We expect to continue to spend substantial amounts on research and development, including amounts spent on conducting clinical trials for our product candidates. Further, we will not have sufficient resources to develop fully any new products or technologies unless we are able to raise substantial additional financing or to secure funds from new or existing partners. We cannot assure you that financing will be available when needed, or on favorable terms or at all. The current economic environment combined with a number of other factors pose additional challenges to the Company in securing adequate financing under acceptable terms. If additional capital is raised through the sale of equity or convertible debt securities, the issuance of such securities would result in dilution to our existing stockholders. Additionally, these conditions may increase the costs to raise capital. Our failure to raise capital when needed would adversely affect our business, financial condition, and results of operations, and could force us to reduce or discontinue operations.

We may not be able to make the payments we owe to Novartis.

On December 1, 2004 we issued a $10 million convertible note (the Novartis Note) to Novartis in connection with a research collaboration option relating to the development of PTH-1-34. The Novartis Note, as amended, bears interest

at a rate of 3% prior to December 1, 2006, 5% from December 1, 2006 through December 1, 2008, and 7% from that point until maturity. The Novartis Note was originally due December 1, 2009. On November 27, 2009, Novartis agreed to extend the maturity date of the Novartis Note to February 26, 2010. Subsequently, on February 23, 2010, Novartis agreed to further extend the maturity date of the Novartis

Table of Contents

Note to May 26, 2010. We have the option to pay interest in cash on a current basis or accrue the periodic interest as an addition to the principal amount of the Novartis Note. In the event that interest accrues on the Novartis Note, the accretion to principal will cause future interest payments to rise. Approximately $12.6 million was due as payment of the Novartis Note as of December 31, 2009. The Novartis Note is convertible, at our option, at any time prior to maturity into a number of shares of our common stock equal to the principal and accrued and unpaid interest thereon divided by the conversion price, which conversion price is equal to the average of the highest bid and lowest ask prices of our common stock as quoted on the Over-The-Counter Bulletin Board (OTCBB) averaged over a period of twenty (20) days, consisting of the day on which the conversion price is being determined and the nineteen (19) consecutive business days prior to such day, provided certain conditions contained in the Novartis Note are met. Those conditions include that, at the time of such conversion, no event of default under the Novartis Note has occurred and is continuing and that there is either an effective registration statement in effect covering the resale of the shares issued in connection with such conversion or the shares may be resold by Novartis pursuant to Rule 144 as promulgated under the Securities Act of 1933, as amended. Based on the price per share of our common stock on December 31, 2009, the Novartis Note was convertible into 14,944,980 shares of our common stock, assuming Novartis does not exercise their right to limit the number of shares issued to it upon conversion of the Novartis Note such that the shares of common stock they receive upon conversion do not exceed 19.9% of the total shares of our common stock outstanding. If upon conversion, Novartis decided to exercise their right to limit their ownership to 19.9%, we would still be obligated to pay the remaining balance due, after deducting the value of the stock issued upon conversion, in cash.

The Novartis Note contains customary events of default including our failure to timely cure a default in the payment of certain other indebtedness, acceleration of certain indebtedness, we become entitled to terminate the registration of our securities or the filing of reports under the Securities Exchange Act of 1934, our common stock is no longer listed, we experience a change of control (including by, among other things, a change in the composition of a majority of our board (other than as approved by the board) in any one-year period, a merger which results in our stockholders holding shares that represent less than a majority of the voting power of the merged entity, and any other acquisition by a third party of shares that represent a majority of the voting power of the company), we sell substantially all of our assets, or we are effectively unable to honor or perform our obligations under the new research collaboration option relating to the development of PTH-1-34. Upon the occurrence of an event of default prior to conversion, any unpaid principal and accrued interest on the Novartis Note would become immediately due and payable. If the Novartis Note is converted into our common stock, Novartis would have the right to require us to repurchase the shares of common stock within six months after an event of default under the Novartis Note, for an aggregate purchase price equal to the principal and interest that was converted, plus interest from the date of conversion, as if no conversion had occurred.

We are currently in discussions with Novartis to arrange a settlement to meet our obligations under the Note. We can not be certain that the discussions between the parties will result in an agreement regarding the Novartis Note that will be advantageous for the Company. If the Company is unable to satisfy the terms of the Novartis Note, the Company would be in default and could be forced into bankruptcy or otherwise to liquidate its assets. Any of these events would materially and adversely affect our business, financial condition and results of operations. Furthermore, in the event of our bankruptcy or liquidation, holders of common stock would not be entitled to receive any cash or other property or assets until holders of our debt securities and other creditors have been paid in full.

We may not be able to meet the covenants detailed in the Convertible Notes with MHR Institutional Partners IIA LP, which could result in an increase in the interest rate on the Convertible Notes and/or accelerated maturity of the Convertible Notes, which we would not be able to satisfy.

On September 26, 2005, we executed a Senior Secured Loan Agreement (the Loan Agreement) with MHR Institutional Partners IIA LP (together with its affiliates, MHR). The Loan Agreement, as amended, provides for a seven year, $15 million secured loan from MHR to us at an interest rate of 11% (the Loan). Under the Loan

Agreement, MHR requested, and on May 16, 2006 we effected, the exchange of the Loan for

Table of Contents

11% senior secured convertible notes (the Convertible Notes) with substantially the same terms as the Loan agreement, except that the Convertible Notes are convertible, at the sole discretion of MHR or any assignee thereof, into shares of our common stock at a price per share of $3.78. Interest will be payable in the form of additional Convertible Notes rather than in cash and we have the right to call the Convertible Notes after September 26, 2010 if certain conditions are satisfied. The Convertible Notes are secured by a first priority lien in favor of MHR on substantially all of our assets.

The Convertible Notes provide for certain events of default including failure to perfect liens in favor of MHR created by the transaction, failure to observe any covenant or agreement, failure to maintain the listing and trading of our common stock, sale of a substantial portion of our assets, or merger with another entity without the prior consent of MHR, or any governmental action renders us unable to honor or perform our obligations under the Convertible Notes or results in a material adverse effect on our operations among other things. If an event of default occurs, the Convertible Notes provide for the immediate repayment of the Notes and certain additional amounts described above and as set forth in the Convertible Notes. At such time, we may not be able to make the required payment, and if we are unable to pay the amount due under the Notes, the resulting default would enable MHR to foreclose on all of our assets. Any of the foregoing events would have a material adverse effect on our business and on the value of our stockholders investments in our common stock. We currently have a waiver from MHR for failure to perfect liens on certain intellectual property rights, through April 1, 2011.

Our stock was de-listed from NASDAQ.

Our common stock was suspended from trading on The NASDAQ Capital Market effective at the open of business on June 9, 2009, and NASDAQ delisted the Company s securities thereafter. The delisting resulted from the Company s non-compliance with the minimum market value of listed securities requirement for continued listing on The NASDAQ Capital Market pursuant to NASDAQ Marketplace Rule 4310(c)(3)(B). Simultaneously, the Company s securities began trading on the Over-the-Counter Bulletin Board (the OTCBB), an electronic quotation service maintained by the Financial Industry Regulatory Authority, effective with the open of business on June 9, 2009. The Company s trading symbol has remained EMIS; however, it is our understanding that, for certain stock quote publication websites, investors may be required to key EMIS.OB to obtain quotes.

Because our stock is traded on the Over-the-Counter Bulletin Board market, selling our common stock could be more difficult because smaller quantities of shares would likely be bought and sold, transactions could be delayed, and security analysts coverage of us may be reduced or harder to obtain. In addition, because our common stock was de-listed from the NASDAQ Capital Market, broker-dealers have certain regulatory burdens imposed upon them, which may discourage broker-dealers from effecting transactions in our common stock, further limiting the liquidity thereof. These factors could result in lower prices and larger spreads in the bid and ask prices for shares of our common stock and/or limit an investor s ability to execute a transaction.

The delisting from The NASDAQ Capital Market or future declines in our stock price could also greatly impair our ability to raise additional necessary capital through equity or debt financing, and could significantly increase the ownership dilution to stockholders caused by our issuing equity in financing or other transactions.

Our business will suffer if we fail or are delayed in developing and commercializing an improved oral form of Vitamin B12.

We are focusing substantial resources on the development of an oral dosage form of Vitamin B12 that will demonstrate improved bioavailability compared with current B12 tablets. During November 2009 the Company launched its first commercially available product, oral Eligen® B12 (100 mcg), which had been specifically developed to help improve Vitamin B12 absorption and bioavailability with a patented formulation, in partnership with Life

Extension®. Life Extension® has certain exclusivity in the USA for distribution via the internet and at specialty health food and nutritional retail outlets including The Vitamin Shoppe, GNC and Vitamin World. Oral Eligen® B12 (100mcg) tablets have been available for sale since November 2009. In

Table of Contents

addition, we are developing a higher dose Eligen® B12 oral formulation as a medical food for B12 deficient patients and for certain generic over-the-counter B12. Our inability or delay in developing or commercializing the B12 product candidate could have a significant material adverse effect on our business.

To commercialize this higher dose product candidate, we will be required to complete certain clinical studies, develop a market introduction plan, and possibly obtain financing to support our commercialization efforts, among other things. We cannot assure you that we will succeed in these efforts as these involve activities (or portions of activities) that we have not previously completed. In addition, if we succeed in these activities, Vitamin B12 is available at reasonably low prices both in injections and tablet forms (as well as other forms) through a variety of distributors, sellers, and other sources. We have no current commercial capabilities. Therefore, we would be entering a highly competitive market with an untested, newly-established commercial capability. This outline of risks involved in the development and commercialization of B12 is not exhaustive, but illustrative. For example, it does not include additional competitive, intellectual property, commercial, product liability, and commercial risks involved in a launch of the B12 product candidate outside the U.S. or certain of such risks in the U.S.

We are highly dependent upon collaborative partners to develop and commercialize compounds using our delivery agents.

A key part of our strategy is to form collaborations with pharmaceutical companies that will assist us in developing, testing, obtaining government approval for and commercializing oral forms of therapeutic macromolecules using the Eligen® Technology. We have a collaborative agreement for candidates in clinical development with Novartis, Novo Nordisk and Genta.

We negotiate specific ownership rights with respect to the intellectual property developed as a result of the collaboration with each partner. While ownership rights vary from program to program, in general we retain ownership rights to developments relating to our carrier and the collaborator retains rights related to the drug product developed.

Despite our existing agreements, we cannot make any assurances that:

- we will be able to enter into additional collaborative arrangements to develop products utilizing our drug delivery technology;
- any existing or future collaborative arrangements will be sustainable or successful;
- the product candidates in collaborative arrangements will be further developed by partners in a timely fashion;
- any collaborative partner will not infringe upon our intellectual property position in violation of the terms of the collaboration contract; or
- milestones in collaborative agreements will be met and milestone payments will be received.

If we are unable to obtain development assistance and funds from other pharmaceutical companies to fund a portion of our product development costs and to commercialize our product candidates, we may be unable to issue equity to allow us to raise sufficient capital to fund clinical development of our product candidates. Lack of funding would cause us to delay, curtail, or stop clinical development of one or more of our projects. The determination of the specific project to curtail would depend upon the relative future economic value to us of each program.

Our collaborative partners control the clinical development of the drug candidates and may terminate their efforts at will.

Novartis controls the clinical development of oral salmon calcitonin, PTH, and rhGH. Novo Nordisk controls the clinical development of oral GLP-1 analogs. Genta controls the clinical development of oral gallium. Novartis, Novo Nordisk and Genta control the decision-making for the design and timing of their clinical studies.

Table of Contents

Moreover, the agreements with Novartis, Novo Nordisk and Genta provide that they may terminate their programs at will for any reason and without any financial penalty or requirement to fund any further clinical studies. We cannot make any assurance that Novartis, Novo Nordisk or Genta will continue to advance the clinical development of the drug candidates subject to collaboration.

Our collaborative partners are free to develop competing products.

Aside from provisions preventing the unauthorized use of our intellectual property by our collaborative partners, there is nothing in our collaborative agreements that prevent our partners from developing competing products. If one of our partners were to develop a competing product, our collaboration could be substantially jeopardized.

Our product candidates are in various stages of development, and we cannot be certain that any will be suitable for commercial purposes.

To be profitable, we must successfully research, develop, obtain regulatory approval for, manufacture, introduce, market, and distribute our products under development, or secure a partner to provide financial and other assistance with these steps. The time necessary to achieve these goals for any individual pharmaceutical product is long and can be uncertain. Before we or a potential partner can sell any of the pharmaceutical products currently under development, pre-clinical (animal) studies and clinical (human) trials must demonstrate that the product is safe and effective for human use for each targeted indication. We have never successfully commercialized a drug or a nonprescription candidate and we cannot be certain that we or our current or future partners will be able to begin, or continue, planned clinical trials for our product candidates, or if we are able, that the product candidates will prove to be safe and will produce their intended effects.

Even if safe and effective, the size of the solid dosage form, taste, and frequency of dosage may impede their acceptance by patients.

A number of companies in the drug delivery, biotechnology, and pharmaceutical industries have suffered significant setbacks in clinical trials, even after showing promising results in earlier studies or trials. Only a small number of research and development programs ultimately result in commercially successful drugs. Favorable results in any pre-clinical study or early clinical trial do not imply that favorable results will ultimately be obtained in future clinical trials. We cannot make any assurance that results of limited animal and human studies are indicative of results that would be achieved in future animal studies or human clinical studies, all or some of which will be required in order to have our product candidates obtain regulatory approval. Similarly, we cannot assure you that any of our product candidates will be approved by the FDA. Even if clinical trials or other studies demonstrate safety and effectiveness of any of our product candidates for a specific disease or condition and the necessary regulatory approvals are obtained, the commercial success of any of our product candidates will depend upon their acceptance by patients, the medical community, and third-party payers and on our partners ability to successfully manufacture and commercialize our product candidates.

Our future business success depends heavily upon regulatory approvals, which can be difficult and expensive to obtain.

Our pre-clinical studies and clinical trials of our prescription drug and biologic product candidates, as well as the manufacturing and marketing of our product candidates, are subject to extensive, costly and rigorous regulation by governmental authorities in the U.S. and other countries. The process of obtaining required approvals from the FDA and other regulatory authorities often takes many years, is expensive, and can vary significantly based on the type, complexity, and novelty of the product candidates. We cannot assure you that we, either independently or in collaboration with others, will meet the applicable regulatory criteria in order to receive the required approvals for

manufacturing and marketing. Delays in obtaining U.S. or foreign approvals for our self-developed projects could result in substantial additional costs to us, and, therefore, could adversely affect our ability to compete with other companies. Additionally, delays in obtaining regulatory approvals encountered by others with whom we collaborate also could adversely affect our business and

Table of Contents

prospects. Even if regulatory approval of a product is obtained, the approval may place limitations on the intended uses of the product, and may restrict the way in which we or our partner may market the product.

The regulatory approval process for our prescription drug product candidates presents several risks to us:

- In general, pre-clinical tests and clinical trials can take many years, and require the expenditure of substantial resources. The data obtained from these tests and trials can be susceptible to varying interpretation that could delay, limit or prevent regulatory approval

- Delays or rejections may be encountered during any stage of the regulatory process based upon the failure of the clinical or other data to demonstrate compliance with, or upon the failure of the product to meet, a regulatory agency s requirements for safety, efficacy, and quality or, in the case of a product seeking an orphan drug indication, because another designee received approval first

- Requirements for approval may become more stringent due to changes in regulatory agency policy or the adoption of new regulations or guidelines

- New guidelines can have an effect on the regulatory decisions made in previous years

- The scope of any regulatory approval, when obtained, may significantly limit the indicated uses for which a product may be marketed and may impose significant limitations in the nature of warnings, precautions, and contraindications that could materially affect the profitability of the drug

- Approved drugs, as well as their manufacturers, are subject to continuing and ongoing review, and discovery of problems with these products or the failure to adhere to manufacturing or quality control requirements may result in restrictions on their manufacture, sale or use or in their withdrawal from the market

- Regulatory authorities and agencies may promulgate additional regulations restricting the sale of our existing and proposed products

- Once a product receives marketing approval, the FDA may not permit us to market that product for broader or different applications, or may not grant us clearance with respect to separate product applications that represent extensions of our basic technology. In addition, the FDA may withdraw or modify existing clearances in a significant manner or promulgate additional regulations restricting the sale of our present or proposed products

Additionally, we face the risk that our competitors may gain FDA approval for a product before us. Having a competitor reach the market before us would impede the future commercial success for our competing product because we believe that the FDA uses heightened standards of approval for products once approval has been granted to a competing product in a particular product area. We believe that this standard generally limits new approvals to only those products that meet or exceed the standards set by the previously approved product.

The regulatory approval process for nonprescription product candidates will likely vary by the nature of therapeutic molecule being delivered,

Our business will suffer if we cannot adequately protect our patent and proprietary rights.

Although we have patents for some of our product candidates and have applied for additional patents, there can be no assurance that patents applied for will be granted, that patents granted to or acquired by us now or in the future will be valid and enforceable and provide us with meaningful protection from competition, or that we will possess the

financial resources necessary to enforce any of our patents. Also, we cannot be certain that any products that we (or a licensee) develop will not infringe upon any patent or other intellectual property right of a third party.

We also rely upon trade secrets, know-how, and continuing technological advances to develop and maintain our competitive position. We maintain a policy of requiring employees, scientific advisors, consultants, and collaborators to execute confidentiality and invention assignment agreements upon commencement of

Table of Contents

a relationship with us. We cannot assure you that these agreements will provide meaningful protection for our trade secrets in the event of unauthorized use or disclosure of such information.

Part of our strategy involves collaborative arrangements with other pharmaceutical companies for the development of new formulations of drugs developed by others and, ultimately, the receipt of royalties on sales of the new formulations of those drugs. These drugs are generally the property of the pharmaceutical companies and may be the subject of patents or patent applications and other rights of protection owned by the pharmaceutical companies. To the extent those patents or other forms of rights expire, become invalid or otherwise ineffective, or to the extent those drugs are covered by patents or other forms of protection owned by third parties, sales of those drugs by the collaborating pharmaceutical company may be restricted, limited, enjoined, or may cease. Accordingly, the potential for royalty revenues to us may be adversely affected.

We may be at risk of having to obtain a license from third parties making proprietary improvements to our technology.

There is a possibility that third parties may make improvements or innovations to our technology in a more expeditious manner than we do. Although we are not aware of any such circumstance related to our product portfolio, should such circumstances arise, we may need to obtain a license from such third party to obtain the benefit of the improvement or innovation. Royalty s payable under such a license would reduce our share of total revenue. Such a license may not be available to us at all or on commercially reasonable terms. Although we currently do not know of any circumstances related to our product portfolio which would lead us to believe that a third party has developed any improvements or innovation with respect to our technology, we cannot assure you that such circumstances will not arise in the future. We cannot reasonably determine the cost to us of the effect of being unable to obtain any such license.

We are dependent on third parties to manufacture and test our products.

Currently, we have no manufacturing facilities for production of our carriers or any therapeutic compounds under consideration as products. We have no facilities for clinical testing. The success of our self-developed programs is dependent upon securing manufacturing capabilities and contracting with clinical service and other service providers.

The availability of manufacturers is limited by both the capacity of such manufacturers and their regulatory compliance. Among the conditions for NDA approval is the requirement that the prospective manufacturer s quality control and manufacturing procedures continually conform with the FDA s current GMP (GMP are regulations established by the FDA that govern the manufacture, processing, packing, storage and testing of drugs intended for human use). In complying with GMP, manufacturers must devote extensive time, money, and effort in the area of production and quality control and quality assurance to maintain full technical compliance. Manufacturing facilities and company records are subject to periodic inspections by the FDA to ensure compliance. If a manufacturing facility is not in substantial compliance with these requirements, regulatory enforcement action may be taken by the FDA, which may include seeking an injunction against shipment of products from the facility and recall of products previously shipped from the facility. Such actions could severely delay our ability to obtain product from that particular source.

The success of our clinical trials and our partnerships is dependent on the proposed or current partner s capacity and ability to adequately manufacture drug products to meet the proposed demand of each respective market. Any significant delay in obtaining a supply source (which could result from, for example, an FDA determination that such manufacturer does not comply with current GMP) could harm our potential for success. Additionally, if a current manufacturer were to lose its ability to meet our supply demands during a clinical trial, the trial may be delayed or may even need to be abandoned.

We may face product liability claims related to participation in clinical trials or future products.

We have product liability insurance with a policy limit of $5.0 million per occurrence and in the aggregate. The testing, manufacture, and marketing of products for humans utilizing our drug delivery technology may expose us to potential product liability and other claims. These may be claims directly by

Table of Contents

consumers or by pharmaceutical companies or others selling our future products. We seek to structure development programs with pharmaceutical companies that would complete the development, manufacturing and marketing of the finished product in a manner that would protect us from such liability, but the indemnity undertakings for product liability claims that we secure from the pharmaceutical companies may prove to be insufficient.

We are subject to environmental, health, and safety laws and regulations for which we incur costs to comply.

We use some hazardous materials in our research and development activities and are subject to environmental, health, and safety laws and regulations governing the use of such materials. For example, our operations involve the controlled use of chemicals, biologicals and radioactive materials and we bear the costs of complying with the various regulations governing the use of such materials. Costs of compliance have not been material to date. While we believe we are currently in compliance with the federal, state, and local laws governing the use of such materials, we cannot be certain that accidental injury or contamination will not occur. Should we be held liable or face regulatory actions regarding an accident involving personal injury or an environmental release, we potentially could incur costs in excess of our resources or insurance coverage, although, to date, we have not had to deal with any such actions. During each of 2009, 2008, and 2007, we incurred costs of approximately $0.1 million, $0.2 million and $0.2 million, respectively, in our compliance with environmental, health, and safety laws and regulations.

We face rapid technological change and intense competition.

Our success depends, in part, upon maintaining a competitive position in the development of products and technologies in an evolving field in which developments are expected to continue at a rapid pace. We compete with other drug delivery, biotechnology and pharmaceutical companies, research organizations, individual scientists, and non-profit organizations engaged in the development of alternative drug delivery technologies or new drug research and testing, as well as with entities developing new drugs that may be orally active. Many of these competitors have greater research and development capabilities, experience, and marketing, financial, and managerial resources than we have, and, therefore, represent significant competition.

Our products, when developed and marketed, may compete with existing parenteral or other versions of the same drug, some of which are well established in the marketplace and manufactured by formidable competitors, as well as other existing drugs. For example, our salmon calcitonin product candidate, if developed and marketed, would compete with a wide array of existing osteoporosis therapies, including a nasal dosage form of salmon calcitonin, estrogen replacement therapy, selective estrogen receptor modulators, bisphosphonates, and other compounds in development.

Our competitors may succeed in developing competing technologies or obtaining government approval for products before we do. Developments by others may render our product candidates, or the therapeutic macromolecules used in combination with our product candidates, noncompetitive or obsolete. At least one competitor has notified the FDA that it is developing a competing formulation of salmon calcitonin. If our products are marketed, we cannot assure you that they will be preferred to existing drugs or that they will be preferred to or available before other products in development.

If a competitor announces a successful clinical study involving a product that may be competitive with one of our product candidates or an approval by a regulatory agency of the marketing of a competitive product, such announcement may have a material adverse effect on our operations or future prospects resulting from reduced sales of future products that we may wish to bring to market or from an adverse impact on the price of our common stock or our ability to obtain regulatory approval for our product candidates.

We are dependent on our key personnel and if we cannot recruit and retain leaders in our research, development, manufacturing, and commercial organizations, our business will be harmed.

We are dependent on our executive officers. Our President and Chief Executive Officer, Michael V. Novinski, joined the Company in May 2007. We could be significantly disadvantaged if Mr. Novinski were to

Table of Contents

leave Emisphere. The loss of other officers could have an adverse effect as well, given their specific knowledge related to our proprietary technology and personal relationships with our pharmaceutical company partners. If we are not able to retain our executive officers, our business may suffer. None of our key officers have announced any intention to leave Emisphere. We do not maintain key-man life insurance policies for any of our executive officers.

There is intense competition in the biotechnology industry for qualified scientists and managerial personnel in the development, manufacture, and commercialization of drugs. We may not be able to continue to attract and retain the qualified personnel necessary for developing our business. Additionally, because of the knowledge and experience of our scientific personnel and their specific knowledge with respect to our drug carriers the continued development of our product candidates could be adversely affected by the loss of any significant number of such personnel.

Provisions of our corporate charter documents, Delaware law, and our stockholder rights plan may dissuade potential acquirers, prevent the replacement or removal of our current management and may thereby affect the price of our common stock.

Our Board of Directors has the authority to issue up to 1,000,000 shares of preferred stock and to determine the rights, preferences and privileges of those shares without any further vote or action by our stockholders. Of these 1,000,000 shares, 200,000 are currently designated Series A Junior Participating Cumulative Preferred Stock (A Preferred Stock) in connection with our stockholder rights plan, and the remaining 800,000 shares remain available for future issuance. Rights of holders of common stock may be adversely affected by the rights of the holders of any preferred stock that may be issued in the future.

We also have a stockholder rights plan, commonly referred to as a poison pill, in which Preferred Stock Purchase Rights (the Rights) have been granted at the rate of one one-hundredth of a share of A Preferred Stock at an exercise price of $80 for each share of our common stock. The Rights are not exercisable or transferable apart from the common stock, until the earlier of (i) ten days following a public announcement that a person or group of affiliated or associated persons have acquired beneficial ownership of 20% or more of our outstanding common stock or (ii) ten business days (or such later date, as defined) following the commencement of, or announcement of an intention to make a tender offer or exchange offer, the consummation of which would result in the beneficial ownership by a person, or group, of 20% or more of our outstanding common stock. If we enter into consolidation, merger, or other business combinations, as defined, each Right would entitle the holder upon exercise to receive, in lieu of shares of A Preferred Stock, a number of shares of common stock of the acquiring company having a value of two times the exercise price of the Right, as defined. By potentially diluting the ownership of the acquiring company, our rights plan may dissuade prospective acquirors of our company. MHR is specifically excluded from the provisions of the plan.

The A Preferred Stockholders will be entitled to a preferential cumulative quarterly dividend of the greater of $1.00 per share or 100 times the per-share dividend declared on our stock and are also entitled to a liquidation preference, thereby hindering an acquirer s ability to freely pay dividends or to liquidate the company following an acquisition. Each A Preferred Stock share will have 100 votes and will vote together with the common shares, effectively preventing an acquirer from removing existing management. The Rights contain anti-dilutive provisions and are redeemable at our option, subject to certain defined restrictions for $.01 per Right. The Rights expire on April 7, 2016.

Provisions of our corporate charter documents, Delaware law and financing agreements may prevent the replacement or removal of our current management and members of our Board of Directors and may thereby affect the price of our common stock.

In connection with the MHR financing transaction, and after approval by our Board of Directors, Dr. Mark H. Rachesky was appointed to the Board of Directors by MHR (the MHR Nominee) and Dr. Michael Weiser was appointed to the Board of Directors by both the majority of our Board of Directors and MHR (the Mutual Director), as

contemplated by our bylaws. Our certificate of incorporation provides that the MHR Nominee and the Mutual Director may be removed only by the affirmative vote of at least 85% of the shares

Table of Contents

of common stock outstanding and entitled to vote at an election of directors. Our certificate of incorporation also provides that the MHR Nominee may be replaced only by an individual designated by MHR unless the MHR Nominee has been removed for cause, in which case the MHR Nominee may be replaced only by an individual approved by both a majority of our Board of Directors and MHR. Furthermore, the amendments to the by-laws and the certificate of incorporation provide that the rights granted to MHR by these amendments may not be amended or repealed without the unanimous vote or unanimous written consent of the Board of Directors or the affirmative vote of the holders of at least 85% of the shares of Common Stock outstanding and entitled to vote at the election of directors. The amendments to the by-laws and the certificate of incorporation will remain in effect as long as MHR holds at least 2% of the shares of fully diluted Common Stock. The amendments to the by-laws and the certificate of incorporation will have the effect of making it more difficult for a third party to gain control of our Board of Directors.

Additional provisions of our certificate of incorporation and by-laws could have the effect of making it more difficult for a third party to acquire a majority of our outstanding voting common stock. These include provisions that classify our Board of Directors, limit the ability of stockholders to take action by written consent, call special meetings, remove a director for cause, amend the by-laws or approve a merger with another company.

We are subject to the provisions of Section 203 of the Delaware General Corporation Law which prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. For purposes of Section 203, a business combination includes a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder, and an interested stockholder is a person who, either alone or together with affiliates and associates, owns (or within the past three years, did own) 15% or more of the corporation s voting stock.

Our stock price has been and may continue to be volatile.

The trading price for our common stock has been and is likely to continue to be highly volatile. The market prices for securities of drug delivery, biotechnology and pharmaceutical companies have historically been highly volatile.

Factors that could adversely affect our stock price include:

- fluctuations in our operating results; announcements of partnerships or technological collaborations;
- innovations or new products by us or our competitors;
- governmental regulation;
- developments in patent or other proprietary rights;
- public concern as to the safety of drugs developed by us or others;
- the results of pre-clinical testing and clinical studies or trials by us, our partners or our competitors;
- litigation;
- general stock market and economic conditions;
- number of shares available for trading (float); and

inclusion in or dropping from stock indexes.

As of December 31, 2009, our 52-week high and low closing market price for our common stock was $1.38 and $0.44, respectively.

Table of Contents

Future sales of common stock or warrants, or the prospect of future sales, may depress our stock price.

Sales of a substantial number of shares of common stock or warrants, or the perception that sales could occur, could adversely affect the market price of our common stock. As of December 31, 2009, we have 7,000,000 shares of common stock registered on a shelf registration for future sale. Additionally, as of December 31, 2009, there were outstanding options to purchase up to 1,814,982 shares of our common stock that are currently exercisable, and additional outstanding options to purchase up to 919,754 shares of common stock that are exercisable over the next several years. As of December 31, 2009, the Novartis Note was convertible into 14,944,980 shares of common stock and the MHR Convertible Notes were convertible into 5,983,146 shares of our common stock. As of December 31, 2009, there were outstanding warrants to purchase 9,934,253 shares of our stock. The holders of these options have an opportunity to profit from a rise in the market price of our common stock with a resulting dilution in the interests of the other. The existence of these options may adversely affect the terms on which we may be able to obtain additional financing. The weighted average exercise price of issued and outstanding options is $6.29 and the weighted average exercise price of warrants is $2.33 which compares to the $1.06 market price at closing on December 31, 2009.

ITEM 1B. *UNRESOLVED STAFF COMMENTS*

None.

ITEM 2. *PROPERTIES*

We lease approximately 15,000 square feet of office space at 240 Cedar Knolls Road, Suite 200, Cedar Knolls, New Jersey for use as our corporate office. The lease for our corporate office is set to expire on January 31, 2013.

At the beginning of 2009 we had leased approximately 80,000 square feet of office space at 765 Old Saw Mill River Road, Tarrytown, NY for use as administrative offices and laboratories. The lease for our administrative and laboratory facilities had been set to expire on August 31, 2012. However, on April 29, 2009, the Company entered into a Lease Termination Agreement (the Agreement) with BMR-Landmark at Eastview, LLC, a Delaware limited liability company (BMR) pursuant to which the Company and BMR terminated the lease of space at 765 Old Saw Mill River Road in Tarrytown, NY. Pursuant to the Agreement, the Lease was terminated effective as of April 1, 2009. The Agreement provided that the Company make the following payments to BMR: (a) $1 million, paid upon execution of the Agreement, (b) $0.5 million, paid six months after the execution date of the Agreement, and (c) $0.75 million, payable twelve months after the execution date of the Agreement. Initial and six months payments were made on schedule. The final payment was originally due April 29, 2010. However, on March 17, 2010 the Company and BMR agreed to amend the Agreement (the Amendment). According to the Amendment, the final payment will be modified as follows: the Company will pay Eight Hundred Thousand Dollars ($800,000), as follows: (i) Two Hundred Thousand Dollars ($200,000) within five (5) days after the Execution Date and (ii) One Hundred Thousand Dollars ($100,000) on each of the following dates: July 15, 2010, August 15, 2010, September 15, 2010, October 15, 2010, November 15, 2010, and December 15, 2010.

ITEM 3. *LEGAL PROCEEDINGS*

In April 2005, the Company entered into an amended and restated employment agreement with its then Chief Executive Officer, Dr. Michael M. Goldberg, for services through July 31, 2007. On January 16, 2007, the Board of Directors terminated Dr. Goldberg s services. On April 26, 2007, the Board of Directors held a special hearing at which it determined that Dr. Goldberg s termination was for cause. On March 22, 2007, Dr. Goldberg, through his counsel, filed a demand for arbitration asserting that his termination was without cause and seeking $1,048,000 plus attorney s fees, interest, arbitration costs and other relief alleged to be owed to him in connection with his employment agreement with the Company. During the arbitration, Dr. Goldberg sought a total damage amount of at least

$9,223,646 plus interest. On February 11, 2010, the arbitrator issued the final award in favor of Dr. Goldberg for a total amount of approximately $2,333,115 as full and final payment for all claims, defenses, counterclaims, and related matters. As a result of the February 11, 2010 final

Table of Contents

award, the Company adjusted its estimate of costs to settle this matter to $2,333,115. If the awards are upheld and confirmed in court, the Company will be required to make the final payment to Dr. Goldberg.

On August 18, 2008, Emisphere filed a complaint in the United States District Court for the District of New Jersey against Laura A. Kragie and Kragie BioMedWorks, Inc. seeking a declaratory judgment affirming Emisphere s sole rights to its proprietary technology for the oral administration of Vitamin B12, as set forth in several Emisphere United States provisional patent applications. The complaint also includes a claim under the Lanham Act arising from statements made by defendants on their web site. Laura A. Kragie, M.D., is a former consultant for Emisphere who later was employed by Emisphere. On February 13, 2009, the defendants filed an answer, affirmative defenses and counterclaims, adding as counterclaim defendants current or former Emisphere executives or employees, including Michael V. Novinski. The countersuit against Emisphere alleged breach of contract, fraudulent inducement, trademark infringement, false advertising, and other claims, which Emisphere believed to be without merit. The litigation with the Kragie parties has been resolved. On February 23, 2010, the Court entered an Order, pursuant to the parties written settlement agreement, dismissing the case with prejudice.

ITEM 4. ***RESERVED***

PART II

ITEM 5. ***MARKET FOR REGISTRANT S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES***

Nasdaq Listing

The Company s securities were suspended from trading on The NASDAQ Capital Market effective at the open of business on Tuesday, June 9, 2009, and NASDAQ delisted the Company s securities thereafter. The delisting resulted from the Company s non-compliance with the minimum market value of listed securities requirement for continued listing on The NASDAQ Capital Market pursuant to NASDAQ Marketplace Rule 4310(c)(3)(B. Simultaneously, the Company s securities began trading on the Over-the-Counter Bulletin Board (the OTCBB), an electronic quotation service maintained by the Financial Industry Regulatory Authority, effective with the open of business on Tuesday, June 9, 2009. The Company s trading symbol has remained EMIS; however, it is our understanding that, for certain stock quote publication websites, investors may be required to key EMIS.OB to obtain quotes.

The following table sets forth the range of high and low intra-day sale prices as reported by The NASDAQ Stock Market or the Over-the-Counter Bulletin Board (the OTCBB), electronic quotation service (post de-listing from the NASDAQ Stock Market on June 9, 2009) for each period indicated:

	High	Low
2008		
First quarter	$ 2.78	$ 1.43
Second quarter	2.69	1.33
Third quarter	4.21	1.98
Fourth quarter	2.05	0.57
2009		
First quarter	1.06	0.43
Second quarter	1.49	0.42
Third quarter	1.18	0.72

Fourth quarter	1.08	0.46
2010		
First quarter (through March 22, 2010)	1.94	0.92

Table of Contents

As of March 1, 2010 there were 229 stockholders of record, including record owners holding shares on behalf of an indeterminate number of beneficial owners, and 42,084,075 shares of common stock outstanding. The closing price of our common stock on March 1, 2010 was $1.25.

We have never paid cash dividends and do not intend to pay cash dividends in the foreseeable future. We intend to retain earnings, if any, to finance the growth of our business.

Equity Compensation Plan Information

The following table provides information as of December 31, 2009 about the common stock that may be issued upon the exercise of options granted to employees, consultants or members of our board of directors under all of our existing equity compensation plans, including the 1991 Stock Option Plan, 1995 Stock Option Plan, 2000 Stock Option Plan, the 2002 Broad Based Plan, the 2007 Stock Award and Incentive Plan, (collectively the Plans), the Stock Incentive Plan for Outside Directors, and the Directors Deferred Compensation Plan:

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options	(b) Weighted Average Exercise Price of Outstanding Options	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity Compensation Plans Approved by Security Holders			
The Plans	2,734,736	$ 6.29	2,055,977
Stock Incentive Plan for Outside Directors	121,000	15.59	
Directors Deferred Compensation Plan			
Equity Compensation Plans not approved by Security Holders(1)	10,000	3.64	
Total	2,865,736	$ 6.29	2,055,977

(1) Our Board of Directors has granted options which are currently outstanding for a former consultant. The Board of Directors determines the number and terms of each grant (option exercise price, vesting and expiration date). These grants were made on July 12, 2002 and July 14, 2003.

Table of Contents

Comparative Stock Performance Graph

The graph below compares the cumulative total stockholder return through December 31, 2009 on Emisphere s Common Stock with the cumulative total stockholder return of the NASDAQ Composite Index, the NASDAQ Pharmaceutical Index, the RDG MicroCap Pharmaceutical Index, the Dow Jones US Pharmaceuticals Total Stock Market Index, and SIC Code: 2834 Pharmaceutical Preparations, assuming an investment of $100 on December 31, 2004 in the Company s Common Stock, and in the stocks comprising each index (with all dividends reinvested).

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among Emisphere Technologies, Inc.

* $100 invested on 12/31/04 in stock or index, including reinvestment of dividends.

Fiscal year ending December 31.

Table of Contents

ITEM 6. ***SELECTED FINANCIAL DATA***

The following selected financial data for the years ended December 31, 2009, 2008, 2007, 2006, and 2005 have been derived from the financial statements of Emisphere and notes thereto, which have been audited by our independent registered public accounting firm. We recognize expense for our share-based compensation in accordance with FASB ASC 718, Compensation-Stock Compensation, which requires that the costs resulting from all stock based payment transactions be recognized in the financial statements at their fair values. Results from prior periods have not been restated.

	Year Ended December 31,				
	2009	2008	2007	2006	2005
	(In thousands, except per share data)				
Statement of Operations Data:					
Revenue	$ 92	$ 251	$ 4,077	$ 7,259	$ 3,540
Costs, expenses and income from lawsuit:					
Cost of goods sold	15				
Research and development expenses	4,046	12,785	21,076	18,892	18,915
General and administrative expenses	10,068	9,176	14,459	11,693	13,165
Other costs and expenses	(422)	779	1,083	3,802	3,915
Restructuring charge	(356)	3,831			
(Income) expense from lawsuit, net	1,293		(11,890)		
Total costs, expenses and income from lawsuit	14,629	26,571	24,728	34,387	35,995
Operating loss	(14,552)	(26,320)	(20,651)	(27,128)	(32,455)
Beneficial conversion of convertible security				(12,215)	
Gain on extinguishment of note payable					14,663
Change in fair value of derivative instruments	(2,473)	2,220	5,057	(1,390)	(624)
Interest expense (income)	5,081	2,956	2,615	2,335	1,141
Sale of patent	500	1,500			
Net loss	(21,243)	(24,388)	(16,928)	(41,766)	(18,051)
Net loss per share Basic	(0.61)	(0.80)	(0.58)	(1.58)	(0.81)
Net loss per share Diluted	(0.61)	(0.80)	(0.76)	(1.58)	(0.81)

	December 31,				
	2009	2008	2007	2006	2005
	(In thousands)				
Balance Sheet Data:					
Cash, cash equivalents, restricted cash and investments	$ 3,825	$ 7,469	$ 14,100	$ 21,533	$ 9,218
Working capital (deficit)	(20,441)	(7,954)	9,868	13,377	(522)
Total assets	5,933	10,176	19,481	28,092	18,988

Derivative instruments	10,780	267	2,487	6,498	6,528
Long-term liabilities and deferrals	24,652	31,531	27,648	24,744	23,121
Accumulated deficit	(436,671)	(433,688)	(409,300)	(392,372)	(350,606)
Stockholders (deficit) equity	(47,864)	(37,028)	(13,674)	(6,106)	(14,895)

Table of Contents

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

Management s Discussion and Analysis of Financial Conditions and Results of Operations (MD&A) is provided to supplement the accompanying financial statements and notes in Item 8 to help provide an understanding of our financial condition, changes in our financial condition and results of operations. To supplement its audited financial statements presented in accordance with US GAAP, the company is providing a comparison of operating results describing net income and operating expenses which removed certain non-cash and one-time or nonrecurring charges and receipts. The Company believes that this presentation of net income and operating expense provides useful information to both management and investors concerning the approximate impact of the items above. The Company also believes that considering the effect of these items allows management and investors to better compare the Company s financial performance from period to period and to better compare the Company s financial performance with that of its competitors. The presentation of this additional information is not meant to be considered in isolation of, or as a substitute for, results prepared in accordance with US GAAP.

CAUTION CONCERNING FORWARD-LOOKING STATEMENTS

The following discussion and analysis contain forward-looking statements that involve risks and uncertainties. When used in this report, the words, intend, anticipate, believe, estimate, plan, expect and similar expressions as th to us are included to identify forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of factors, including those set forth under Item 1A. Risk Factors (above) and elsewhere in this report. This discussion and analysis should be read in conjunction with the Selected Financial Data and the Financial Statements and notes thereto included in this report.

Overview

Emisphere Technologies, Inc. is a biopharmaceutical company that focuses on a unique and improved delivery of therapeutic molecules or nutritional supplements using its Eligen® Technology. These molecules could be currently available or are under development. Such molecules are usually delivered by injection; in many cases, their benefits are limited due to poor bioavailability, slow on-set of action or variable absorption. In those cases, our technology may increase the benefit of the therapy by improving bioavailability or absorption or by increasing the onset of action. The Eligen® Technology can be applied to the oral route of administration as well other delivery pathways, such as buccal, rectal, inhalation, intra-vaginal or transdermal. The Eligen® Technology can make it possible to orally deliver certain therapeutic molecules without altering their chemical form or biological integrity. Eligen® delivery agents, or carriers , facilitate or enable the transport of therapeutic molecules across the mucous membranes of the gastrointestinal tract, to reach the tissues of the body where they can exert their intended pharmacological effect.

Since our inception in 1986, substantial efforts and resources have been devoted to understanding the Eligen® Technology and establishing a product development pipeline that incorporated this technology with selected molecules. Since 2007, Emisphere has undergone many positive changes. A new senior management team, led by Michael V. Novinski, was hired; the Eligen® Technology was reevaluated and our corporate strategy was refocused on commercializing the Eligen® Technology as quickly as possible, building high-value partnerships and reprioritizing the product pipeline. Spending was redirected and aggressive cost control initiatives were implemented. These changes resulted in redeployment of resources to programs, one of which, yielded the introduction of our first commercial product during 2009. We continue to develop potential product candidates in-house and we demonstrated and enhanced the value of the Eligen® Technology as evident in the progress made by our development partners Novo Nordisk A/S (Novo Nordisk) and Novartis Pharma AG (Novartis) on their respective product development programs. Further development, exploration and commercialization of the technology entail risk and operational expenses. However, we have made significant progress on refocusing our efforts on strategic development initiatives and cost

control and continue to aggressively seek to reduce non-strategic spending.

Table of Contents

The application of the Eligen® Technology is potentially broad and may provide for a number of opportunities across a spectrum of therapeutic modalities or nutritional supplements. During 2009, we continued to develop our product pipeline utilizing the Eligen® Technology with prescription and nonprescription product candidates. We prioritized our development efforts based on overall potential returns on investment, likelihood of success, and market and medical need. Our goal is to implement our Eligen® Technology to enhance overall healthcare, including patient accessibility and compliance, while benefiting the commercial pharmaceutical marketplace and driving company valuation. Investments required to continue developing our product pipeline may be partially paid by income-generating license arrangements whose value tends to increase as product candidates move from pre-clinical into clinical development. It is our intention that incremental investments that may be required to fund our research and development will be approached incrementally in order to minimize disruption or dilution.

On the nutritional supplements side, during November 2009, the Company launched its first commercially available product, oral Eligen® B12 (100 mcg), which was specifically developed to help improve Vitamin B12 absorption and bioavailability with a patented formulation, in partnership with Life Extension®. Life Extension® has certain exclusivity in the USA for distribution via the internet and at specialty health food and nutritional retail outlets including The Vitamin Shoppe, GNC and Vitamin World. Oral Eligen® B12 (100mcg) tablets have been available for sale since November 2009.

The Company also reported progress on its planned second product, a higher dose formulation of Eligen® B12 for use by B12 deficient patients. During November 2009, the Company announced that interim data from an ongoing study demonstrated its oral Eligen® B12 (1000mcg) restored B12 to normal levels in individuals with Vitamin B12 deficiency. Normal levels of serum B12 and active B12 were achieved by 100 percent of those study participants who had taken Eligen® B12 (1000mcg) 15 days into the 90-day study when the first blood samples were taken. As part of an interim analysis in this randomized, multi-center study, levels of serum B12, active B12, homocysteine and methyl malonic acid were measured on day 15, at which point a total of 18 participants (8 on IM injection and 10 on oral) had received either five 1000mcg intramuscular injections of Vitamin B12 or once daily tablets of oral Eligen® B12 (1000mcg). Study subjects taking Eligen® B12 also had a marked decrease in homocysteine, which is a known risk factor for cardiovascular disease. This clinical study with Eligen® B12 (1000mcg) is expected to be completed within the first half of 2010. It is estimated that as many as 10 million people in the U.S. and over 100 million people worldwide may be B12 deficient. Emisphere s Eligen® B12 product (1000mcg) is planned to be available in 2010. Oral Eligen® B12 and the foregoing statements have not been evaluated by the Food and Drug Administration. Oral Eligen® B12 is not intended to diagnose, treat, cure, or prevent any disease.

On the prescription side, our licensees include Novartis, which is using our drug delivery technology in combination with salmon calcitonin, parathyroid hormone, and human growth hormone. Their most advanced program is testing an oral formulation of calcitonin to treat osteoarthritis and osteoporosis. Novartis is conducting two Phase III clinical studies for osteoarthritis and one Phase III clinical study for osteoporosis. Now that these Phase III studies are fully enrolled, over 5,500 clinical study patients used the Eligen® Technology during 2009 and continue to use it during 2010. During December 2009, the Company announced that an independent Data Monitoring Committee (DMC) informed Novartis and its partner Nordic Bioscience about their recommendation to proceed with the Osteoporosis Phase III Study 2303 and the Osteoarthritis Phase III Study 2301 exploring the safety and efficacy of an oral formulation of salmon calcitonin to treat patients with osteoporosis and osteoarthritis of the knee. This recommendation is based on a futility analysis of one-year data for all patients enrolled in the study for 12 months and includes both an assessment of safety and efficacy parameters. Based on this interim analysis, the DMC is of the opinion that there are no major or unexpected safety concerns and recommended proceeding with the studies to evaluate the efficacy and safety profile of oral calcitonin at two years as planned.

Research using the Eligen® Technology and GLP-1, a potential treatment for Type 2 Diabetes is being conducted by Novo Nordisk A/S (Novo Nordisk) and by Dr. Christoph Beglinger, M.D., of the Clinical Research Center,

Department of Biomedicine Division of Gastroenterology, and Department of Clinical Pharmacology and Toxicology at University Hospital in Basel, Switzerland. We had previously conducted extensive tests on oral insulin for Type 1 Diabetes and concluded that a more productive pathway is to move

Table of Contents

forward with GLP-1 and its analogs, an oral form of which might be used to treat Type 2 Diabetes and related conditions. Consequently, on June 21, 2008 we entered into an exclusive Development and License Agreement with Novo Nordisk focused on the development of oral formulations of Novo Nordisk s proprietary GLP-1 receptor agonists.

During January 2010, we announced that Novo Nordisk had initiated its first Phase I clinical trial with a long-acting oral GLP-1 analogue (NN9924). This milestone released a $2 million payment to Emisphere, whose proprietary Eligen® Technology is used in the formulation of NN9924. GLP-1 (Glucagon-Like Peptide-1) is a natural hormone involved in controlling blood sugar levels. It stimulates the release of insulin only when blood sugar levels become too high. GLP-1 secretion is often impaired in people with Type 2 Diabetes. The aim of this trial, which is being conducted in the UK, is to investigate the safety, tolerability and bioavailability of NN9924 in healthy volunteers. The trial will enroll approximately 155 individuals and results from the trial are expected in 2011. There are many challenges in developing an oral formulation of GLP-1, in particular obtaining adequate bioavailability. NN9924 addresses some of these key challenges by utilizing Emisphere s Eligen® Technology to facilitate absorption from the gastrointestinal tract.

Our other product candidates in development are in earlier or preclinical research phases, and we continue to assess them for their compatibility with our technology and market need. Our intent is to seek partnerships with pharmaceutical and biotechnology companies for certain of these products. We plan to expand our pipeline with product candidates that demonstrate significant opportunities for growth.

The Company also continues to focus on improving operational efficiency. During 2009 we implemented plans to strengthen our financial foundation while maintaining our focus on advancing and commercializing the Eligen® Technology. By closing our research and development facility in Tarrytown, NY and utilizing independent contractors to conduct essential research and development, we reduced our annual operating costs by approximately 55% from 2008 levels. Annual cash expenditures were reduced by approximately $11 million, and the resulting cash burn rate to support continuing operations is approximately $8 million per year. Additionally, we expect to accelerate the commercialization of the Eligen® Technology in a cost effective way and to gain operational efficiencies by tapping into more advanced scientific processes independent contractors can provide.

During April 2009 we entered into a Lease Termination Agreement with BMR-Landmark at Eastview, LLC, pursuant to which the Company and BMR terminated the lease of space at 765 and 777 Old Saw Mill River Road in Tarrytown, NY. The Company agreed to make the following payments to BMR: (a) $1 million, paid upon execution of the Lease Termination Agreement, (b) $0.5 million, paid six months after the execution date of the Lease Termination Agreement, and (c) $0.75 million, payable twelve months after the execution date of the Lease Termination Agreement. The first two payments were made in accordance with the terms of the Agreement. The final payment was originally due April 29, 2010 However, on March 17, 2010, the Company and BMR agreed to modify the final payment as follows: the Company will pay Eight Hundred Thousand Dollars ($800,000), as follows: (i) Two Hundred Thousand Dollars ($200,000) within five (5) days after the Execution Date and (ii) One Hundred Thousand Dollars ($100,000) on each of the following dates: July 15, 2010, August 15, 2010, September 15, 2010, October 15, 2010, November 15, 2010, and December 15, 2010.

By terminating its Tarrytown lease, the Company s monthly cash burn rate was reduced by approximately $0.3 million. In addition, a total of approximately $14 million in future lease payments were avoided.

Liquidity and Capital Resources

Since our inception in 1986, we have generated significant losses from operations. However, during 2009 we introduced our first commercial product and anticipate introducing our second commercial product during 2010. At

some point in the future, potential combined sales or partnerships may generate sufficient net proceeds to offset a part of continuing losses from operations for the foreseeable future. Until those potential net proceeds are realized, we anticipate that we will continue to generate significant losses from operations for the foreseeable future. As of December 31, 2009, our working capital deficit was $20.4 million, our accumulated deficit was approximately $436.7 million and our stockholders deficit was $47.9 million. Our

Table of Contents

operating loss was $14.6 million, $26.3 million and $20.7 million for the years ended December 31, 2009, 2008, and 2007, respectively, after net sales of Eligen B-12 of $0.1 million in 2009 and receipts of collaboration and feasibility payments of $0.3 million, and $4.1 million in 2008 and 2007, respectively (which do not occur with regularity or at all), as well as income from the settlement of a lawsuit in 2007 of $11.9 million. Our net loss was $21.2 million, $24.4 million, and $16.9 million for the years ended December 31, 2009, 2008, and 2007, respectively. Our operating and net losses for 2008 included a $3.8 million one time restructuring charge which represented our best estimate of current and future costs associated with the closure of our research and development facility in Tarrytown, NY. During 2009 we received $0.2 million from Novo Nordisk in connection with the exclusive Development and License Agreement with Novo Nordisk focused on the development of oral formulations of Novo Nordisk s proprietary GLP-1 receptor agonists. In accordance with GAAP, these payments were deferred and included in deferred revenue on our balance sheet (please see the Critical Accounting Estimates section for more information). We have limited capital resources and operations to date have been funded primarily with the proceeds from collaborative research agreements, public and private equity and debt financings and income earned on investments. As of December 31, 2009, total cash, cash equivalents, restricted cash and investments were $3.8 million. We anticipate that our existing capital resources, without implementing cost reductions, raising additional capital, or obtaining substantial cash inflows from potential partners for our products, will enable us to continue operations through approximately June 2010. However, this expectation is based on the current operating plan that could change as a result of many factors and additional funding may be required sooner than anticipated. These conditions raise substantial doubt about our ability to continue as a going concern. The audit reports prepared by our independent registered public accounting firms relating to our financial statements for the years ended December 31, 2009, 2008 and 2007 include an explanatory paragraph expressing substantial doubt about our ability to continue as a going concern.

Our business will require substantial additional investment that has not yet been secured. While our plan is to raise capital when needed and/or to pursue partnering opportunities, we cannot be sure how much we will need to spend in order to develop, market and manufacture new products and technologies in the future. We expect to continue to spend substantial amounts on research and development, including amounts spent on conducting clinical trials for our product candidates. Further, we will not have sufficient resources to develop fully any new products or technologies unless we are able to raise substantial additional financing on acceptable terms or secure funds from new or existing partners. We cannot assure you that financing will be available on favorable terms or at all. Additionally, these conditions may increase the cost to raise capital. If additional capital is raised through the sale of equity or convertible debt securities, the issuance of such securities would result in dilution to our existing stockholders. Additionally, these conditions may increase costs to raise capital and/or result in further dilution. Our failure to raise capital when needed would adversely affect our business, financial condition and results of operations, and could force us to reduce or cease our operations.

During the year ended December 31, 2009, our cash liquidity (consisting of $3.6 million cash at December 31, 2009) decreased as follows:

Cash and Investments:

		(In thousands)
At December 31, 2008	$	7,200
At December 31, 2009		3,600
Decrease in cash and investments	$	3,600

Table of Contents

The (decrease) increase in cash and investments is comprised of the following components for the years ended December 31:

	2009	2008
	(In thousands)	
Proceeds, net, from issuance of equity securities	$ 7,300	$
Proceeds from collaboration, sale of patent, real estate sublease and other projects	1,500	14,500
Sources of cash and investments	8,800	14,500
Cash used in operations (grossed up for collaborations)	12,100	20,900
Repayment of debts and capital expenditures		100
Restriction of cash	300	200
Uses of cash and investments	12,400	21,200
Decrease in cash and investments	$ (3,600)	$ (6,700)

During the year ended December 31, 2009, our working capital liquidity decreased by $12.4 million as follows:

	December 31,		
	2009	2008	Change
	(In thousands)		
Current assets	$ 4,100	$ 7,700	$ (3,600)
Current liabilities	24,500	15,700	8,800
Working capital (deficiency)	$ (20,400)	$ (8,000)	$ (12,400)

The decrease in current assets is driven primarily by the decrease in cash and investments. The increase in current liabilities is driven primarily by the derivative instrument liability as a result of the increase in the price of our common stock and the adoption of ASC 815-40-15-5, the accrual of costs to settle legal proceedings in connection with Dr. Goldberg; and accrued interest related to the Novartis note payable.

Primary Sources of Cash

During 2009, we received net proceeds of $7.3 million through the issuance of common stock and associated derivative instruments from the August 2009 registered direct and private placement offerings; we received $1.0 million net proceeds from the sale of our equipment utilized in the former laboratory facility located at 765 Old Saw Mill River Road, Tarrytown, NY.; and we received a $0.5 million installment payment for sale of certain Emisphere patents and a patent application relating to diketopiparazine technology to MannKind Corporation.

During 2008 we received a $10.0 million upfront payment and reimbursement of $1.3 million in costs from Novo Nordisk in connection with the development and license agreement to develop an oral formulation of GLP-1 receptor agonists for Diabetes. Also during 2008 we received an initial $1.5 million payment for sale of certain Emisphere

patents and a patent application relating to diketopiparazine technology to MannKind Corporation. Also during 2008 we received $800 thousand in sublease and related payments in connection with sublease agreements for space at our laboratory and office facilities located at Tarrytown, NY.

During 2007, we received a $2 million milestone payment and reimbursement of $0.7 million in costs from Novartis on the oral salmon calcitonin program. Also during 2007, we received $6.9 million through the issuance of common stock and derivative instruments from the August 2007 offering of 2 million shares of our common stock and warrants. MHR was a purchaser in this offering.

During 2006, we received a $5 million milestone payment from Novartis on the oral recombinant human growth Hormone (rhGH) program. Also during 2006, we received $35.2 million through the issuance of common stock and derivative instruments, including $31.1 million from the May 2006 offering of four million

Table of Contents

shares of our common stock and warrants, $3.6 million from the exercise of warrants and stock options and $0.6 million from the purchase of warrants. MHR was a purchaser in this offering.

During 2005, we received net proceeds of approximately $12.9 million under a $15 million secured loan agreement (the Loan Agreement) executed with MHR. Under the Loan Agreement, MHR requested, and on May 16, 2006, we effected, the exchange of the loan from MHR for senior secured convertible notes (the Convertible Notes) with substantially the same terms as the Loan Agreement, except that the Convertible Notes are convertible, at the sole discretion of MHR, into shares of our common stock at a price per share of $3.78. The Convertible Notes are due on September 26, 2012, bear interest at 11% and are secured by a first priority lien in favor of MHR on substantially all of our assets. Interest is payable in the form of additional Convertible Notes rather than in cash and we have the right to call the Convertible Notes after September 26, 2010 if certain conditions are satisfied. Further, the Convertible Notes provide MHR with the right to require redemption in the event of a change in control, as defined, prior to September 26, 2009. The Convertible Notes provide for various events of default. If an event of default occurs, the Convertible Notes provide for the immediate repayment and certain additional amounts as set forth in the Convertible Notes. We have received a waiver from MHR, through March 18, 2010 for certain defaults under the agreement. Additionally, MHR was granted certain registration rights.

In connection with the MHR financing, the Company agreed to appoint a representative of MHR (MHR Nominee) and another person (the Mutual Director) to its Board of Directors. MHR nominees constitute 33% of our Directors. Further, the Company amended its certificate of incorporation to provide for continuity of the MHR Nominee and the Mutual Nominee on the Board, as described therein, so long as MHR holds at least 2% of the outstanding common stock of the Company.

On December 1, 2004 we received $10.0 million in exchange for issuance of a convertible note to Novartis (the Novartis Note) in connection with a new research collaboration option relating to the development of PTH-1-34. The Novartis Note is convertible, at our option, at any time prior to maturity into a number of shares of our common stock equal to the principal and accrued and unpaid interest divided by the then market price of our common stock, provided certain conditions are met. The Novartis Note bears interest at a rate of 3% until December 1, 2006, 5% from then until December 1, 2008, and 7% from that point until maturity. The Novartis Note was originally due December 1, 2009. On November 27, 2009, Novartis agreed to extend the maturity date of the Novartis Note to February 26, 2010. Subsequently, on February 23, 2010, Novartis agreed to further extend the maturity date of the Novartis Note to May 26, 2010. We have the option to pay interest in cash on a current basis or accrue the periodic interest as an addition to the principal amount of the Novartis Note. We are accruing interest which is being recorded using the effective interest rate method, which results in a level interest rate of 4.6%.

Results of Operations

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

	Year Ended December 31,		
	2009	2008	Change
	(In thousands)		
Revenue	$ 92	$ 251	$ (159)
Operating expenses (including a $3.8 million restructuring charge in 2008 and a $0.4 million reduction to the restructuring liability in 2009 relating to the closure of the facility in Tarrytown, NY)	$ 14,644	$ 26,571	$ 11,927

Operating loss	$ (14,552)	$ (26,320)	$ 11,768
Change in fair value of derivative instruments	$ (2,473)	$ 2,220	$ (4,693)
Interest Expense	$ (5,081)	$ (2,956)	$ (2,125)
Other non-operating income (expenses)	$ 863	$ 2,668	$ (1,805)
Net loss	$ (21,243)	$ (24,388)	$ 3,145

Table of Contents

Revenue decreased $0.2 million for the year ended December 31, 2009 compared to December 31, 2008, due to decreased receipts from development partners, the deferral of cost reimbursements received from Novo Nordisk in connection with the development of an oral formulation of GLP-1 receptor agonists in accordance with the Company s revenue recognition policy; offset by the receipt of $92 thousand B12 operating revenue during 2009. Revenue reported in 2009 relates to the sales of low dose Eligen B-12 to Life Extension Foundation.

Our principal operating costs include the following items as a percentage of total expenses:

	Year Ended December 31, 2009	December 31, 2008
Human resource costs, including benefits	35%	42%
Professional fees for legal, intellectual property, accounting and consulting	35%	22%
Occupancy for our laboratory and operating space	8%	19%
Clinical costs	8%	5%
Depreciation and amortization	3%	4%
Other	11%	8%

Operating expenses, decreased by $11.9 million (45%) as a result of the following items:

	(In thousands)
Decrease in human resource costs	$ (4,400)
Increase in clinical costs and lab fees	400
Increase in professional and consulting fees	200
Decrease in occupancy costs	(3,300)
Reduction in depreciation and amortization	(500)
All other	(4,300)
Net decrease	$ (11,900)

Human resource costs decreased approximately $4.4 million primarily due to an 80% reduction in headcount from 87 as of December 31, 2008 to 17 as of December 31, 2009.

Clinical costs and lab fees increased approximately $0.4 million primarily as a result of studies and clinical testing related to the B-12 program.

Professional and consulting fees increased approximately $0.2 million primarily due to an increase of approximately $1.0 million in legal fees offset by a $0.5 million reduction in consulting fees in connection with the completion of toxicology and clinical studies; $0.2 million reduction in accounting fees; and a $0.1 million reduction in various miscellaneous professional fees.

Occupancy costs decreased $3.3 million primarily due to the closure of the Tarrytown, NY facility and subsequent termination of our lease for that facility.

Depreciation and amortization expense decreased $0.5 million primarily due to the write-off of leasehold improvements, laboratory equipment, abandoned furniture, fixtures and computer hardware in connection with the closure of the Tarrytown, NY facility.

All other operating costs decreased $4.3 million primarily due to the $3.8 million restructuring charge incurred during 2008, a $0.4 million adjustment to the restructuring liability during 2009, an increase of $0.7 million on the gain on sale of fixed assets during 2009, and $0.7 million decrease in insurance, travel related, software licensing, maintenance, and other operating expenses during 2009; offset by the incremental accrual of $1.3 million expense in connection with the final ruling of the arbitrator awarding legal fees to Dr. Goldberg.

Table of Contents

As a result of the factors above, Emisphere s operating expenses were $14.6 million for the year ended December 31, 2009; a decrease of $11.9 million or 45% compared to operating expenses for the year ended December 31, 2008.

Other non-operating expense increased by approximately $8.6 million for the year ended December 31, 2009 in comparison to the same period last year primarily due to a $4.7 million increase in the change in the value of derivative instruments, a $2.1 million increase in interest expense due primarily to the adoption of FASB ASC 815-40-15-5, a $1.0 million reduction in the gain from sale of patent to MannKind Corporation, a decrease of $0.6 million in sublease income during 2009, and a $0.2 million decrease in investment income. Expense from the change in the fair value of derivatives instruments for 2009 and 2008 is the result of the adoption of FASB ASC 815-40-15-5, an increase in stock price from $0.79 on December 31, 2008 to $1.06 on December 31, 2009 and from the decrease in stock price from $2.73 on December 31, 2007 to $0.79 on December 31, 2008, and the addition of 4,523,755 warrants in connection with the August 2009 offering. The change in value of derivative instruments: increases in value of the underlying shares of the Company s common stock increase the liability with a corresponding loss recognized in the Company s operating statement while decreases in the value of the Company s common stock decrease the value of the liability with a corresponding gain recognized in the Company s operating statement. Future gains and losses recognized in the Company s operating results from changes in value of the derivative instrument liability are based in part on the fair value of the Company s common stock which is outside the control of the Company. Gains and losses could be material.

As a result of the above factors, we reported a net loss of $21.2 million, compared to a net loss of $24.4 million, or $3.1 million (13%) lower than the net loss for the year ended December 31, 2008.

Year Ended December 31, 2008 Compared to Year Ended December 31, 2007

	Year Ended December 31,		
	2008	**2007**	**Change**
		(In thousands)	
Revenue	$ 251	$ 4,077	$ (3,826)
Operating expenses (excluding income from settlement of lawsuit in 2007, net; including the $3.8 million restructuring charge in 2008)	$ 26,571	$ 36,618	$ (10,047)
Income from settlement of lawsuit, net	$	$ 11,890	$ (11,890)
Operating loss	$ (26,320)	$ (20,651)	$ (5,669)
Change in fair value of derivative instruments	$ 2,220	$ 5,057	$ (2,837)
Interest Expense	$ (2,956)	$ (2,615)	$ (341)
Other non-operating income (expenses)	$ 2,668	$ 1,281	$ 1,387
Net loss	$ (24,388)	$ (16,928)	$ (7,460)

Revenue decreased $3.8 million for the year ended December 31, 2008 compared to year ended December 31, 2007 due to the receipt of milestone payments during 2007. In connection with the development and license agreement with Novo Nordisk to develop an oral formulation of GLP-1 receptor agonists for Diabetes we received a $10.0 million non-refundable license fee payment and $1.2 million in reimbursement of costs in 2008; all of which was deferred in accordance with the Company s revenue recognition policy. Under such agreement Emisphere could receive more than $87.0 million in contingent product development and sales milestone payments. Emisphere would also be entitled to receive royalties in the event Novo Nordisk commercializes products developed under such agreement.

47

Table of Contents

Our principal operating costs include the following items as a percentage of total expenses:

	Year Ended December 31, 2008	December 31, 2007
Human resource costs, including benefits	42%	50%
Professional fees for legal, intellectual property, accounting and consulting	22%	17%
Occupancy for our laboratory and operating space	19%	12%
Clinical costs	5%	8%
Depreciation and amortization	4%	3%
Other	8%	10%

Operating expenses, excluding income from settlement of lawsuit, net, and excluding the restructuring charge, decreased by $13.9 million (38%) as a result of the following items:

	(In thousands)
Decrease in human resource costs	$ (8,800)
Decrease in clinical costs and lab fees	(2,800)
Decrease in professional and consulting fees	(1,400)
Decrease in occupancy costs	(100)
Reduction in depreciation and amortization	(100)
All other	(700)
Net decrease	$ (13,900)

Human resource costs decreased by approximately $8.8 million primarily due to a 77% reduction in headcount from 87 employees as of December 31, 2007 to 20 as of December 31, 2008; in addition to a reduction in severance payments and approximately $2.0 reduction in non-cash compensation expense due to the cancellation or expiration of employee stock options.

Clinical costs and lab fees decreased approximately $2.8 million primarily as a result of the completion of clinical and toxicology studies in connection with the anticipated heparin trial.

The decrease of approximately $1.4 million in professional and consulting fees is primarily due to an approximately $0.8 million reduction in legal fees in connection with the settlement of our law suit with Eli Lilly, and streamlining corporate legal support; a $0.3 million reduction in professional and consulting fees in connection with the completion of toxicology and clinical studies and an $0.1 million reduction in recruiting costs.

All other operating costs decreased by $0.9 million primarily due to decreases in insurance, travel related, software licensing and maintenance, depreciation and amortization, utilities and a gain on the sale of fixed assets and a reduction in other operating expenses.

As a result of the factors above Emisphere s operating expenses were $26.6 million for the year ended December 31, 2008, including the $3.8 million one time restructuring charge in connection with the closure of the research and development facility in Tarrytown, NY; an increase of $1.8 million or 7% compared to operating expenses for the year ended December 31, 2007. Total operating expenses for the year ended December 31, 2008, excluding the one time restructuring charge of $3.8 million would have been $22.7 million, compared to $36.6 million operating costs, excluding $11.9 million net proceeds from the settlement of the lawsuit with Eli Lilly for the year ended December 31, 2007, a decrease of $13.9 million or 38%.

Other non-operating income decreased by approximately $1.8 million for the year ended December 31, 2008 in comparison to the same period last year primarily due to a reduction of approximately $2.8 million in the change in the value of derivative instruments, a $0.7 million decrease in investment income, and an approximately $0.3 million increase in interest expense; offset by the $1.5 million gain from sale of patent to MannKind

Table of Contents

Corporation and an increase of approximately $0.6 million in sublease income during 2008, Income from the change in the fair value of derivatives instruments for 2008 and 2007 is the result of the decrease in stock price from $2.73 on December 31, 2007 to $0.79 on December 31, 2008 and from $5.29 on December 31, 2006 to $2.73 on December 31, 2007, partially offset by the addition of 400,000 warrants in connection with the August 2007 offering. The change in value of derivative instruments: increases in value of the underlying shares of the Company s common stock increase the liability with a corresponding loss recognized in the Company s operating statement while decreases in the value of the Company s common stock decrease the value of the liability with a corresponding gain recognized in the Company s operating statement. Future gains and losses recognized in the Company s operating results from changes in value of the derivative instrument liability are based in part on the fair value of the Company s common stock which is outside the control of the Company. Gains and losses could be material.

As a result of the above factors, we reported a net loss of $24.4 million, including the $3.8 million one-time restructuring charge in connection with the closure of its research and development facility in Tarrytown, NY; compared to a net loss of $16.9 million, including $11.9 million net proceeds from the settlement of the lawsuit with Eli Lilly and Company. The net loss for year ended December 31, 2008 excluding the one time restructuring charge of $3.8 million would have been $20.6 million, compared to $28.8 million, or $8.3 million (29%) lower than the net loss for the year ended December 31, 2007, excluding $11.9 million net proceeds from the settlement of the lawsuit with Eli Lilly in 2007.

The $3.8 million one-time restructuring charge related to the closure of the Tarrytown facility is comprised of $2.6 million present value in rent, net of sub-lease income through the expiration of the lease; termination benefits of $0.2 million; and a $1.0 million charge to write down the net book value of leasehold improvements in space no longer used by the Company as of December 8, 2008.

Critical Accounting Estimates and New Accounting Pronouncements

Critical Accounting Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect reported amounts and related disclosures in the financial statements. Management considers an accounting estimate to be critical if:

It requires assumptions to be made that were uncertain at the time the estimate was made, and

Changes in the estimate or different estimates that could have been selected could have a material impact on our results of operations or financial condition

Share-Based Payments We recognize expense for our share-based compensation in accordance with FASB ASC 718, compensation-stock compensation , which establishes standards for share-based transactions in which an entity receives employee s services for (a) equity instruments of the entity, such as stock options, or (b) liabilities that are based on the fair value of the entity s equity instruments or that may be settled by the issuance of such equity instruments. FASB ASC 718 requires that companies expense the fair value of stock options and similar awards, as measured on the awards grant date. FASB ASC 718 applies to all awards granted after the date of adoption, and to awards modified, repurchased or cancelled after that date.

We estimate the value of stock option awards on the date of grant using the Black-Scholes-Merton option-pricing model (the Black-Scholes model). The determination of the fair value of share-based payment awards on the date of grant is affected by our stock price as well as assumptions regarding a number of complex and subjective variables. These variables include our expected stock price volatility over the term of the awards, expected term, risk-free

interest rate, expected dividends and expected forfeiture rates.

If factors change and we employ different assumptions in the application of FASB ASC 718 in future periods, the compensation expense that we record under FASB ASC 718 may differ significantly from what we have recorded in the current period. There is a high degree of subjectivity involved when using option pricing models to estimate share-based compensation under FASB ASC 718. Consequently, there is a risk that our estimates of the fair values of our share-based compensation awards on the grant dates may bear little

Table of Contents

resemblance to the actual values realized upon the exercise, expiration, early termination or forfeiture of those share-based payments in the future. Employee stock options may expire worthless or otherwise result in zero intrinsic value as compared to the fair values originally estimated on the grant date and reported in our financial statements. Alternatively, value may be realized from these instruments that are significantly in excess of the fair values originally estimated on the grant date and reported in our financial statements. During the year ended December 31, 2009, we do not believe that reasonable changes in the projections would have had a material effect on share-based compensation expense.

Revenue Recognition Revenue includes amounts earned from sales of our oral Eligen® B12 product to Life Extension®, collaborative agreements and feasibility studies. Revenue earned from the sale of Eligen® B12 is recognized when products are shipped to Life Extension®. Revenue from feasibility studies, which are typically short term in nature, is recognized upon delivery of the study, provided that all other revenue recognition criteria are met. Revenue from collaboration agreements are recognized using the proportional performance method provided that we can reasonably estimate the level of effort required to complete our performance obligations under an arrangement and such performance obligations are provided on a best effort basis and based on expected payments. Under the proportional performance method, periodic revenue related to nonrefundable cash payments is recognized as the percentage of actual effort expended to date as of that period to the total effort expected for all of our performance obligations under the arrangement. Actual effort is generally determined based upon actual hours incurred and include research and development (R&D) activities performed by us and time spent for joint steering committee (JSC) activities. Total expected effort is generally based upon the total R&D and JSC hours incorporated into the project plan that is agreed to by both parties to the collaboration. Significant management judgments and estimates are required in determining the level of effort required under an arrangement and the period over which we expect to complete the related performance obligations. Estimates of the total expected effort included in each project plan are based on historical experience of similar efforts and expectations based on the knowledge of scientists for both the Company and its collaboration partners. The Company periodically reviews and updates the project plan for each collaborative agreement; the most recent reviews took place in January 2010. In the event that a change in estimate occurs, the change will be accounted for using the cumulative catch-up method which provides for an adjustment to revenue in the current period. Estimates of our level of effort may change in the future, resulting in a material change in the amount of revenue recognized in future periods.

Generally under collaboration arrangements, nonrefundable payments received during the period of performance may include time- or performance-based milestones. The proportion of actual performance to total expected performance is applied to the expected payments in determining periodic revenue. However, revenue is limited to the sum of (1) the amount of nonrefundable cash payments received and (2) the payments that are contractually due but have not yet been paid.

With regard to revenue recognition from collaboration agreements: the Company previously interpreted expected payments to equate to total payments subject to each collaboration agreement. On a prospective basis, the Company has revised its application of expected payments to equate to a best estimate of payments. Under this application, expected payments typically include (i) payments already received and (ii) those milestone payments not yet received but that the Company believes are more likely than not of receiving. Our support for the assertion that the next milestone is likely to be met is based on the (a) project status updates discussed at JSC meetings; (b) clinical trial/development results of prior phases; (c) progress of current clinical trial/development phases; (c) directional input of collaboration partners and (d) knowledge and experience of the Company s scientific staff. After considering the above factors, the Company believes those payments included in expected payments are more likely than not of being received. While this interpretation differs from that used previously by the Company, it does not result in any change to previously recognized revenues in either timing or amount for periods through December 31, 2009.

With regard to revenue recognition in connection with the agreement with Novo Nordisk: such agreement includes multiple deliverables including the license grant, several versions of the Company s Eligen® Technology (or carriers), support services and manufacturing. Emisphere s management reviewed the relevant terms of the Novo Nordisk agreement and determined such deliverables should be accounted for as a single unit of accounting in accordance with FASB ASC 605-25, Multiple-Element Arrangements since the

Table of Contents

delivered license and Eligen® Technology do not have stand-alone value and Emisphere does not have objective evidence of fair value of the undelivered Eligen® Technology or the manufacturing value of all the undelivered items. Such conclusion will be reevaluated as each item in the arrangement is delivered. Consequently any payments received from Novo Nordisk pursuant to such agreement, including the initial $10 million upfront payment and any payments received for support services, will be deferred and included in Deferred Revenue within our balance sheet. Management cannot currently estimate when all of such deliverables will be delivered nor can they estimate when, if ever, Emisphere will have objective evidence of the fair value for all of the undelivered items, therefore all payments from Novo Nordisk are expected to be deferred for the foreseeable future.

As of December 31, 2009 total deferred revenue from the agreement was $11.5 million, comprised of the $10.0 million non-refundable license fee and $1.5 million in support services.

Purchased Technology Purchased technology represents the value assigned to patents and the rights to use, sell or license certain technology in conjunction with our proprietary carrier technology. These assets underlie our research and development projects related to various research and development projects.

Warrants Warrants issued in connection with the equity financing completed in March 2005 and August 2007 and to MHR have been classified as liabilities due to certain provisions that may require cash settlement in certain circumstances. At each balance sheet date, we adjust the warrants to reflect their current fair value. We estimate the fair value of these instruments using the Black-Scholes option pricing model which takes into account a variety of factors, including historical stock price volatility, risk-free interest rates, remaining term and the closing price of our common stock. Changes in the assumptions used to estimate the fair value of these derivative instruments could result in a material change in the fair value of the instruments. We believe the assumptions used to estimate the fair values of the warrants are reasonable. See Item 7A. Quantitative and Qualitative Disclosures about Market Risk for additional information on the volatility in market value of derivative instruments.

Equipment and Leasehold Improvements Equipment and leasehold improvements are stated at cost. Depreciation and amortization are provided for on a straight-line basis over the estimated useful life of the asset. Leasehold improvements are amortized over the life of the lease or of the improvements, whichever is shorter. Expenditures for maintenance and repairs that do not materially extend the useful lives of the respective assets are charged to expense as incurred. The cost and accumulated depreciation or amortization of assets retired or sold are removed from the respective accounts and any gain or loss is recognized in operations.

Impairment of Long-Lived Assets We review our long-lived assets for impairment whenever events and circumstances indicate that the carrying value of an asset might not be recoverable. An impairment loss, measured as the amount by which the carrying value exceeds the fair value, is triggered if the carrying amount exceeds estimated undiscounted future cash flows. Actual results could differ significantly from these estimates, which would result in additional impairment losses or losses on disposal of the assets. During the years ended December 31, 2007 and 2006, we did not recognize any significant impairment losses. During the year ended December 31, 2008 we recognized an approximately $1.0 million charge to write down the value of leasehold improvements in connection with the restructuring charge to estimate current and future costs to close the laboratory and office facility located in Tarrytown, NY. In addition, with regards to the restructuring, we accelerated the useful life of approximately $0.2 million in leasehold improvements for a portion of the laboratory facility in Tarrytown that we continued to use through January 29, 2009. Approximately $0.1 million in additional depreciation expense was recognized during December 2008 and approximately $0.1 million during January 2009.

Clinical Trial Accrual Methodology Clinical trial expenses represent obligations resulting from our contracts with various research organizations in connection with conducting clinical trials for our product candidates. We account for those expenses on an accrual basis according to the progress of the trial as measured by patient enrollment and the

timing of the various aspects of the trial. Accruals are recorded in accordance with the following methodology: (i) the costs for period expenses, such as investigator meetings and initial start-up costs, are expensed as incurred based on management s estimates, which are impacted by

Table of Contents

any change in the number of sites, number of patients and patient start dates; (ii) direct service costs, which are primarily on-going monitoring costs, are recognized on a straight-line basis over the life of the contract; and (iii) principal investigator expenses that are directly associated with recruitment are recognized based on actual patient recruitment. All changes to the contract amounts due to change orders are analyzed and recognized in accordance with the above methodology. Change orders are triggered by changes in the scope, time to completion and the number of sites. During the course of a trial, we adjust our rate of clinical expense recognition if actual results differ from our estimates.

New Accounting Pronouncements

In June 2008, the Financial Accounting Standards Board (FASB) ratified the final consensuses for ASC 815-40-15-5 Evaluating Whether an Instrument Involving a Contingency is Considered Indexed to an Entity s Own Stock (ASC 815-40-15-5). ASC 815-40-15-5 became effective for fiscal years beginning after December 15, 2008. The Company adopted ASC 815-40-15-5 on January 1, 2009. See Note 2 of the Financial Statements for additional information.

Effective July 1, 2009, the Company adopted the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 105-10, *Generally Accepted Accounting Principles Overall* (ASC 105-10). ASC 105-10 establishes the *FASB Accounting Standards Codification* (the Codification) as the source of authoritative accounting principles recognized by the FASB to be applied by nongovernmental entities in the preparation of financial statements in conformity with U.S. GAAP. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative U.S. GAAP for SEC registrants. All guidance contained in the Codification carries an equal level of authority. The Codification superseded all existing non-SEC accounting and reporting standards. All other non-grandfathered, non-SEC accounting literature not included in the Codification is non-authoritative. The FASB will not issue new standards in the form of Statements, FASB Staff Positions or Emerging Issues Task Force Abstracts. Instead, it will issue Accounting Standards Updates (ASUs). The FASB will not consider ASUs as authoritative in their own right. ASUs will serve only to update the Codification, provide background information about the guidance and provide the bases for conclusions on the change(s) in the Codification. References made to FASB guidance throughout this document have been updated for the Codification.

Effective January 1, 2008, the Company adopted FASB ASC 820-10, *Fair Value Measurements and Disclosures Overall* (ASC 820-10) with respect to its financial assets and liabilities. In February 2008, the FASB issued updated guidance related to fair value measurements, which is included in the Codification in ASC 820-10-55, *Fair Value Measurements and Disclosures Overall Implementation Guidance and Illustrations*. The updated guidance provided a one year deferral of the effective date of ASC 820-10 for non-financial assets and non-financial liabilities, except those that are recognized or disclosed in the financial statements at fair value at least annually. Therefore, the Company adopted the provisions of ASC 820-10 for non-financial assets and non-financial liabilities effective January 1, 2009, and such adoption did not have a material impact on the Company s results of operations or financial condition.

Effective April 1, 2009, the Company adopted FASB ASC 820-10-65, *Fair Value Measurements and Disclosures Overall Transition and Open Effective Date Information* (ASC 820-10-65). ASC 820-10-65 provides additional guidance for estimating fair value in accordance with ASC 820-10 when the volume and level of activity for an asset or liability have significantly decreased. ASC 820-10-65 also includes guidance on identifying circumstances that indicate a transaction is not orderly. The adoption of ASC 820-10-65 did not have an impact on the Company s consolidated results of operations or financial condition.

Effective April 1, 2009, the Company adopted FASB ASC 825-10-65, *Financial Instruments Overall Transition and Open Effective Date Information* (ASC 825-10-65). ASC 825-10-65 amends ASC 825-10 to require disclosures about fair value of financial instruments in interim financial statements as well as in annual financial statements and also

amends ASC 270-10 to require those disclosures in all interim financial statements. The adoption of ASC 825-10-65 did not have a material impact on the Company s results of operations or financial condition.

Table of Contents

Effective April 1, 2009, the Company adopted FASB ASC 855-10, *Subsequent Events Overall* (ASC 855-10). ASC 855-10 establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. It requires the disclosure of the date through which an entity has evaluated subsequent events and the basis for that date that is, whether that date represents the date the financial statements were issued or were available to be issued. This disclosure should alert all users of financial statements that an entity has not evaluated subsequent events after that date in the set of financial statements being presented. Adoption of ASC 855-10 did not have a material impact on the Company s results of operations or financial condition.

Effective July 1, 2009, the Company adopted FASB ASU No. 2009-05, *Fair Value Measurements and Disclosures (Topic 820)* (ASU 2009-05). ASU 2009-05 provided amendments to ASC 820-10, *Fair Value Measurements and Disclosures Overall,* for the fair value measurement of liabilities. ASU 2009-05 provides clarification that in circumstances in which a quoted price in an active market for the identical liability is not available, a reporting entity is required to measure fair value using certain techniques. ASU 2009-05 also clarifies that when estimating the fair value of a liability, a reporting entity is not required to include a separate input or adjustment to other inputs relating to the existence of a restriction that prevents the transfer of a liability. ASU 2009-05 also clarifies that both a quoted price in an active market for the identical liability at the measurement date and the quoted price for the identical liability when traded as an asset in an active market when no adjustments to the quoted price of the asset are required are Level 1 fair value measurements. Adoption of ASU 2009-05 did not have a material impact on the Company s results of operations or financial condition.

In October 2009, the FASB issued ASU 2009-13, *Multiple-Deliverable Revenue Arrangements,* (amendments to FASB ASC Topic 605, *Revenue Recognition*) (ASU 2009-13) and ASU 2009-14, *Certain Arrangements That Include Software Elements*, (amendments to FASB ASC Topic 985, *Software*) (ASU 2009-14). ASU 2009-13 requires entities to allocate revenue in an arrangement using estimated selling prices of the delivered goods and services based on a selling price hierarchy. The amendments eliminate the residual method of revenue allocation and require revenue to be allocated using the relative selling price method. ASU 2009-14 removes tangible products from the scope of software revenue guidance and provides guidance on determining whether software deliverables in an arrangement that includes a tangible product are covered by the scope of the software revenue guidance. ASU 2009-13 and ASU 2009-14 should be applied on a prospective basis for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010, with early adoption permitted. The Company does not expect adoption of ASU 2009-13 or ASU 2009-14 to have a material impact on the Company s results of operations or financial condition.

In October, 2009, the FASB issued ASU 2009-15, Accounting for Own-Share Lending Arrangements in Contemplation of Convertible Debt Issuance or Other Financing , (ASU-2009-15), which provides guidance for accounting and reporting for own-share lending arrangements issued in contemplation of a convertible debt issuance. At the date of issuance, a share-lending arrangement entered into on an entity s own shares should be measured at fair value in accordance with Topic 820 and recognized as an issuance cost, with an offset to additional paid-in capital. Loaned shares are excluded from basic and diluted earnings per share unless default of the share-lending arrangement occurs. The amendments also require several disclosures including a description and the terms of the arrangement and the reason for entering into the arrangement. The effective dates of the amendments are dependent upon the date the share-lending arrangement was entered into and include retrospective application for arrangements outstanding as of the beginning of fiscal years beginning on or after December 15, 2009. Management is currently evaluating the potential impact of ASU 2009-15 on our financial statements.

In January 2010, the FASB issued ASU 2010-06, *Improving Disclosures about Fair Value Measurements*. ASU 2010-06 amends ASC 820 to require a number of additional disclosures regarding fair value measurements. The amended guidance requires entities to disclose the amounts of significant transfers between Level 1 and Level 2 of the

fair value hierarchy and the reasons for these transfers, the reasons for any transfers in or out of Level 3, and information in the reconciliation of recurring Level 3 measurements about purchases, sales, issuances and settlements on a gross basis. The ASU also clarifies the requirements for entities to disclose information about both the valuation techniques and inputs used in estimating Level 2 and Level 3

Table of Contents

fair value measurements. The amended guidance is effective for interim and annual financial periods beginning after December 15, 2009. ASU 2010-06 is not expected to have a significant effect on the Company s financial statements.

Management does not believe that any other recently issued, but not yet effective, accounting standards if currently adopted would have a material effect on the accompanying financial statements.

Off-Balance Sheet Arrangements

As of December 31, 2009, we had no material off-balance sheet arrangements.

In the ordinary course of business, we enter into agreements with third parties that include indemnification provisions which, in our judgment, are normal and customary for companies in our industry sector. These agreements are typically with business partners, clinical sites, and suppliers. Pursuant to these agreements, we generally agree to indemnify, hold harmless, and reimburse indemnified parties for losses suffered or incurred by the indemnified parties with respect to our product candidates, use of such product candidates, or other actions taken or omitted by us. The maximum potential amount of future payments we could be required to make under these indemnification provisions is unlimited. We have not incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. As a result, the estimated fair value of liabilities relating to these provisions is minimal. Accordingly, we have no liabilities recorded for these provisions as of December 31, 2009.

In the normal course of business, we may be confronted with issues or events that may result in a contingent liability. These generally relate to lawsuits, claims, environmental actions or the actions of various regulatory agencies. We consult with counsel and other appropriate experts to assess the claim. If, in our opinion, we have incurred a probable loss as set forth by accounting principles generally accepted in the U.S., an estimate is made of the loss and the appropriate accounting entries are reflected in our financial statements. After consultation with legal counsel, we do not anticipate that liabilities arising out of currently pending or threatened lawsuits and claims, including the pending litigation described in Part I, Item 3 **Legal Proceedings ,** will have a material adverse effect on our financial position, results of operations or cash flows.

Contractual Arrangements

Significant contractual obligations as of December 31, 2009 are as follows:

		Amount Due in			
Type of Obligation	**Total**	**Less than 1 Year**	**1 to 3 Years**	**3 to 5 Years**	**More than 5 Years**
		(In thousands)			
Notes Payable(1)(2)	$ 43,105	$ 12,588	$ 30,517	$	$
Derivative liabilities(3)	10,780	6,189	4,591		
Lawsuit(4)	2,333	2,333			
Operating lease obligations	1,089	345	713	31	
Total	$ 57,307	$ 21,455	$ 35,821	$ 31	$

(1) Amounts include both principal and related interest payments.

(2) In December 2004, we issued a $10.0 million convertible note payable to Novartis (the Novartis Note). The Novartis Note, as amended, bears interest at a rate of 3% prior to December 1, 2006, 5% from December 1, 2006 through December 1, 2008, and 7% from that point until maturity. The Novartis Note was originally due December 1, 2009. On November 27, 2009, Novartis agreed to extend the maturity date of the Novartis Note to February 26, 2010. Subsequently, on February 23, 2010, Novartis agreed to further extend the maturity date of the Novartis Note to May 26, 2010. Interest may be paid annually or accreted as additional principal. The Novartis Note is convertible, at our option, at any time prior to maturity into a number of shares of our common stock equal to the principal and accrued and unpaid interest thereon divided by the conversion price, which conversion price is equal to the average of the highest bid and

Table of Contents

lowest ask prices of our common stock as quoted on the Over-The-Counter Bulletin Board (OTCBB) averaged over a period of twenty (20) days, consisting of the day on which the conversion price is being determined and the nineteen (19) consecutive business days prior to such day, provided certain conditions contained in the Novartis Note are met. Those conditions include that, at the time of such conversion, no event of default under the Novartis Note has occurred and is continuing and that there is either an effective registration statement in effect covering the resale of the shares issued in connection with such conversion or the shares may be resold by Novartis pursuant to SEC Rule 144. Based on the price per share of our common stock on December 31, 2009, the Novartis Note was convertible into 14,944,980 shares of our common stock, assuming Novartis does not exercise their right to limit the number of shares issued to it upon conversion of the Novartis Note such that the shares of common stock they receive upon conversion do not exceed 19.9% of the total shares of our common stock outstanding. At December 31, 2009, the balance on the Novartis Note was approximately $12.6 million.

We have outstanding $13.1 million in Convertible Notes payable to MHR and its affiliates (MHR) due September 2012 and convertible at the sole discretion of MHR into shares of our common stock at a price of $3.78. Interest at 11% is payable in additional Convertible Notes rather than in cash and we have the right to call the Convertible Notes after September 10, 2010 if certain conditions are satisfied. The Convertible Notes are subject to acceleration upon the occurrence of certain events of default.

(3) We have issued warrants to purchase shares of our common stock which contain provisions requiring us to make a cash payment to the holders of the warrant for any gain that could have been realized if the holders exercise the warrants and we subsequently fail to deliver a certificate representing the shares to be issued upon such exercise by the third trading day after such warrants have been exercised. As a result, these warrants have been recorded at their fair value and are classified as current liabilities. The value and timing of the actual cash payments, if any, related to these derivative instruments could differ materially from the amounts and periods shown.

(4) In April 2005, the Company entered into an amended and restated employment agreement with its then Chief Executive Officer, Dr. Michael M. Goldberg, for services through July 31, 2007. On January 16, 2007, the Board of Directors terminated Dr. Goldberg s services. On April 26, 2007, the Board of Directors held a special hearing at which it determined that Dr. Goldberg s termination was for cause. On March 22, 2007, Dr. Goldberg, through his counsel, filed a demand for arbitration asserting that his termination was without cause and seeking $1,048,000 plus attorney s fees, interest, arbitration costs and other relief alleged to be owed to him in connection with his employment agreement with the Company. During the arbitration, Dr. Goldberg sought a total damage amount of at least $9,223,646 plus interest. On February 11, 2010, the arbitrator issued the final award in favor of Dr. Goldberg for a total amount of approximately $2,333,115 as full and final payment for all claims, defenses, counterclaims, and related matters. As a result of the February 11, 2010 final award, the Company adjusted its estimate of costs to settle this matter to $2,333,115. If the awards are upheld and confirmed in court, the Company will be required to pay the final amount due to Dr. Goldberg.

On April 6, 2007, the Board of Directors appointed Michael V. Novinski to the position of President and Chief Executive Officer. Pursuant to his appointment, the Company has entered into a three year employment agreement with Mr. Novinski. If Mr. Novinski s contract is terminated without cause or at any time by the executive for good reason as defined in his contract, we are obligated to make severance payments to Mr. Novinski.

Table of Contents

ITEM 7A. ***QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK***

Fair Value of Warrants and Derivative Liabilities. At December 31, 2009, the value of derivative instruments was $10.8 million. We estimate the fair values of these instruments using the Black-Scholes option pricing model which takes into account a variety of factors, including historical stock price volatility, risk-free interest rates, remaining term and the closing price of our common stock. We are required to revalue this liability each quarter. We believe that the assumption that has the greatest impact on the determination of fair value is the closing price of our common stock. The following table illustrates the potential effect on the fair value of derivative instruments from changes in the assumptions made:

	Increase/(Decrease) (In thousands)
25% increase in stock price	$ 1,974
50% increase in stock price	4,060
5% increase in assumed volatility	299
25% decrease in stock price	(1,828)
50% decrease in stock price	(3,448)
5% decrease in assumed volatility	(304)

Table of Contents

ITEM 8. ***FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA***

EMISPHERE TECHNOLOGIES, INC.

FINANCIAL STATEMENTS

Index

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Emisphere Technologies, Inc.

We have audited the accompanying balance sheet of Emisphere Technologies, Inc. as of December 31, 2009, and the related statements of operations, cash flows and stockholders (deficit) equity for the year then ended. 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 audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Emisphere Technologies, Inc. as of December 31, 2009, and the results of its operations and its cash flows for the year then ended, in conformity with U.S. generally accepted accounting principles.

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

As discussed in Note 3 to the financial statements, Emisphere Technologies, Inc. has changed its method of accounting for derivative instruments as of January 1, 2009 due to the adoption of Financial Accounting Standards Board Accounting Codification Topic 815-50-15, Evaluating Whether an Instrument Involving a Contingency is Considered Indexed to an Entity s Own Stock .

We were not engaged to examine management s assessment of the effectiveness of Emisphere Technologies, Inc. s internal control over financial reporting as of December 31, 2009, included in the accompanying Management s Report on Internal Control Over Financial Reporting and, accordingly, we do not express an opinion thereon.

/s/ McGladrey & Pullen, LLP

New York, New York
March 25, 2010

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Emisphere Technologies, Inc.:

In our opinion, the balance sheet as of December 31, 2008 and the related statements of operations, of cash flows and of stockholders (deficit) equity for each of the two years in the period ended December 31, 2008 present fairly, in all material respects, the financial position of Emisphere Technologies, Inc. (the Company) at December 31, 2008, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2008, 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 includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

The financial statements referred to above have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has experienced recurring operating losses, has limited capital resources and has significant future commitments that raise substantial doubt about its ability to continue as a going concern. Management s plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ PricewaterhouseCoopers LLP

New York, New York
March 16, 2009

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

BALANCE SHEETS

	December 31,	
	2009	2008
	(In thousands, except share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 3,566	$ 7,214
Accounts receivable, net of allowance of $0 in 2009 and $9 in 2008	158	232
Inventories	20	
Prepaid expenses and other current assets	369	273
Total current assets	4,113	7,719
Equipment and leasehold improvements, net	138	465
Restricted cash	259	255
Purchased technology, net	1,077	1,316
Deferred financing cost	346	421
Total assets	$ 5,933	$ 10,176
LIABILITIES AND STOCKHOLDERS DEFICIT		
Current liabilities:		
Notes payable, including accrued interest and net of related discount	$ 12,588	$ 12,011
Accounts payable and accrued expenses	4,975	2,361
Derivative instruments:		
Related party	3,205	153
Others	2,984	114
Deferred revenue, current		87
Restructuring charge, current	750	927
Other current liabilities	52	20
Total current liabilities	24,554	15,673
Notes payable, including accrued interest and net of related discount, related party	13,076	18,209
Derivative instrument, related party	4,591	
Restructuring charge, non-current		1,953
Deferred revenue, non-current	11,494	11,240
Deferred lease liability and other liabilities, non current	82	129
Total liabilities	53,797	47,204
Commitments and contingencies (Note 16)		
Stockholders deficit:		

Preferred stock, $.01 par value; authorized 1,000,000 shares; issued and outstanding-none		
Common stock, $.01 par value; authorized 100,000,000 shares; issued 42,360,133 shares (42,070,401 outstanding) in 2009 and 30,630,810 shares (30,341,078 outstanding) in 2008	424	306
Additional paid-in capital	392,335	400,306
Accumulated deficit	(436,671)	(433,688)
Common stock held in treasury, at cost; 289,732 shares	(3,952)	(3,952)
Total stockholders deficit	(47,864)	(37,028)
Total liabilities and stockholders deficit	$ 5,933	$ 10,176

The accompanying notes are an integral part of the financial statements

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2009	2008	2007
	(In thousands, except share and per share data)		
Revenue	$ 92	$ 251	$ 4,077
Cost of goods sold	15		
Gross profit	77	251	4,077
Costs, expenses and income from settlement of lawsuit:			
Research and development	4,046	12,785	21,076
General and administrative	10,068	9,176	14,459
Loss (gain) on disposal of fixed assets	(789)	(135)	35
Restructuring charge	(356)	3,831	
Depreciation and amortization	367	914	1,048
Income from settlement of lawsuit:			
Proceeds from settlement of lawsuit			(18,000)
Expense from settlement of lawsuit	1,293		6,110
(Income) expense from settlement of lawsuit, net	1,293		(11,890)
Total costs, expenses and income from settlement of lawsuit	14,629	26,571	24,728
Operating loss	(14,552)	(26,320)	(20,651)
Other non-operating income (expense):			
Sale of patent	500	1,500	
Sublease income	232	797	215
Investment and other income	131	371	1,066
Change in fair value of derivative instruments:			
Related party	(1,853)	1,085	2,561
Others	(620)	1,135	2,496
Interest expense:			
Related party	(4,504)	(2,428)	(2,111)
Others	(577)	(528)	(504)
Total other income (expense)	(6,691)	1,932	3,723
Net loss	$ (21,243)	$ (24,388)	$ (16,928)
Net loss per share, basic	$ (0.61)	$ (0.80)	$ (0.58)
Net loss per share, diluted	$ (0.61)	$ (0.80)	$ (0.76)

Weighted average shares outstanding, basic	34,679,321	30,337,442	29,039,101
Weighted average shares outstanding, diluted	34,679,321	30,337,442	29,128,013

The accompanying notes are an integral part of the financial statements

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2009	2008	2007
	(In thousands)		
Cash flows from operating activities:			
Net loss	$ (21,243)	$ (24,388)	$ (16,928)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	367	914	1,048
Non-cash interest expense:			
Related party	4,504	2,428	2,111
Others	577	528	504
Changes in the fair value of derivative instruments:			
Related party	1,853	(1,085)	(2,561)
Others	620	(1,135)	(2,496)
Non-cash restructuring charge		1,040	
Non-cash compensation	1,587	1,011	3,068
Loss (gain) on disposal of fixed assets	(789)	(135)	35
Impairment of intangible and fixed assets and other			86
Changes in assets and liabilities excluding non-cash charges:			
(Increase) decrease in accounts receivable	73	60	(76)
(Increase) decrease in inventories	(20)		
(Increase) decrease in prepaid expenses and other current assets	(95)	710	400
Increase (decrease) in accounts payable, accrued expenses and other	2,613	(513)	225
Increase (decrease) in deferred revenue	166	11,254	43
Increase (decrease) in deferred lease and other liabilities	(14)	(253)	137
Restructuring charge	(2,130)	2,880	
Total adjustments	9,312	17,704	2,524
Net cash used in operating activities	(11,931)	(6,684)	(14,404)
Cash flows from investing activities:			
Proceeds from sale and maturity of investments		9,927	15,650
Purchases investments and short term instruments			(12,084)
Equipment purchases		(109)	(293)
(Increase) decrease in restricted cash	(4)	(9)	(246)
Proceeds from sale of fixed assets	989	138	28
Net cash provided by investing activities	985	9,947	3,055
Cash flows from financing activities:			
Proceeds from exercise of stock options and warrants		13	346
Net proceeds from issuance of common stock and warrants	7,298		5,954

Proceeds from issuance of warrants			952
Net cash provided by financing activities	7,298	13	7,252
Net increase (decrease) cash and cash equivalents	(3,648)	3,276	(4,097)
Cash and cash equivalents, beginning of year	7,214	3,938	8,035
Cash and cash equivalents, end of year	$ 3,566	$ 7,214	$ 3,938
Supplemental disclosure of cash flow information:			
Interest paid	$	$	$
Non-cash investing and financing activities:			
Issuance of stock options to consultants	$	$	$ (6)

The accompanying notes are an integral part of the financial statements

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

STATEMENTS OF STOCKHOLDERS (DEFICIT) EQUITY
For the years ended December 31, 2009, 2008 and 2007

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive (Loss) Income	Common Stock Held in Treasury Shares	Common Stock Held in Treasury Amount	Total
				(In thousands, except share data)				
Balance, December 31, 2006	28,528,677	$ 285	$ 389,935	$ (392,372)	$ (2)	289,732	$ (3,952)	$ (6,106)
Net loss				(16,928)				(16,928)
Unrealized gain on investments					(8)			(8)
Comprehensive loss								(16,936)
Equity proceeds from issuance of common stock, net of share issuance expenses	2,000,000	20	5,934					5,954
Sale of common stock under employee stock purchase plans and exercise of options	82,023	1	345					346
Stock based compensation expense for employees			3,014					3,014
Stock based compensation expense for directors	15,960		60					60
Issuance of stock options for consulting services			(6)					(6)
Balance, December 31, 2007	30,626,660	306	399,282	(409,300)	(10)	289,732	(3,952)	(13,674)
Net loss				(24,388)				(24,388)
Unrealized loss on investments					10			10
Comprehensive loss								(24,378)

Sale of common stock under exercise of options	4,150		13				13
Stock based compensation expense for employees			1,011				1,011
Balance, December 31, 2008	30,630,810	306	400,306	(433,688)	289,732	(3,952)	(37,028)
Net loss				(21,243)			(21,243)
Cumulative effect of change in accounting principle implementation of ASC 815-40-15-5			(12,215)	18,260			6,045
Equity proceeds from issuance of common stock, net of share issuance expenses	11,729,323	118	2,657				2,775
Stock based compensation expense for employees			1,532				1,532
Stock based compensation expense for directors			55				55
Balance, December 31, 2009	42,360,133	$ 424	$ 392,335	$ (436,671)	289,732	$ (3,952)	$ (47,864)

The accompanying notes are an integral part of the financial statements

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS

1. Nature of Operations, Risks and Uncertainties and Liquidity

Nature of Operations. Emisphere Technologies, Inc. (Emisphere , our , us , the company or we) is a biopharmace company that focuses on our improved delivery of therapeutic molecules and pharmaceutical compounds using its Eligen® Technology. These molecules and compounds could be currently available or are in pre-clinical or clinical development.

Our core business strategy is to develop oral forms of drugs that are not currently available or have poor bioavailability in oral form, either alone or with corporate partners, by applying the Eligen® Technology to those drugs. Typically, the drugs that we target have received regulatory approval, have demonstrated safety and efficacy, and are currently available on the market. In November 2009 the Company launched its first commercially available product, oral Eligen® B12 (100 mcg), which had been specifically developed to help improve Vitamin B12 absorption and bioavailability with a patented formulation, in partnership with Life Extension®.

Risks and Uncertainties. We have no prescription products currently approved for sale by the U.S. FDA. Our oral Eligen® Vitamin B12 products may not achieve anticipated sales targets. There can be no assurance that our research and development will be successfully completed, that any products developed will obtain necessary government regulatory approval or that any approved products will be commercially viable. In addition, we operate in an environment of rapid change in technology and are dependent upon the continued services of our current employees, consultants and subcontractors.

Liquidity. As of December 31, 2009, we had approximately $3.8 million in cash and restricted cash, approximately $20.4 million in working capital deficiency, a stockholders deficit of approximately $47.9 million and an accumulated deficit of approximately $436.7 million. Our net loss and operating loss for the year ended December 31, 2009 was approximately $21.2 million and $14.6 million, respectively. Since our inception in 1986, we have generated significant losses from operations. However, during 2009 we introduced our first commercial product and anticipate introducing our second commercial product during 2010. Although we cannot assure the commercial success of these products, at some point in the future, potential combined sales or partnerships may generate sufficient net proceeds to offset a part of continuing losses from operations for the foreseeable future. However, until those potential net proceeds are realized, we anticipate that we will continue to generate significant losses from operations for the foreseeable future, and that our business will require substantial additional investment that we have not yet secured. As such, we anticipate that our existing cash resources will enable us to continue operations only through approximately June 2010 or earlier if unforeseen events arise that negatively affect our liquidity. Further, we have significant future commitments and obligations. These conditions raise substantial doubt about our ability to continue as a going concern.

Our plan is to raise capital when needed and/or to pursue product partnering opportunities. We expect to continue to spend substantial amounts on research and development, including amounts spent on conducting clinical trials for our product candidates. Expenses will be partially offset with income-generating license agreements, if possible. Further, we will not have sufficient resources to develop fully any new products or technologies unless we are able to raise substantial additional financing on acceptable terms or secure funds from new or existing partners. We cannot assure that financing will be available when needed, or on favorable terms or at all. If additional capital is raised through the sale of equity or convertible debt securities, the issuance of such securities would result in dilution to our existing stockholders. Our failure to raise capital before June 2010 will adversely affect our business, financial condition and

results of operations, and could force us to reduce or cease our operations. No adjustment has been made in the accompanying financial statements to the carrying amount and classification of recorded assets and liabilities should we be unable to continue operations.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

2. Summary of Significant Accounting Policies

Use of Estimates. The preparation of financial statements in accordance with accounting principles generally accepted in the U.S. involves the use of estimates and assumptions that affect the recorded amounts of assets and liabilities as of the date of the financial statements and the reported amounts of revenue and expenses and performance period for revenue recognition. Actual results may differ substantially from these estimates. Significant estimates include the fair value and recoverability of the carrying value of purchased technology, recognition of on-going clinical trial costs, estimated costs to complete research collaboration projects, accrued expenses, the variables and method used to calculate stock-based compensation, derivative instruments and deferred taxes.

Concentration of Credit Risk. Financial instruments, which potentially subject us to concentrations of credit risk, consist of cash, cash equivalents, restricted cash and investments. We invest excess funds in accordance with a policy objective seeking to preserve both liquidity and safety of principal. We generally invest our excess funds in obligations of the U.S. government and its agencies, bank deposits, money market funds, and investment grade debt securities issued by corporations and financial institutions. We hold no collateral for these financial instruments.

Cash, Cash Equivalents, and Investments. We consider all highly liquid, interest-bearing instruments with original maturity of three months or less when purchased to be cash equivalents. Cash and cash equivalents may include demand deposits held in banks and interest bearing money market funds. Our investment policy requires that commercial paper be rated A-1, P-1 or better by either Standard and Poor s Corporation or Moody s Investor Services or another nationally recognized agency and that securities of issuers with a long-term credit rating must be rated at least A (or equivalent). As of December 31, 2009 we held no investments.

Inventory. Inventories are stated at the lower of cost or market determined by the first in, first out method.

Equipment and Leasehold Improvements. Equipment and leasehold improvements are stated at cost. Depreciation and amortization are provided on a straight-line basis over the estimated useful life of the asset. Leasehold improvements are amortized over the term of the lease or useful life of the improvements, whichever is shorter. Expenditures for maintenance and repairs that do not materially extend the useful lives of the respective assets are charged to expense as incurred. The cost and accumulated depreciation or amortization of assets retired or sold are removed from the respective accounts and any gain or loss is recognized in operations.

Purchased Technology. Purchased technology represents the value assigned to patents and the right to use, sell or license certain technology in conjunction with our proprietary carrier technology that were acquired from Ebbisham Ltd. These assets are utilized in various research and development projects. Such purchased technology is being amortized over 15 years, until 2014, which represents the average life of the patents acquired.

Impairment of Long-Lived Assets. In accordance with FASB ASC 360-10-35, we review our long-lived assets including purchased technology, for impairment whenever events and circumstances indicate that the carrying value of an asset might not be recoverable. An impairment loss, measured as the amount by which the carrying value exceeds the fair value, is recognized if the carrying amount exceeds estimated undiscounted future cash flows.

Deferred Lease Liability. Our leases provide for rental holidays and escalations of the minimum rent during the lease term, as well as additional rent based upon increases in real estate taxes and common maintenance charges. We record rent expense from leases with rental holidays and escalations using the straight-line method, thereby prorating the total rental commitment over the term of the lease. Under this

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

method, the deferred lease liability represents the difference between the minimum cash rental payments and the rent expense computed on a straight-line basis.

Revenue Recognition. We recognize revenue in accordance with FASB ASC 605-10-S99 , *Revenue Recognition.* Revenue includes amounts earned from sales of our oral Eligen® B12 product to Life Extension®, collaborative agreements and feasibility studies. Revenue earned from the sale of oral Eligen® B12 is recognized when products are shipped to Life Extension®. Revenue earned from collaborative agreements and feasibility studies is comprised of reimbursed research and development costs, as well as upfront and research and development milestone payments. Deferred revenue represents payments received which are related to future performance. Revenue from feasibility studies, which are typically short term in nature, is recognized upon delivery of the study, provided that all other revenue recognition criteria are met.

Revenue from collaboration agreements are recognized using the proportional performance method provided that we can reasonably estimate the level of effort required to complete our performance obligations under an arrangement and such performance obligations are provided on a best effort basis and based on expected payments. Under the proportional performance method, periodic revenue related to nonrefundable cash payments is recognized as the percentage of actual effort expended to date as of that period to the total effort expected for all of our performance obligations under the arrangement. Actual effort is generally determined based upon actual hours incurred and include research and development (R&D) activities performed by us and time spent for joint steering committee (JSC) activities. Total expected effort is generally based upon the total R&D and JSC hours incorporated into the project plan that is agreed to by both parties to the collaboration. Significant management judgments and estimates are required in determining the level of effort required under an arrangement and the period over which we expect to complete the related performance obligations. Estimates of the total expected effort included in each project plan are based on historical experience of similar efforts and expectations based on the knowledge of scientists for both the Company and its collaboration partners. The Company periodically reviews and updates the project plan for each collaborative agreement; the most recent reviews took place in January 2010. In the event that a change in estimate occurs, the change will be accounted for using the cumulative catch-up method which provides for an adjustment to revenue in the current period. Estimates of our level of effort may change in the future, resulting in a material change in the amount of revenue recognized in future periods.

Generally under collaboration arrangements, nonrefundable payments received during the period of performance may include time- or performance-based milestones. The proportion of actual performance to total expected performance is applied to the expected payments in determining periodic revenue. However, revenue is limited to the sum of (i.) the amount of nonrefundable cash payments received and (ii.) the payments that are contractually due but have not yet been paid.

Research and Development and Clinical Trial Expenses. Research and development expenses include costs directly attributable to the conduct of research and development programs, including the cost of salaries, payroll taxes, employee benefits, materials, supplies, maintenance of research equipment, costs related to research collaboration and licensing agreements, the cost of services provided by outside contractors, including services related to our clinical trials, clinical trial expenses, the full cost of manufacturing drug for use in research, pre-clinical development, and clinical trials. All costs associated with research and development are expensed as incurred.

Clinical research expenses represent obligations resulting from our contracts with various research organizations in connection with conducting clinical trials for our product candidates. We account for those expenses on an accrual basis according to the progress of the trial as measured by patient enrollment and the timing of the various aspects of the trial. Accruals are recorded in accordance with the following methodology: (i) the costs for period expenses, such as investigator meetings and initial start-up costs, are expensed as incurred based on management s estimates, which are impacted by any change in the number of sites, number of patients and patient start dates; (ii) direct service costs, which are primarily ongoing monitoring costs, are

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

recognized on a straight-line basis over the life of the contract; and (iii) principal investigator expenses that are directly associated with recruitment are recognized based on actual patient recruitment. All changes to the contract amounts due to change orders are analyzed and recognized in accordance with the above methodology. Change orders are triggered by changes in the scope, time to completion and the number of sites. During the course of a trial, we adjust our rate of clinical expense recognition if actual results differ from our estimates.

Income Taxes. Deferred tax liabilities and assets are recognized for the expected future tax consequences of events that have been included in the financial statements or tax returns. These liabilities and assets are determined based on differences between the financial reporting and tax basis of assets and liabilities measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. A valuation allowance is recognized to reduce deferred tax assets to the amount that is more likely than not to be realized. In assessing the likelihood of realization, management considered estimates of future taxable income.

Effective January 1, 2007, the Company adopted the provisions of FASB ASC 740-10-05 *Income Taxes.* The implementation had no impact on the Company s financial statements as the Company has not recognized any uncertain income tax positions.

Stock-Based Employee Compensation. We recognize expense for our share-based compensation based on the fair value of the awards at the time they are granted. We estimate the value of stock option awards on the date of grant using the Black-Scholes-Merton option-pricing model (the Black-Scholes model). The determination of the fair value of share-based payment awards on the date of grant is affected by our stock price as well as assumptions regarding a number of complex and subjective variables. These variables include our expected stock price volatility over the term of the awards, expected term, risk-free interest rate, expected dividends and expected forfeiture rates. The forfeiture rate is estimated using historical option cancellation information, adjusted for anticipated changes in expected exercise and employment termination behavior. Our outstanding awards do not contain market or performance conditions therefore we have elected to recognize share-based employee compensation expense on a straight-line basis over the requisite service period.

Fair Value of Financial Instruments. The carrying amounts for cash, cash equivalents, accounts payable, and accrued expenses approximate fair value because of their short-term nature. We have determined that it is not practical to estimate the fair value of our notes payable because of their unique nature and the costs that would be incurred to obtain an independent valuation. We do not have comparable outstanding debt on which to base an estimated current borrowing rate or other discount rate for purposes of estimating the fair value of the notes payable and we have not yet obtained or developed a valuation model. Additionally, we are engaged in research and development activities and have not yet developed products for sale. Accordingly, at this stage of our development, a credit risk assessment is highly judgmental. These factors all contribute to the impracticability of estimating the fair value of the notes payable. At December 31, 2009, the carrying value of the notes payable and accrued interest was $25.7 million. The MHR Convertible Notes, which are due on September 26, 2012, yield an effective interest rate of 14.2%. The Novartis Note was originally due December 1, 2009. On November 27, 2009, Novartis agreed to extend the maturity date of the Novartis Note to February 26, 2010. Subsequently, on February 23, 2010, Novartis agreed to further extend the maturity date of the Novartis Note to May 26, 2010. See Note 8 for further discussion of the notes payable.

Derivative Instruments. Derivative instruments consist of common stock warrants, and certain instruments embedded in the certain Notes payable and related agreements. These financial instruments are recorded in the balance sheets at

fair value as liabilities. Changes in fair value are recognized in earnings in the period of change.

Effective January 1, 2009, the Company adopted the provisions of the Financial Accounting Standards Board Accounting Codification Topic 815-40-15-5, *Evaluating Whether an Instrument Involving a Contingency is Considered Indexed to an Entity s Own Stock* (FASB ASC 815-40-15-5). FASB ASC 815-40-15-5

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

provides guidance in assessing whether an equity-linked financial instrument (or embedded feature) is indexed to an entity s own stock for purposes of determining whether the equity linked instrument (or embedded feature) qualifies as a derivative instrument. We have determined that our MHR convertible notes and certain of our warrants contain features that that are not indexed to our own stock and therefore, were classified as a derivative instrument. Upon adoption, we recognized and recorded a cumulative effect of a change in accounting principle of $18.3 million. The cumulative adjustment included a decrease in Notes payable of approximately $9.6 million, an increase in Derivative instruments of approximately $3.5 million and the balance was a reduction in Stockholders Deficit.

For comparability purposes, the following table sets forth the effects of the adoption of FASB ASC 815-40-15-5 on net loss and loss per share for the years ended December 31, 2008 and 2007:

	As Reported December 31,		Pro Forma (unaudited) December 31,	
	2008	2007	2008	2007
	(In thousands, except per share amounts)		(In thousands, except per share amounts)	
Net loss	$ (24,388)	$ (16,928)	$ (20,135)	$ (6,766)
Net loss per share, basic	$ (0.80)	$ (0.58)	$ (0.66)	$ (0.23)
Net loss per share, dilutive	$ (0.80)	$ (0.76)	$ (0.66)	$ (0.41)

Comprehensive Loss. Comprehensive loss represents the change in net assets of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. Comprehensive loss includes net loss adjusted for the change in net unrealized gain or loss on marketable securities. The disclosures required by FASB ASC 220-10-45, *Reporting Comprehensive Income* for the years ended December 31, 2009, 2008 and 2007 have been included in the statements of stockholders equity (deficit).

Exit activities. We have adopted FASB ASC 420-10-05, *Exit or Disposal Cost Obligations*. This Standard addresses financial accounting and reporting for costs associated with exit or disposal activities. This Standard requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred. This Standard also establishes that fair value is the objective for initial measurement of the liability. This Standard specifies that a liability for a cost associated with an exit or disposal activity is incurred when the definition of a liability is met, and that fair value is the measurement at the exit, disposal or cease use date.

Fair Value Measurements. The authoritative guidance for fair value measurements defines fair value as the exchange price that would be received an asset or paid to transfer a liability (an exit price) in the principal or the most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Market participants are buyers and sellers in the principal market that are (i) independent, (ii) knowledgeable, (iii) able to transact, and (iv) willing to transact. The guidance describes a fair value hierarchy based on the levels of inputs, of which the first two are considered observable and the last unobservable, that may be

used to measure fair value which are the following:

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

Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or corroborated by observable market data or substantially the full term of the assets or liabilities

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

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

Future Impact of Recently Issued Accounting Standards

In October 2009, the FASB issued ASU 2009-13, *Multiple-Deliverable Revenue Arrangements,* (amendments to FASB ASC Topic 605, *Revenue Recognition*) (ASU 2009-13). ASU 2009-13 requires entities to allocate revenue in an arrangement using estimated selling prices of the delivered goods and services based on a selling price hierarchy. The amendments eliminate the residual method of revenue allocation and require revenue to be allocated using the relative selling price method. ASU 2009-13 should be applied on a prospective basis for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010, with early adoption permitted. The Company does not expect adoption of ASU 2009-13 to have a material impact on the Company s results of operations or financial condition.

In October, 2009, the FASB issued ASU 2009-15, Accounting for Own-Share Lending Arrangements in Contemplation of Convertible Debt Issuance or Other Financing , (ASU-2009-15), which provides guidance for accounting and reporting for own-share lending arrangements issued in contemplation of a convertible debt issuance. At the date of issuance, a share-lending arrangement entered into on an entity s own shares should be measured at fair value in accordance with Topic 820 and recognized as an issuance cost, with an offset to additional paid-in capital. Loaned shares are excluded from basic and diluted earnings per share unless default of the share-lending arrangement occurs. The amendments also require several disclosures including a description and the terms of the arrangement and the reason for entering into the arrangement. The effective dates of the amendments are dependent upon the date the share-lending arrangement was entered into and include retrospective application for arrangements outstanding as of the beginning of fiscal years beginning on or after December 15, 2009. Management is currently evaluating the potential impact of ASU 2009-15 on our financial statements.

In January 2010, the FASB issued ASU 2010-06, *Improving Disclosures about Fair Value Measurements*. ASU 2010-06 amends ASC 820 to require a number of additional disclosures regarding fair value measurements. The amended guidance requires entities to disclose the amounts of significant transfers between Level 1 and Level 2 of the fair value hierarchy and the reasons for these transfers, the reasons for any transfers in or out of Level 3, and information in the reconciliation of recurring Level 3 measurements about purchases, sales, issuances and settlements on a gross basis. The ASU also clarifies the requirements for entities to disclose information about both the valuation techniques and inputs used in estimating Level 2 and Level 3 fair value measurements. The amended guidance is effective for interim and annual financial periods beginning after December 15, 2009. ASU 2010-06 is not expected to have a significant effect on the Company s financial statements.

Management does not believe that any other recently issued, but not yet effective, accounting standards if currently adopted would have a material effect on the accompanying financial statements.

3. Inventories

Inventories consist of the following:

	December 31,	
	2009	**2008**

	(In thousands)	
Work in process	$ 5	$
Finished goods	15	
	$ 20	$

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

4. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following:

	December 31, 2009	2008
	(In thousands)	
Prepaid corporate insurance	$ 44	$ 50
Deposit on inventory	215	
Prepaid expenses and other current assets	110	223
	$ 369	$ 273

5. Fixed Assets

Tarrytown Facility. On December 8, 2008, we decided to close our research and development facilities in Tarrytown, NY to reduce costs and improve operating efficiency. As of December 8, 2008 we ceased using approximately 85% of the facilities which resulted in a restructuring charge of approximately $3.8 million in the fourth quarter, 2008. As a result, the Company wrote down the value of approximately $1.0 million (net) in leasehold improvements related to the Tarrytown facility no longer in use as of December 31, 2008. In addition, the useful lives of approximately $0.2 million in leasehold improvements were shortened because we ceased using the facilities on January 29, 2009 resulting in an accelerated charge to amortization expense for 2008 of approximately $0.1 million. Please refer to Footnote 16 Commitments and Contingencies for more information on this subject.

Fixed Assets. Equipment and leasehold improvements, net, consists of the following:

	December 31, Useful Lives In Years	2009	2008
		(In thousands)	
Equipment	3-7	$ 1,370	$ 9,080
Leasehold improvements	Term of lease	61	3,013
		1,431	12,093
Less, accumulated depreciation and amortization		1,293	11,628
		$ 138	$ 465

Depreciation expense for the years ended December 31, 2009, 2008 and 2007, was $0.1 million, $0.7 million and $0.8 million, respectively.

In 2009, in connection with the closure of our Tarrytown facility we abandoned leasehold improvements with a historical cost of $2.95 million and accumulated amortization of $2.85 million. We also abandoned equipment with a historical cost of $2.86 million and accumulated depreciation of $2.84. Additionally, during 2009 we sold equipment with a historical cost of $4.84 million and accumulated depreciation of $4.76 million for $0.99 million, The effect of these abandonments and sales was a gain of $0.79 million.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

6. Purchased Technology

The carrying value of the purchased technology is comprised as follows:

	December 31, 2009	2008
	(In thousands)	
Gross carrying amount	$ 4,533	$ 4,533
Less, accumulated amortization	3,456	3,217
Net book value	$ 1,077	$ 1,316

Annual amortization of purchased technology was $0.2 million for 2009, 2008 and 2007 and is estimated to be $0.2 million for the years ended 2010 through 2013 and $0.1 million in 2014.

7. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consist of the following:

	December 31, 2009	2008
	(In thousands)	
Accounts payable	$ 1,979	$ 1,539
Accrued cost of lawsuit	2,333	
Accrued bonus	150	
Accrued legal, professional fees and other	302	636
Accrued vacation	81	132
Clinical trial expenses and contract research	130	54
	$ 4,975	$ 2,361

8. Notes Payable and Restructuring of Debt

Notes payable consist of the following:

	December 31,

	2009	2008
	(In thousands)	
MHR Note	$ 13,076	$ 18,209
Novartis Note	12,588	12,011
	$ 25,664	$ 30,220

MHR Note. On September 26, 2005, we received net proceeds of approximately $12.9 million under a $15 million secured loan agreement (the Loan Agreement) executed with MHR Institutional Partners IIA LP (together with its affiliates, MHR). Under the Loan Agreement, MHR requested, and on May 16, 2006, we effected, the exchange of the loan from MHR for senior secured convertible notes (the Convertible Notes) with substantially the same terms as the Loan Agreement, except that the Convertible Notes are convertible, at the sole discretion of MHR, into shares of our common stock at a price per share of $3.78. At December 31, 2009, the Convertible Notes were convertible into 5,983,146 shares of our common stock. The Convertible Notes are due on September 26, 2012, bear interest at 11% and are collateralized by a first priority lien in favor of MHR on substantially all of our assets. Interest is payable in the form of additional Convertible Notes rather than in cash and we have the right to call the Convertible Notes after September 26, 2010 if certain conditions are satisfied.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

In connection with the Loan Agreement, we amended MHR s previously existing warrants to purchase 387,374 shares of common stock (MHR 2005 Warrants) to provide additional anti-dilution protection. We also granted MHR the option (MHR Option) to purchase warrants for up to 617,211 shares of our common stock. The MHR Option was exercised during April 2006 whereby MHR acquired 617,211 warrants (MHR 2006 Warrants) to acquire an equal number of shares of common stock. The exercise price for the MHR Option was $0.01 per warrant for the first 67,084 warrants and $1.00 per warrant for each additional warrant. See Note 9 for a further discussion of the liability related to these warrants.

Total issuance costs associated with the Loan Agreement were $2.1 million, of which $1.9 million were allocated to the MHR Note and $0.2 million were allocated to the related derivative instruments. Of the $1.9 million allocated to the MHR Note, $1.4 million represents reimbursement of MHR s legal fees and $0.5 million represents our legal and other transaction costs. The $1.4 million paid on behalf of the lender has been recorded as a reduction of the face value of the note, while the $0.5 million of our costs has been recorded as deferred financing costs, which is included in other assets on the balance sheet.

The Convertible Notes provide MHR with the right to require us to redeem the Loan in the event of a change in control. The change in control redemption feature has been determined to be an embedded derivative instrument which must be separated from the host contract. For the year ended December 31, 2006, the fair value of the change in control redemption feature was estimated using a combination of a put option model for the penalties and the Black-Scholes option pricing model for the conversion option that would exist under the Convertible Note. The estimate resulted in a value that was de minimis and therefore, no separate liability was recorded. Changes in the assumptions used to estimate the fair value of this derivative instrument, in particular the probability that a change in control will occur, could result in a material change to the fair value of the instrument. For the years ended December 31, 2009, 2008 and 2007, management determined the probability of exercise of the right due to change in control to be remote. The fair value of the change in control redemption feature is de minimis.

Effective January 1, 2009, the Company adopted the provisions of the Financial Accounting Standards Board Accounting Codification Topic 815-40-15-5, Evaluating Whether an Instrument Involving a Contingency is Considered Indexed to an Entity s Own Stock (FASB ASC 815-40-15-5). Under FASB ASC 815-40-15-5, the conversion feature embedded in the MHR note has been bifurcated from the host contract and accounted for separately as a derivative. The bifurcation of the embedded derivative increased the amount of debt discount thereby reducing the book value of the MHR Note and increasing prospectively the amount of interest expense to be recognized over the life of the MHR Note. At December 31, 2009, the Convertible Notes were convertible into 5,983,146 shares of our common stock.

The book value of the MHR Note is comprised of the following:

	December 31,	
	2009	2008
	(In thousands)	
Face value of the note (including accrued interest)	$ 22,616	$ 20,270
Discount (related to the embedded conversion feature)	(793)	

Discount (related to the warrant purchase option)	(7,848)	(966)
Lender s financing costs	(899)	(1,095)
	$ 13,076	$ 18,209

The debt discount, lenders financing costs, deferred financing costs and amounts attributed to derivative instruments are being amortized to interest expense over the life of the Convertible Notes using an effective interest method to yield an effective interest rate of 14.2%.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

In connection with the MHR financing, the Company agreed to appoint a representative of MHR (MHR Nominee) and another person (the Mutual Director) to its Board of Directors. Further, the Company agreed to amend, and in January 2006 did amend, its certificate of incorporation to provide for continuity of the MHR Nominee and the Mutual Nominee on the Board, as described therein, so long as MHR holds at least 2% of the outstanding common stock of the Company.

The Convertible Notes provide for various events of default including for failure to perfect any of the liens in favor of MHR, failure to observe any covenant or agreement, failure to maintain the listing and trading of our common stock, sale of a substantial portion of our assets, merger with another entity without the prior consent of MHR, or any governmental action renders us unable to honor or perform our obligations under the Loan Agreement or results in a material adverse effect on our operations. If an event of default occurs, the Convertible Notes provide for the immediate repayment and certain additional amounts as set forth in the Convertible Notes. We have received a waiver from MHR, through April 1, 2011 for certain defaults under the agreement.

Novartis Note. On December 1, 2004 we received $10.0 million in exchange for issuance of a convertible note to Novartis (the Novartis Note) in connection with a new research collaboration option relating to the development of PTH-1-34. The Novartis Note is convertible, at our option, at any time prior to maturity into a number of shares of our common stock equal to the principal and accrued and unpaid interest thereon divided by the conversion price, which conversion price is equal to the average of the highest bid and lowest ask prices of our common stock as quoted on the Over-The-Counter Bulletin Board (OTCBB) averaged over a period of twenty (20) days, consisting of the day on which the conversion price is being determined and the nineteen (19) consecutive business days prior to such day, provided certain conditions contained in the Novartis Note are met. Those conditions include that, at the time of such conversion, no event of default under the Novartis Note has occurred and is continuing and that there is either an effective registration statement in effect covering the resale of the shares issued in connection with such conversion or the shares may be resold by Novartis pursuant to SEC Rule 144. Based on the price per share of our common stock on December 31, 2009, the Novartis Note was convertible into 14,944,980 shares of our common stock, assuming Novartis does not exercise their right to limit the number of shares issued to it upon conversion of the Novartis Note such that the shares of common stock they receive upon conversion do not exceed 19.9% of the total shares of our common stock outstanding.

The Novartis Note was originally due December 1, 2009. On November 30, 2009, Novartis agreed to extend the maturity date to February 26, 2010. On February 23, 2010, Novartis agreed to extend the maturity date to May 26, 2010. The Company continues to accrue interest at 7%.

Until December 1, 2008, the Novartis Note initially accrued interest at a rate of 3% -5%. From that date through maturity it bears interest at a rate of 7%. We have the option to pay interest in cash on a current basis or accrue the periodic interest as an addition to the principal amount of the Novartis Note. We are accruing interest which is being recorded using the effective interest rate method, which results in an effective interest rate of 4.6%.

The Novartis Note contains customary events of default including our failure to timely cure a default in the payment of certain other indebtedness, acceleration of certain indebtedness, we become entitled to terminate the registration of our securities or the filing of reports under the Securities Exchange Act of 1934, our common stock is no longer listed, we experience a change of control (including by, among other things, a change in the composition of a majority of our board (other than as approved by the board) in any one-year period, a merger which results in our stockholders

holding shares that represent less than a majority of the voting power of the merged entity, and any other acquisition by a third party of shares that represent a majority of the voting power of the company), we sell substantially all of our assets, or we are effectively unable to honor or perform our obligations under the new research collaboration option relating to the development of PTH-1-34. Upon the occurrence of an event of default prior to conversion, any unpaid

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

principal and accrued interest on the Novartis Note would become immediately due and payable. If the Novartis Note is converted into our common stock, Novartis would have the right to require us to repurchase the shares of common stock within six months after an event of default under the Novartis Note, for an aggregate purchase price equal to the principal and interest that was converted, plus interest from the date of conversion, as if no conversion had occurred.

For as long as any portion of the principal amount of this Note or any accrued and unpaid interest thereon remains outstanding, the Issuer shall not (i) pay any dividend or otherwise make any distribution, directly or indirectly, in respect of any shares of its capital stock, other than such dividends or distributions payable solely in shares of its capital stock or (ii) except to any employee or former employee of the Issuer upon the death, disability or termination of such employee pursuant any employee stock incentive plan of the issuer or employment agreement with such employee of the Issuer, in each case as in effect on the date hereof and in an aggregate amount not to exceed $2.0 million , make any payment, directly or indirectly, on account of the purchase, redemption, retirement or acquisition of any shares of its capital stock, or any option, warrant or other convertible or exchangeable security or other right to acquire shares of its capital stock.

The scheduled repayments of all debt outstanding as of December 31, 2009 are as follows:

	Debt (In thousands)
2010	$ 12,588
2011	
2012	22,616
	$ 35,204

Restructuring of Debt. Ebbisham was an Irish corporation formed by Elan Corporation, plc (Elan) and us to develop and market heparin products using technologies contributed by both parties. In July 1999, we acquired from Elan its ownership interest in Ebbisham in exchange for a seven year, $20 million zero coupon note due July 2006 carrying a 15% interest rate, compounding semi-annually (the Original Elan Note), plus royalties on oral heparin product sales, subject to an annual maximum and certain milestone payments. On February 28, 2002 Ebbisham was voluntarily liquidated.

On December 27, 2004, we entered into a Security Purchase Agreement with Elan, providing for our purchase of our indebtedness to Elan under the Original Elan Note. The value of the Original Elan Note plus accrued interest on December 27, 2004 was $44.2 million. Pursuant to the Security Purchase Agreement, we paid Elan $13 million and issued to Elan 600,000 shares of our common stock with a market value of $2 million. Also, we issued to Elan a new zero coupon note with an issue price of $29.2 million (the Modified Elan Note), representing the accrued value of the Original Elan Note minus the sum of the cash payment and the value of the 600,000 shares.

As of March 31, 2005, we issued to Elan a warrant to purchase up to 600,000 shares of our common stock at an exercise price of $3.88. The warrants provide for certain anti-dilution protection. On April 1, 2005, we made a

$13 million payment to Elan, which completed the repurchase of our indebtedness to Elan. This transaction was accounted for as a troubled debt restructuring. The carrying amount of the debt was reduced to an amount equal to the total cash payments, or $13 million. The fair value of the warrant issued, estimated using the Black-Scholes option pricing model, was $1.6 million at the date of issuance. As such, a gain of $14.7 million, calculated as the difference between the carrying value of approximately $29 million and the fair value of cash paid and warrants issued, was recognized in our consolidated statement of operations for 2005. Under the accounting for a restructuring of debt, no interest expense was recorded during 2005. As of December 31, 2009 the 600,000 warrants remain outstanding and expire on September 30, 2010.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

9. Derivative Instruments

Derivative instruments consist of the following:

	December 31, 2009	2008
	(In thousands)	
Elan warrant	$ 394	$
MHR Convertible Note	4,591	
March 2005 equity financing warrants		31
MHR 2006 warrants	213	115
August 2007 equity financing warrants	141	121
August 2009 equity financing warrants	5,092	
August 2009 equity financing warrants to placement agent	349	
	$ 10,780	$ 267

Elan Warrant. In connection with a restructuring of debt in March 2005, we issued to Elan a warrant to purchase up to 600,000 shares of our common stock at an exercise price of $3.88. The warrant provides for adjustment of the exercise price upon the occurrence of certain events, including the issuance by Emisphere of common stock or common stock equivalents that have an effective price that is less than the exercise price of the warrant. The anti-dilution feature of the warrant was triggered in connection with the August 2007 financing, resulting in an adjustment to the exercise price to $3.76. The anti-dilution feature of the warrant was triggered again in connection with the August 2009 financing, resulting in an adjustment to the exercise price to $0.4635. As of December 31, 2009 the warrant remains outstanding and expires on August 31, 2010. The Company adopted the provisions of FASB ASC 815-40-15-5 effective January 1, 2009. Under FASB ASC 815-40-15-5 the warrant is not considered indexed to the Company s own stock and, therefore, does not meet the scope exception in FASB ASC 815-10-15 and thus needs to be accounted for as a derivative liability. The adoption of FASB ASC 815-40-15-5 requires recognition of the cumulative effect of a change in accounting principle to the opening balance of our accumulated deficit, additional paid in capital, and liability for derivative financial instruments. The fair value of the warrant is estimated at the end of each quarterly reporting period, using the Black-Scholes option pricing model. The assumptions used in computing the fair value as of December 31, 2009 are a closing stock price of $1.06, expected volatility of 111.43% over the remaining term of nine months and a risk-free rate of 0.47%. The fair value of the warrant increased by $0.3 million during the year ended December 31, 2009 which has been recognized in the accompanying statements of operations. The warrants will be adjusted to estimated fair value for each future period they remain outstanding.

Embedded Conversion Feature of MHR Convertible Note. The Company s convertible notes due to MHR contain a provision whereby, the conversion price is adjustable upon the occurrence of certain events, including the issuance by Emisphere of common stock or common stock equivalents at a price which is lower than the current conversion price of the convertible note and lower than the current market price. However, the adjustment provision does not become

effective until after the Company raises $10 million through the issuance of common stock or common stock equivalents at a price which is lower than the current conversion price of the convertible note and lower than the current market price during any consecutive 24 month period. The Company adopted the provisions of FASB ASC 815-40-15-5 effective January 1, 2009. Under FASB ASC 815-40-15-5, the embedded conversion feature is not considered indexed to the Company s own stock and, therefore, does not meet the scope exception in FASB ASC 815-10-15 and thus needs to be accounted for as a derivative liability. The adoption of FASB ASC 815-40-15-5 requires recognition of the cumulative effect of a change in accounting principle to the opening balance of our accumulated deficit, additional paid in capital, and liability for derivative financial instruments. The liability has been presented as a non-current

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

liability to correspond with its host contract, the MHR convertible note. The fair value of the embedded conversion feature is estimated, at the end of each quarterly reporting period, using the Black-Scholes option pricing model. The assumptions used in computing the fair value as of December 31, 2009 are a closing stock price of $1.06, expected volatility of 103.09% over the remaining term of two years and nine months and a risk-free rate of 1.70%. The fair value of the embedded conversion feature increased by $1.3 million during the year ended December 31, 2009 which has been recognized in the accompanying statements of operations. The embedded conversion feature will be adjusted to estimated fair value for each future period they remain outstanding. See Note 8 for a further discussion of the MHR Note.

March 2005 Equity Financing Warrants. In connection with the March 2005 offering, Emisphere sold warrants to purchase 1.5 million shares of common stock to MHR and other unrelated investors. The warrants were originally issued with an exercise price of $4.00 and expire on March 31, 2010. The warrants provide for certain anti-dilution protection as provided therein. Warrants to purchase up to 1,010,631 shares of common stock provide that under no circumstances will the adjusted exercise price be less than $3.81. The remaining warrants do not limit adjustments to the exercise price. The anti-dilution feature of the warrants was triggered in connection with the August 2007 financing, resulting in an increase to the warrant shares of 4,838, as well as an adjustment to the exercise price. The anti-dilution feature of was triggered again in connection with the August 2009 financing, resulting in an increase to the warrant shares of 43,167 and a further adjustment to the exercise price. At December 31, 2009, we have outstanding warrants to purchase up to 1,398,005 shares of common stock. The adjusted exercise price for 1,010,631 of the warrants is $3.81 and for the 387,374 warrants held by MHR (MHR 2005 Warrants) is $3.76. Under the terms of the warrants, we have an obligation to make a cash payment to the holders of the warrants for any gain that could have been realized if the holders exercise the warrants and we subsequently fail to deliver a certificate representing the shares to be issued upon such exercise by the third trading day after such warrants have been exercised. Accordingly, the warrants have been accounted for as a liability. The fair value of the warrants is estimated, at the end of each quarterly reporting period, using the Black-Scholes option pricing model. The assumptions used in computing the fair value as of December 31, 2009 are a closing stock price of $1.06, expected volatility of 85.08% over the remaining term of three months and a risk-free rate of 0.06%. The fair value of the warrants decreased by $0.2 million and $1.1 million and increased $3.0 million for the years ended December 31, 2009, 2008 and 2007, respectively, and the fluctuation has been recorded in the statement of operations.

MHR 2006 Warrants (MHR 2006 Warrants). In connection with the exercise in April 2006 of the MHR Option discussed in Note 8 above, the Company issued warrants for 617,211 shares to MHR for proceeds of $0.6 million. The MHR 2006 Warrants have an original exercise price of $4.00 and are exercisable through September 26, 2011. The MHR 2006 Warrants have the same terms as the August 2007 equity financing warrants (see below), with no limit upon adjustments to the exercise price. The anti-dilution feature of the MHR 2006 Warrants was triggered in connection with the August 2007 equity financing, resulting in an adjusted exercise price of $3.76. Based on the provisions of FASB ASC 815, Derivatives and Hedging ,, the MHR 2006 Warrants have been determined to be an embedded derivative instrument which must be separated from the host contract. The MHR 2006 Warrants contain the same potential cash settlement provisions as the August 2007 equity financing warrants and therefore they have been accounted for as a separate liability. The fair value of the warrants is estimated, at the end of each quarterly period, using the Black-Scholes option pricing model. The assumptions used in computing the fair value as of December 31, 2009 are a closing stock price of $1.06, expected volatility of 113.65% over the remaining term of one year and nine months and a risk-free rate of 1.14%. The fair value of the MHR 2006 Warrants increased by $0.1 million for the year ended December 31, 2009 and decreased by $0.7 million and $1.6 million for the years ended December 31, 2008 and

2007, respectively. and the fluctuation has been recorded in the statement of operations. The MHR 2006 Warrants will be adjusted to estimated fair value for each future period they remain outstanding.

August 2007 Equity Financing Warrants. In connection with the August 2007 offering, Emisphere sold warrants to purchase up to 400,000 shares of common stock. Of these 400,000 warrants, 91,073 were sold to

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

MHR. Each of the warrants were issued with an exercise price of $3.948 and expire on August 21, 2012. The warrants provide for certain anti-dilution protection as provided therein. Under the terms of the warrants, we have an obligation to make a cash payment to the holders of the warrants for any gain that could have been realized if the holders exercise the warrants and we subsequently fail to deliver a certificate representing the shares to be issued upon such exercise by the third trading day after such warrants have been exercised. Accordingly, the warrants have been accounted for as a liability. The fair value of the warrants is estimated, at the end of each quarterly reporting period, using the Black-Scholes option pricing model. The warrants were accounted for with an initial value of $1.0 million on August 22, 2007. The assumptions used in computing the fair value as of December 31, 2009 are a closing stock price of $1.06, expected volatility of 102.67% over the remaining term of two years and eight months and a risk-free rate of 1.7%.

The fair value of the warrants increased $0.02 million for the year ended December 31, 2009 and decreased by $0.4 million for the year ended December 31, 2008, and decreased $0.5 million for the period between August 22, 2007 and December 31, 2007 and the fluctuations have been recorded in the statements of operations. The warrants will be adjusted to estimated fair value for each future period they remain outstanding.

August 2009 Equity Financing Investors Warrants. In connection with the August 2009 offering, Emisphere sold warrants to purchase 6.4 million shares of common stock to MHR (3.7 million) and other unrelated investors (2.7 million). The warrants were issued with an exercise price of $0.70 and expire on August 21, 2014. Under the terms of the warrants, we have an obligation to make a cash payment to the holders of the warrants for any gain that could have been realized if the holders exercise the warrants and we subsequently fail to deliver a certificate representing the shares to be issued upon such exercise by the third trading day after such warrants have been exercised. Accordingly, the warrants have been accounted for as a liability. The fair value of the warrants is estimated, at the end of each quarterly reporting period, using the Black-Scholes option pricing model. The assumptions used in computing the fair value as of December 31, 2009 are a closing stock price of $1.06, expected volatility of 89.40% over the remaining term of four years and eight months and a risk-free rate of 2.69%. The fair value of the warrants were valued at $4.24 million at their commitment date of August 19, 2009 and increased by $0.85 million through December 31, 2009 and the fluctuation has been recorded in the statements of operations. The warrants will be adjusted to estimated fair value for each future period they remain outstanding.

August 2009 Equity Financing Placement Agent Warrants. In connection with the August 2009 offering, Emisphere issued to the placement agent, as part of the compensation for acting as placement agent for the August 2009 financing, warrants to purchase 504,000 shares of common stock. The warrants were issued with an exercise price of $0.875 and expire on October 1, 2012. Under the terms of the warrants, we have an obligation to make a cash payment to the holders of the warrants for any gain that could have been realized if the holders exercise the warrants and we subsequently fail to deliver a certificate representing the shares to be issued upon such exercise by the third trading day after such warrants have been exercised. Accordingly, the warrants have been accounted for as a liability. The fair value of the warrants are estimated, at the end of each quarterly reporting period, using the Black-Scholes option pricing model. The assumptions used in computing the fair value as of December 31, 2009 are a closing stock price of $1.06, expected volatility of 102.88% over the remaining term of two years and nine months and a risk-free rate of 1.70%. The fair value of the warrants were valued at $0.29 million at their commitment date of August 19, 2009 and increased by $0.06 million through December 31, 2009 and the fluctuation has been recorded in the statements of operations. The fair value of the Placement Agent Warrants was deemed to be a cost of the financing and accounted for as a reduction in the proceeds. The warrants will be adjusted to estimated fair value for each future period they

remain outstanding.

10. Income Taxes

Since the Company has recurring losses and a full valuation allowance against deferred tax assets, there is no tax expense (benefit) for all periods presented.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

As of December 31, 2009, we have available unused federal net operating loss (NOL) carry-forwards of $350 million and New York NOL carry-forwards of $301.7 million, of which $5.7 million, $4.4 million and $1.1 million will expire in 2010, 2011 and 2012, respectively, with the remainder expiring in various years from 2018 to 2029. We have New Jersey NOL carry-forwards of $55.5 million, which will expire in 2014 through 2016. We have research and development tax credit carryforwards which will expire in various years from 2010 through 2029.

The effective rate differs from the statutory rate of 34% for 2009 and 2008 primarily due to the following:

	2009	2008
Statutory rate on pre-tax book loss	(34.00)%	(34.00)%
Stock option issuance	1.12%	0.32%
Disallowed interest	1.23%	0.93%
Derivatives	3.96%	(3.09)%
Research and experimentation tax credit	0.00%	(0.71)%
Expired net operating losses and credits	13.89%	12.12%
Other	(0.01)%	0.04%
Change in federal valuation allowance	13.81%	24.39%
	(0.00)%	(0.00)%

The tax effect of temporary differences, net operating loss carry-forwards, and research and experimental tax credit carry-forwards as of December 31, 2009 and 2008 is as follows:

	December 31,	
	2009	2008
	(In thousands)	
Deferred tax assets and valuation allowance:		
Current deferred tax asset:		
Accrued liabilities	$ 1,213	$ 240
Valuation Allowance	(1,213)	(240)
Net current deferred tax asset	$	$
Noncurrent deferred tax assets:		
Fixed and intangible assets	$ (50)	$ 5,709
Net operating loss carry-forwards	122,296	114,516
Capital loss and charitable carry-fowards	2,779	2,795
Research and experimental tax credits	12,188	12,559
Stock compensation	808	462

Deferred Revenue	4,591	4,551
Interest	2,534	1,737
Valuation allowance	(145,146)	(142,329)
Net noncurrent deferred tax asset	$	$

Future ownership changes may limit the future utilization of these net operating loss and research and development tax credit carry-forwards as defined by the Internal Revenue Code. The amount of any potential limitation is unknown. The net deferred tax asset has been fully offset by a valuation allowance due to our

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

history of taxable losses and uncertainty regarding our ability to generate sufficient taxable income in the future to utilize these deferred tax assets.

On January 1, 2007, we adopted the provisions of ASC 740-10-25. ASC 740-10-25 provides recognition criteria and a related measurement model for uncertain tax positions taken or expected to be taken in income tax returns. ASC 740-10-25 requires that a position taken or expected to be taken in a tax return be recognized in the financial statements when it is more likely than not that the position would be sustained upon examination by tax authorities. Tax positions that meet the more likely than not threshold are then measured using a probability weighted approach recognizing the largest amount of tax benefit that is greater than 50% likely of being realized upon ultimate settlement. The Company had no tax positions relating to open income tax returns that were considered to be uncertain. Accordingly, we have not recorded a liability for unrecognized tax benefits upon adoption of ASC 740-10-25. There continues to be no liability related to unrecognized tax benefits at December 31, 2009.

The Company s 2006, 2007 and 2008 federal and New York tax returns remain subject to examination by the IRS and New York, respectively. The Company s 2007 and 2008 New Jersey tax returns are also open to potential examination. In addition, net operating losses and research tax credits arising from prior years are also subject to examination at the time that they are utilized in future years. Neither the Company s federal or state tax returns are currently under examination.

11. Stockholders Deficit

On April 20, 2007, the stockholders of the Company approved an increase in the Company s authorized common stock from 50 million to 100 million shares.

On August 22, 2007, we completed the sale of two million registered shares of common stock at $3.785 per share. Proceeds from this offering were $6.9 million, net of total issuance costs of $0.7 million, which will be used for general corporate purposes. As the shares of stock were sold in connection with warrants, $5.9 million was allocated to the issuance of the stock and $1.0 million was allocated to the warrants.

Our certificate of incorporation provides for the issuance of 1,000,000 shares of preferred stock with the rights, preferences, qualifications, and terms to be determined by our Board of Directors. As of December 31, 2009 and 2008, there were no shares of preferred stock outstanding.

We have a stockholder rights plan in which Preferred Stock Purchase Rights (the Rights) have been granted at the rate of one one-hundredth of a share of Series A Junior Participating Cumulative Preferred Stock (A Preferred Stock) at an exercise price of $80 for each share of our common stock. The Rights expire on April 7, 2016.

The Rights are not exercisable, or transferable apart from the common stock, until the earlier of (i) ten days following a public announcement that a person or group of affiliated or associated persons have acquired beneficial ownership of 20% or more of our outstanding common stock or (ii) ten business days (or such later date, as defined) following the commencement of, or announcement of an intention to make a tender offer or exchange offer, the consummation of which would result in the beneficial ownership by a person, or group, of 20% or more of our outstanding common stock. MHR is specifically excluded from the provisions of the plan.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

Furthermore, if we enter into consolidation, merger, or other business combinations, as defined, each Right would entitle the holder upon exercise to receive, in lieu of shares of A Preferred Stock, a number of shares of common stock of the acquiring company having a value of two times the exercise price of the Right, as defined. The Rights contain anti-dilutive provisions and are redeemable at our option, subject to certain defined restrictions for $.01 per Right.

As a result of the Rights dividend, the Board of Directors designated 200,000 shares of preferred stock as A Preferred Stock. A Preferred Stockholders will be entitled to a preferential cumulative quarterly dividend of the greater of $1.00 per share or 100 times the per share dividend declared on our common stock. Shares of A Preferred Stock have a liquidation preference, as defined, and each share will have 100 votes and will vote together with the common shares.

On August 22, 2009, we completed the sale of 5,714,286 shares of common stock and 2,685,714 warrants to purchase shares of common stock to certain institutional investors for gross proceeds of $4,000,000. Also, on August 22, 2009, we completed the sale of 6,015,037 shares of common stock and 3,729,323 warrants to purchase shares of common stock to MHR for gross proceeds of $4,000,000. Both the investor warrants and the MHR warrants expire on August 21, 2014 and have an exercise price of $0.70. Proceeds from this offering were $7.30 million, net of cash issuance costs of $0.70 million. Additional issuance costs consisted of $0.29 million from the issuance of 504,000 warrants issued to a placement agent (see Note 9).

12. Stock-Based Compensation Plans

Total compensation expense recorded during the years ended December 31, 2009, 2008 and 2007 for share-based payment awards was $1.6 million, $1.0 million and $3.1 million, respectively, of which $0.1 million, $0.4 million and $1.4 million is recorded in research and development and $1.5 million, $0.6 million and $1.7 million is recorded in general and administrative expenses in the statement of operations. Included in compensation expense during the year ended December 31, 2007 are incremental costs of $0.8 million resulting from the modification of previously granted stock option awards for 4 former executives. Under the terms of the separation agreements with these executives, certain option grants received accelerated vesting, extended exercise period or both.

At December 31, 2009, total unrecognized estimated compensation expense related to non-vested stock options granted prior to that date was approximately $0.9 million, which is expected to be recognized over a weighted-average period of 2.0 years. No tax benefit was realized due to a continued pattern of operating losses. We have a policy of issuing new shares to satisfy share option exercises. There were no options exercised during the year ended December 31, 2009. Cash received from options exercised totaled $0.01 million and $0.4 million for the years ended December 31, 2008 and 2007, respectively.

Using the Black-Scholes model, we have estimated our stock price volatility using the historical volatility in the market price of our common stock for the expected term of the option. The risk-free interest rate is based on the yield curve of U.S. Treasury STRIP securities for the expected term of the option. We have never paid cash dividends and do not intend to pay cash dividends in the foreseeable future. Accordingly, we assumed a 0% dividend yield. The forfeiture rate is estimated using historical option cancellation information, adjusted for anticipated changes in expected exercise and employment termination behavior. Forfeiture rates and the expected term of options are estimated separately for groups of employees that have similar historical exercise behavior. The ranges presented below are the result of certain groups of employees displaying different behavior.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

The following weighted-average assumptions were used for grants made under the stock option plans for the years ended December 31, 2009, 2008 and 2007:

	2009		
	Directors	**Executives**	**Employees**
Expected volatility	87.8%	87.8%	87.9%
Expected term	6.8 years	6.8 years	6.8 years
Risk-free interest rate	3.19%	3.14%	2.90%
Dividend yield	0%	0%	0%
Annual forfeiture rate	5%	5%	5%

	2008		
	Directors	**Executives**	**Employees**
Expected volatility	84.9%	85.0%	85.0%
Expected term	10 years	10 years	10 years
Risk-free interest rate	3.89%	3.89%	3.89%
Dividend yield	0%	0%	0%
Annual forfeiture rate	5%	5%	5%

	2007		
	Directors	**Executives**	**Employees**
Expected volatility	84.9%	82.9%	83.0%
Expected term	5 years	10 years	5.5 years
Risk-free interest rate	4.28%	4.82%	4.62%
Dividend yield	0%	0%	0%
Annual forfeiture rate	0%	0%	5%

Stock Option Plans. On April 20, 2007, the stockholders approved the 2007 Stock Award and Incentive Plan (the 2007 Plan). The 2007 Plan provides for grants of options, stock appreciation rights, restricted stock, deferred stock, bonus stock and awards in lieu of obligations, dividend equivalents, other stock based awards and performance awards to executive officers and other employees of the Company, and non-employee directors, consultants and others who provide substantial service to us. The 2007 Plan provides for the issuance of 3,275,334 shares as follows: 2,500,000 new shares, 374,264 shares remaining and transferred from the Company s 2000 Stock Option Plan (the 2000 Plan) (which was then replaced by the 2007 Plan) and 401,070 shares remaining and transferred from the Company s Stock Option Plan for Outside Directors (the Directors Stock Plan). In addition, shares cancelled, expired, forfeited, settled in cash, settled by delivery of fewer shares than the number underlying the award, or otherwise terminated under the 2000 Plan will become available for issuance under the 2007 Plan, once registered. As of December 31, 2009 1,183,854 shares remain available for issuance under the 2007 Plan. Generally, the options vest at the rate of 20% per

year and expire within a five-to-ten-year period, as determined by the compensation committee of the Board of Directors and as defined by the Plans.

The Company s other active Stock Option Plan is the 2002 Broad Based Plan (the 2002 Plan). Under the 2002 Plan, a maximum of 160,000 shares are authorized for issuance to employees in the form of either incentive stock options (ISOs), as defined by the Internal Revenue Code, or non-qualified stock options, which do not qualify as ISOs. As of December 31, 2009, 143,430 shares remain available for issuance under the 2002 Plan.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

The Company also has grants outstanding under various expired and terminated Stock Option Plans, including the 1991 Stock Option Plan (the 1991 Plan), the 1995 Non-Qualified Stock Option Plan (the 1995 Plan) and the 2000 Stock Option Plan (the 2000 Plan). Under our 1991, 1995 and 2000 Plans a maximum of 2,500,000, 2,550,000 and 1,945,236 shares of our common stock, respectively, were available for issuance. The 1991 Plan was available to employees and consultants; the 2000 Plan was available to employees, directors and consultants. The 1991 Plan and 2000 Plan provide for the grant of either incentive stock options (ISOs), as defined by the Internal Revenue Code, or non-qualified stock options, which do not qualify as ISOs. The 1995 Plan provides for grants of non-qualified stock options to officers and key employees. Generally, the options vest at the rate of 20% per year and expire within a five- to ten-year period, as determined by the compensation committee of the Board of Directors and as defined by the Plans.

Transactions involving stock options awarded under the Stock Option Plans described above during the years ended December 31, 2009, 2008, 2007 and 2006 are summarized as follows:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term in Years	Aggregate Intrinsic Value (In thousands)
Outstanding at December 31, 2006	3,807,012	$ 16.63	4.3	
Granted	1,514,735	$ 4.55		
Expired	(2,041,125)	$ 21.29		
Forfeited	(381,696)	$ 4.30		
Exercised	(31,050)	$ 1.56		$ 89
Outstanding at December 31, 2007	2,867,876	$ 8.73	6.4	
Granted	133,600	$ 2.84		
Expired	(300,087)	$ 12.72		
Forfeited	(664,385)	$ 8.75		
Exercised	(4,150)	$ 3.04		$ 3
Outstanding at December 31, 2008,	2,032,854	$ 8.30	6.7	
Granted	1,041,000	$ 0.86		
Expired	(12,643)	$ 14.63		
Forfeited	(326,475)	$ 3.88		
Outstanding at December 31, 2009	2,734,736	$ 6.29	6.8	
	1,814,982	$ 8.31	5.9	$

Vested and exercisable at December 31, 2009					
Vested and expected to vest at December 31, 2009	2,692,914	$ 6.37	6.8	$	48

The weighted-average grant date fair value of options granted during the years ended December 31, 2009, 2008 and 2007 was $0.92, $2.16 and $3.15, respectively.

Outside Directors Plan. We previously issued options to outside directors who are neither officers nor employees of Emisphere nor holders of more than 5% of our common stock under the Stock Option Plan for Outside Directors (the Outside Directors Plan). As amended, a maximum of 725,000 shares of our common stock were available for issuance under the Outside Directors Plan in the form of options and restricted stock.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

The outside Directors Plan expired on January 29, 2007. Options and restricted stock are now granted to directors under the 2007 Plan discussed above.

Transactions involving stock options awarded under the Outside Directors Plan during the years ended December 31, 2009, 2008 and 2007 are summarized as follows:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term in Years	Aggregate Intrinsic Value (In thousands)
Outstanding at December 31, 2006	177,000	$ 13.42		
Expired	(21,000)	$ 13.75		
Outstanding at December 31, 2007	156,000	$ 13.38	5.0	
Outstanding at December 31, 2008	156,000	$ 13.38	4.0	
Expired	(35,000)	$ 4.23		
Outstanding at December 31, 2009	121,000	$ 15.59	2.7	
Vested and Exercisable at December 31, 2009	121,000	$ 15.59	2.7	$

Directors Deferred Compensation Stock Plan. The Directors Deferred Compensation Stock Plan (the Directors Deferred Plan) ceased as of May 2004. Under the Director s Deferred Plan, directors who were neither officers nor employees of Emisphere had the option to elect to receive one half of the annual Board of Directors retainer compensation, paid for services as a Director, in deferred common stock. An aggregate of 25,000 shares of our common stock has been reserved for issuance under the Directors Deferred Plan. During the years ended December 31, 2004 and 2003, the outside directors earned the rights to receive an aggregate of 1,775 shares and 2,144 shares, respectively. Under the terms of the Directors Deferred Plan, shares are to be issued to a director within six months after he or she ceases to serve on the Board of Directors. We recorded as an expense the fair market value of the common stock issuable under the plan. As of December 31, 2009, there are 3,122 shares issuable under this plan. No grants were awarded in 2009, 2008 and 2007, and none were outstanding as of December 31, 2009.

Non-Plan Options. Our Board of Directors has granted options (Non-Plan Options) which are currently outstanding for the accounts of two consultants. The Board of Directors determines the number and terms of each grant (option exercise price, vesting, and expiration date).

Transactions involving awards of Non-Plan Options during the year ended December 31, 2009, 2008 and 2007 are summarized as follows:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term in Years	Aggregate Intrinsic Value (In thousands)
Outstanding at December 31, 2006	20,000	$ 14.84	5.3	
Outstanding at December 31, 2007	20,000	$ 14.84	4.3	
Outstanding at December 31, 2008	20,000	$ 14.84	3.3	
Expired	(10,000)	$ 26.05		
Outstanding at December 31, 2009	10,000	$ 3.64	1.0	
Vested and Exercisable at December 31, 2009	10,000	$ 3.64	1.0	$

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

13. Collaborative Research Agreements

We are a party to collaborative agreements with corporate partners to provide development and commercialization services relating to the collaborative products. These agreements are in the form of research and development collaboration and licensing agreements. In connection with these agreements, we have granted licenses or the rights to obtain licenses to our oral drug delivery technology. In return, we are entitled to receive certain payments upon the achievement of milestones and will receive royalties on sales of products should they be commercialized. Under these agreements, we are entitled to also be reimbursed for research and development costs. We also have the right to manufacture and supply delivery agents developed under these agreements to our corporate partners.

We also perform research and development for others pursuant to feasibility agreements, which are of short duration and are designed to evaluate the applicability of our drug delivery agents to specific drugs. Under the feasibility agreements, we are generally reimbursed for the cost of work performed.

All of our collaborative agreements are subject to termination by our corporate partners without significant financial penalty to them. Milestone and upfront payments received in connection with these agreements was $0.2 million, $11.4 million and $2.0 million in the years ended December 31, 2009, 2008 and 2007, respectively. Expense reimbursements received in connection with these agreements was $0.2 million, $1.3 million and $1.9 million for the years ended December 31, 2009, 2008 and 2007, respectively. Expenses incurred in connection with these agreements and included in research and development were $0.2 million, $0.1 million and $0.6 million in the years ended December 31, 2009, 2008 and 2007, respectively. Significant agreements are described below.

Novartis Pharma AG. In September 2004, we entered into a licensing agreement with Novartis to develop our oral recombinant human growth hormone (rhGH) program. Under this collaboration, we are working with Novartis to initiate clinical trials of a convenient oral human growth hormone product using the Eligen® Technology. In November 2004, we received a non-refundable upfront payment of $1 million. On May 3, 2006, we received a $5 million payment from Novartis for development commencement. We may receive up to $28 million in additional milestone payments during the course of product development, and royalties based on sales.

In December 2004, we entered into an agreement with Novartis whereby Novartis obtained an option to license our existing technology to develop oral forms of parathyroid hormone (PTH-1-34). On March 7, 2006, Novartis exercised its option to the license. Based on the terms of the agreement, we are eligible for milestone payments totaling up to a maximum of $30 million, plus royalties on sales of product developed using our Eligen® Technology.

In December 1997, we entered into a collaboration agreement with Novartis to develop an oral salmon calcitonin (sCT), currently used to treat osteoporosis. In February 2000, Novartis agreed to execute its option to acquire an exclusive license to develop and commercialize oral sCT and as a result, Novartis made a $2 million milestone payment to us. In March 2000, Novartis paid us $2.5 million to obtain the license to our technology for sCT, and to obtain an option to use the Eligen® Technology for a second compound. Novartis rights to certain financial terms concerning the second compound have since expired. In February 2003, we announced favorable results of a Phase IIa study conducted by Novartis evaluating the performance in post-menopausal women of an oral tablet form of salmon calcitonin. Based on the data from that study, Novartis has initiated a parallel program to develop oral salmon calcitonin for the treatment of osteoarthritis. In February 2007, Novartis and its development partner Nordic

Bioscience notified us of the initiation of a Phase III clinical trial for the treatment of osteoporosis with an oral form of salmon calcitonin (referred to as SMC021), a new drug candidate, using the Company s Eligen® Technology. As a result of the initiation of the trial, Emisphere received a milestone payment from Novartis of $2 million as well as reimbursement for approximately $0.7 million in costs. The $2.7 million was able to be recognized when received as we have

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

met the requirements under our revenue recognition policy. Under the terms of the agreement, we may receive up to $5 million in additional milestone payments.

Novo Nordisk A/S Agreement

On June 21, 2008, we entered into an exclusive Development and License Agreement with Novo Nordisk pursuant to which Novo Nordisk will develop and commercialize oral formulations of Novo Nordisk proprietary products in combination with Emisphere carriers. Under such agreement Emisphere could receive more than $87.0 million in contingent product development and sales milestone payments including a $10.0 million non-refundable license fee which was received during June 2008. Emisphere would also be entitled to receive royalties in the event Novo Nordisk commercializes products developed under such agreement. Under the terms of the agreement, Novo Nordisk is responsible for the development and commercialization of the products. Initially Novo Nordisk is focusing on the development of oral formulations of its proprietary GLP-1 receptor agonists.

The agreement with Novo Nordisk includes multiple deliverables including the license grant, several versions of the Company s Eligen® Technology (or carriers), support services and manufacturing. Emisphere management reviewed the relevant terms of the Novo Nordisk agreement and determined that such deliverables should be accounted for as a single unit of accounting in accordance with FASB ASC 605-25, Multiple-Element Arrangements, since the delivered license and Eligen® Technology do not have stand-alone value and Emisphere does not have objective evidence of fair value of the undelivered Eligen® Technology or the manufacturing value of all the undelivered items. Such conclusion will be reevaluated as each item in the arrangement is delivered. Consequently any payments received from Novo Nordisk pursuant to such agreement, including the initial $10 million upfront payment and any payments received for support services, will be deferred and included in Deferred Revenue within our balance sheet. Management cannot currently estimate when all of such deliverables will be delivered nor can they estimate when, if ever, Emisphere will have objective evidence of the fair value for all of the undelivered items, therefore all payments from Novo Nordisk are expected to be deferred for the foreseeable future.

As of December 31, 2009 total deferred revenue from the agreement was $11.5 million, comprised of the $10.0 million non-refundable license fee and $1.5 million in support services.

Genta. In March 2006, we entered into a collaborative agreement with Genta, Incorporated (Genta) to develop an oral formulation of a gallium-containing compound. We currently receive reimbursements from Genta for the work performed during the formulation phase. We recognized $0.0, $0.1 million and $1.2 million in revenue related to these reimbursements for the years ended December 31, 2009, 2008 and 2007, respectively. We are eligible for future milestone payments totaling up to a maximum of $24.3 million under this agreement.

14. Defined Contribution Retirement Plan

We have a defined contribution retirement plan (the Retirement Plan), the terms of which, as amended, allow eligible employees who have met certain age and service requirements to participate by electing to contribute a percentage of their compensation to be set aside to pay their future retirement benefits, as defined by the Retirement Plan. We have agreed to make discretionary contributions to the Retirement Plan. For the years ended December 31, 2009, 2008 and 2007, we made contributions to the Retirement Plan totaling approximately $0.06 million, $0.2 million and $0.3 million, respectively.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

15. Net Loss Per Share

The following table sets forth the information needed to compute basic and diluted earnings per share for the years ended December 31, 2009, 2008 and 2007:

	Year Ended December 31,		
	2009	2008	2007
	(In thousands, except per share amounts)		
Basic net loss	$ (21,243)	$ (24,388)	$ (16,928)
Dilutive securities:			
Warrants			(5,061)
Diluted net loss	$ (21,243)	$ (24,388)	$ (21,989)
Weighted average common shares outstanding	34,679,321	30,337,442	29,039,101
Dilutive securities:			
Warrants			88,911
Diluted average common stock equivalents outstanding	34,679,321	30,337,442	29,128,012
Basic net loss per share	$ (0.61)	$ (0.80)	$ (0.58)
Diluted net loss per share	$ (0.61)	$ (0.80)	$ (0.76)

The following table sets forth the number of potential shares of common stock that have been excluded from diluted net loss per share because their effect was anti-dilutive:

	Year Ended December 31,		
	2009	2008	2007
Options to purchase common shares	2,865,736	2,208,854	3,043,876
Outstanding warrants and options to purchase warrants	9,934,253	2,972,049	604,838
Novartis convertible note payable	14,944,980	7,537,921	3,743,700
MHR note payable	5,983,146	5,362,596	4,806,404
	33,728,115	18,081,420	12,198,818

16. Commitments and Contingencies

Commitments. At the beginning of 2009 we had leased approximately 80,000 square feet of office space at 765 Old Saw Mill River Road, Tarrytown, NY for use as administrative offices and laboratories. The lease for our administrative and laboratory facilities had been set to expire on August 31, 2012. However, on April 29, 2009, the Company entered into a Lease Termination Agreement (the Agreement) with BMR-Landmark at Eastview, LLC, a Delaware limited liability company (BMR) pursuant to which the Company and BMR terminated the lease of space at 765 Old Saw Mill River Road in Tarrytown, NY. Pursuant to the Agreement, the Lease was terminated effective as of April 1, 2009. The Agreement provided that the Company make the following payments to BMR: (a) $1 million, paid upon execution of the Agreement, (b) $0.5 million, paid six months after the execution date of the Agreement, and (c) $0.75 million, payable twelve months after the execution date of the Agreement. Initial and six months payments were made on schedule.

We continue to lease office space at 240 Cedar Knolls Road, Cedar Knolls, NJ under a non-cancellable operating lease expiring in 2013.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

As of December 31, 2009, future minimum rental payments are as follows:

Years Ending December 31,	**(In thousands)**
2010	345
2011	353
2012	360
2013	31
Total	1,089

Rent expense for the years ended December 31, 2009, 2008 and 2007 was $0.7 million, $2.3 million and $2.0 million, respectively. Additional charges under this lease for real estate taxes and common maintenance charges for the years ended December 31, 2009, 2008 and 2007, were $0.5 million, $0.8 million and $0.8 million, respectively.

In accordance with the lease agreement in Cedar Knolls, NJ, the Company has entered into a standby letter of credit in the amount of $246 thousand as a security deposit. The standby letter of credit is fully collateralized with a time certificate of deposit account in the same amount. The certificate of deposit has been recorded as a restricted cash balance in the accompanying financials. As of December 31, 2009, there are no amounts outstanding under the standby letter of credit.

On April 6, 2007, the Board of Directors appointed Michael V. Novinski to the position of President and Chief Executive Officer. Pursuant to his appointment, the Company has entered into a three year employment agreement with Mr. Novinski. If Mr. Novinski s contract is terminated without cause by the Board of Directors or at any time by the executive for good reason as defined in his contract, we are obligated to make severance payments to Mr. Novinski.

In April 2005, the Company entered into an amended and restated employment agreement with its then Chief Executive Officer, Dr. Michael M. Goldberg, for services through July 31, 2007. On January 16, 2007, the Board of Directors terminated Dr. Goldberg s services. On April 26, 2007, the Board of Directors held a special hearing at which it determined that Dr. Goldberg s termination was for cause. On March 22, 2007, Dr. Goldberg, through his counsel, filed a demand for arbitration asserting that his termination was without cause and seeking $1,048,000 plus attorney s fees, interest, arbitration costs and other relief alleged to be owed to him in connection with his employment agreement with the Company. During the arbitration, Dr. Goldberg sought a total damage amount of at least $9,223,646 plus interest. On February 11, 2010, the arbitrator issued the final award in favor of Dr. Goldberg for a total amount of approximately $2,333,115 as full and final payment for all claims, defenses, counterclaims, and related matters. As a result of the February 11, 2010 final award, the Company adjusted its estimate of costs to settle this matter to $2,333,115. If the awards are upheld and confirmed in court, the Company will be required to pay the final amount due to Dr. Goldberg.

On August 18, 2008, Emisphere filed a complaint in the United States District Court for the District of New Jersey against Laura A. Kragie and Kragie BioMedWorks, Inc. seeking a declaratory judgment affirming Emisphere s sole

rights to its proprietary technology for the oral administration of Vitamin B12, as set forth in several Emisphere United States provisional patent applications. The complaint also includes a claim under the Lanham Act arising from statements made by defendants on their web site. Laura A. Kragie, M.D., is a former consultant for Emisphere who later was employed by Emisphere. On February 13, 2009, the defendants filed an answer, affirmative defenses and counterclaims, adding as counterclaim defendants current or former Emisphere executives or employees, including Michael V. Novinski. The countersuit against Emisphere alleged breach of contract, fraudulent inducement, trademark infringement, false advertising, and other claims. Emisphere believed that the counterclaims were without merit, and litigated all claims vigorously. The litigation with the Kragie Parties has been resolved. On February 23, 2010, the Court entered an Order, pursuant to the parties written settlement agreement, dismissing the case with prejudice.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

The Company evaluates the financial consequences of legal actions periodically or as facts present themselves and books accruals to account for its best estimate of future costs accordingly.

Contingencies. In the ordinary course of business, we enter into agreements with third parties that include indemnification provisions which, in our judgment, are normal and customary for companies in our industry sector. These agreements are typically with business partners, clinical sites, and suppliers. Pursuant to these agreements, we generally agree to indemnify, hold harmless, and reimburse indemnified parties for losses suffered or incurred by the indemnified parties with respect to our product candidates, use of such product candidates, or other actions taken or omitted by us. The maximum potential amount of future payments we could be required to make under these indemnification provisions is unlimited. We have not incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. As a result, the estimated fair value of liabilities relating to these provisions is minimal. Accordingly, we have no liabilities recorded for these provisions as of December 31, 2009.

In the normal course of business, we may be confronted with issues or events that may result in a contingent liability. These generally relate to lawsuits, claims, environmental actions or the action of various regulatory agencies. If necessary, management consults with counsel and other appropriate experts to assess any matters that arise. If, in our opinion, we have incurred a probable loss as set forth by accounting principles generally accepted in the U.S., an estimate is made of the loss and the appropriate accounting entries are reflected in our financial statements. After consultation with legal counsel, we do not anticipate that liabilities arising out of currently pending or threatened lawsuits and claims will have a material adverse effect on our financial position, results of operations or cash flows.

Restructuring Expense

On December 8, 2008, as part of our efforts to improve operational efficiency we decided to close our research and development facilities in Tarrytown to reduce costs and improve operating efficiency. As of December 8, 2008 we terminated all research and development staff and ceased using approximately 85% of the facilities which resulted in a restructuring charge of approximately $3.8 million in the fourth quarter, 2008. As part of the restructuring charge, we wrote down the value of our leasehold improvements in Tarrytown by approximately $1.0 million (net); additionally, the useful life of leasehold improvements in portions of the facility that were still in use as of December 31, 2008 was recalculated, resulting in an accelerated charge to amortization expense of approximately $0.1 million.

In accordance with FASB ASC 420-10-5, *Exit or Disposal Cost Obligations* , we estimated our liability for net costs associated with terminating our lease obligation for the laboratory and office facilities in Tarrytown and recorded a charge net of estimated sublease income. To develop our estimate, we considered our liability under the Tarrytown lease, and estimated costs to be incurred to satisfy rental commitments under the lease, the lead time necessary to sublease the space, projected sublease rental rates, and the anticipated duration of subleases. We validated our estimate and assumptions through consultations with independent third parties having relevant expertise. We used a credit adjusted risk free rate of 1.55% to discount estimated cash flows. We intend to review our estimate and assumptions on a quarterly basis or more frequently as appropriate; and will make modifications to the estimated liability as deemed appropriate, based on our judgment to reflect changing circumstances. Any change in our estimate may result in additional restructuring charges, and those charges may be material.

The restructuring liability at December 31, 2008 of $2.9 million related primarily to the portion of the Tarrytown facility we ceased using as of December 8, 2008, and was recorded at net present value, and included several

obligations related to the restructuring. We classified $0.9 million as short term as of December 31, 2008 and $2.0 million as long term.

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

We recorded $3.8 million in restructuring expenses comprised of $2.6 million lease restructuring expense (net of subleases), $0.2 million in termination benefits (employee severance and related costs) and $1.0 million in leasehold improvement abandonment. In December 2008, we made $47 thousand in net rental payments (calculated at net present value) on the Tarrytown property and made termination payments of $91 thousand which represent employee severance and benefits charges. The restructuring liability was reduced by these amounts.

On April 29, 2009, the Company entered into a Lease Termination Agreement with BMR pursuant to which the Company and BMR terminated the lease of space at 765 and 777 Old Saw Mill River Road in Tarrytown, New York. Pursuant to the Agreement, the Lease was terminated effective as of April 1, 2009. The Agreement provided that the Company shall make the following payments to BMR: (a) One Million Dollars, payable upon execution of the Agreement, (b) Five Hundred Thousand Dollars, payable six months after the execution date of the Agreement, and (c) Seven Hundred Fifty Thousand Dollars, payable twelve months after the execution date of the Agreement. The final payment was originally due April 29, 2010. Consequently, the restructuring liability was adjusted to reflect the terms of the Lease Termination Agreement, resulting in a $356 thousand reduction in the liability and restructuring costs during the year ended December 31, 2009. We classified the $750 thousand as short term as of December 31, 2009. The final payment was originally due April 29, 2010. However, on March 17, 2010 the Company and BMR agreed to amend the Agreement (the Amendment). According to the Amendment, the final payment will be modified as follows: the Company will pay Eight Hundred Thousand Dollars ($800,000), as follows: (i) Two Hundred Thousand Dollars ($200,000) within five (5) days after the Execution Date and (ii) One Hundred Thousand Dollars ($100,000) on each of the following dates: July 15, 2010, August 15, 2010, September 15, 2010, October 15, 2010, November 15, 2010, and December 15, 2010.

The restructuring activity and related liability are as follows ($ thousands):

	Charge	Amounts Previously Accrued	Lease Termination Adjustment	Cash Payments	Non-Cash Expense	Liability at December 31, 2009
Lease restructuring expense	$ 2,592	$ 227	$ (353)	$ (1,716)	$	$ 750
Employee severance and related costs	199		(3)	(196)		
Leasehold improvements abandonment	1,040				(1,040)	
	$ 3,831	$ 227	$ (356)	$ (1,912)	$ (1,040)	$ 750

17. Summarized Quarterly Financial Data (Unaudited)

Following are summarized quarterly financial data (unaudited) for the years ended December 31, 2009 and 2008:

	2009			
	March 31	**June 30**	**September 30**	**December 31**
	(In thousands)			
Total revenue	$	$	$	$ 92
Operating (loss) income	(4,659)	(2,998)	(3,393)	(3,503)
Net (loss) income	(5,417)	(4,187)	(4,037)	(7,602)
Net (loss) income per share, basic	$ (0.18)	$ (0.14)	$ (0.11)	$ (0.18)
Net (loss) income per share, diluted	$ (0.18)	$ (0.14)	$ (0.11)	$ (0.18)

Table of Contents

EMISPHERE TECHNOLOGIES, INC.

NOTES TO THE FINANCIAL STATEMENTS (Continued)

	2008			
	March 31	June 30	September 30	December 31
	(In thousands)			
Total revenue	$ 154	$ 14	$ 77	$ 5
Operating loss	(6,462)	(5,895)	(5,740)	(8,224)
Net income (loss)	(3,942)	(7,643)	(5,100)	(7,704)
Net income (loss) per share, basic	$ (0.13)	$ (0.25)	$ (0.17)	$ (0.25)
Net income (loss) per share, diluted	$ (0.13)	$ (0.25)	$ (0.17)	$ (0.25)

18. Fair Value

In accordance with FASB ASC 820, Fair Value Measurements and Disclosures , the following table represents the Company s fair value hierarchy for its financial liabilities measured at fair value on a recurring basis as of December 31, 2009:

	Level 2 2009 (In thousands)
Derivative instruments (short term)	$ 6,189
Derivative instruments (long term)	4,591
Total	$ 10,780

The derivative instruments were valued using the market approach, which is considered Level 2 because it uses inputs other than quoted prices in active markets that are either directly or indirectly observable. Accordingly, the derivatives were valued using the Black-Scholes model.

19. Settlement of Litigation

On September 25, 2007, Emisphere agreed to accept $18 million from Eli Lilly to settle the pending litigation between the two companies. Additional terms and conditions of the settlement were confidential. Emisphere received $11.9 million of the settlement, net of attorneys fees and expenses.

20. Other

On February 8, 2008, Emisphere reported that it had entered into an agreement with MannKind Corporation to sell certain Emisphere patents and a patent application relating to diketopiperazine technology for a total purchase price of $2.5 million. An initial payment of $1.5 million was received in February 2008. An additional $0.5 million was received in May 2009 with the remaining payment to be made no later than October 5, 2010.

21. Subsequent Event

With the exception of the modification in payment terms of the Lease Termination Agreement with BMR described in Note 16 (above), the Company has evaluated subsequent events through the date on which financial statements were issued and has determined that there are no additional subsequent events that would require adjustments to the financial statements for the year ended December 31, 2009.

Table of Contents

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

On January 6, 2010, the Company dismissed PricewaterhouseCoopers LLP (PwC) as the Company s independent registered public accountants. This action was approved on January 6, 2010 by the Audit Committee of the Board of Directors of the Company.

PwC s audit reports on the Company s financial statements as of and for the years ended December 31, 2008 and 2007 did not contain an adverse opinion or a disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope or accounting principles, except that for each of the years ended December 31, 2008 and 2007 PwC s reports contained an explanatory paragraph expressing substantial doubt about the Company s ability to continue as a going concern.

During the Company s two most recent fiscal years ended December 31, 2007 and 2008 and the subsequent interim periods through January 6, 2010, there were no disagreements with PwC on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of PwC, would have caused PwC to make reference to the matter in their reports. As noted in Item 4 of the Company s quarterly report on Form 10-Q for the quarter ended September 30, 2009, and quarterly reports on Forms 10-Q/A for the quarters ended June 30, 2009 and March 31, 2009, the Company identified a material weakness in its internal controls over financial reporting and disclosure controls and procedures with respect to ineffective controls to ensure completeness and accuracy with regard to the proper recognition, presentation and disclosure of conversion features of certain convertible debt instruments and warrants. The Audit Committee discussed the material weakness with PwC, and the Company has authorized PwC to respond fully to the inquiries of McGladrey & Pullen, LLP (M&P), the successor independent registered public accounting firm, regarding the material weakness. Except as previously noted in this paragraph, there were no other reportable events as defined in Item 304(a)(1)(v) of Regulation S-K during the years ended December 31, 2007 and 2008 and through January 6, 2010.

On January 6, 2010, with the approval of the Audit Committee of the Company, the Company engaged M&P to act as its independent registered public accounting firm. During the years ended December 31, 2007, and 2008, respectively, and in the subsequent interim periods through January 6, 2010, neither the Company nor anyone acting on its behalf has consulted with M&P on any of the matters or events set forth in Item 304(a)(2) of Regulation S-K.

ITEM 9A. *CONTROLS AND PROCEDURES*

Evaluation of Disclosure Controls and Procedures

The Company s senior management is responsible for establishing and maintaining a system of disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the Exchange Act) designed to ensure that the information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer s management, including its principal executive officer or officers and principal financial officer or officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

In light of the material weakness described in Item 9 above, management concluded that our disclosure controls and procedures were not effective as of the end of the period ending September 30, 2009. Since then, management has implemented improvements in our internal control over financial reporting to address the material weakness with

regard to the proper recognition, presentation and disclosure of conversion features of certain convertible debt instruments and warrants. These improvements include, among other things; improved access to and evaluation of recent accounting pronouncements as it relates to financing arrangements and

Table of Contents

derivative instruments, including enhancing the documentation around conclusions reached in the implementation of applicable generally accepted accounting principles. In addition, we will provide further training of those individuals involved in technical accounting and reporting regarding financing arrangements and derivative instruments. We also performed additional analysis and other post closing procedures to ensure that our financial statements were prepared in accordance with generally accepted accounting principles. Accordingly, we believe that the financial statements included in this report fairly present in all material respects, our financial condition, results of operations and cash flows for the periods presented. Consequently, the Company has evaluated the effectiveness of the design and operation of its disclosure controls and procedures under the supervision of and with the participation of management, including the Chief Executive Officer and Chief Financial Officer, as of the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are effective.

Management s Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2009.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

This annual report does not include an attestation report of the Company s registered public accounting firm regarding internal control over financial reporting. Management s report was not subject to attestation by the company s registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit the company to provide only management s report in this annual report.

Changes in Internal Control over Financial Reporting

During the quarter ended December 31, 2009 our system of internal controls over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) was improved as described above. These improvements were successfully implemented and tested. There were no other changes in internal controls over financial reporting that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or internal controls over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the system are met and cannot detect all deviations. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud or deviations, if any, within the company have been detected. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

ITEM 9B. ***OTHER INFORMATION***

None.

Table of Contents

PART III

ITEM 10. *DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE*

Director and Executive Officer Information

Information regarding those directors serving unexpired terms and our current Executive Officers, all of who are currently serving open-ended terms, including their respective ages, the year in which each first joined the Company and their principal occupations or employment during the past five years, is provided below:

Name	Age	Year Joined Emisphere	Position with the Company
Michael V. Novinski	53	2007	President and Chief Executive Officer, Class III Director
Michael R. Garone	51	2007	Vice President, Chief Financial Officer and Corporate Secretary
M. Gary I. Riley DVM, PhD	67	2007	Vice President of Non-Clinical Development and Applied Biology
Nicholas J. Hart	45	2008	Vice President Strategy and Development
John D. Harkey, Jr.	49	2006	Class I Director
Mark H. Rachesky, M.D.	51	2005	Class III Director
Timothy G. Rothwell	59	2009	Class I Director
Michael Weiser, M.D.	47	2005	Class III Director

Michael V. Novinski joined Emisphere in 2007 as President and Chief Executive Officer. Immediately before joining the Company, Mr. Novinski was President and a member of the Board of Directors of Organon USA Inc., a business unit of Organon BioSciences Inc. Mr. Novinski served as Organon s Director of Marketing beginning in 1992 and held several senior executive positions within Organon BioSciences prior to becoming President of Organon USA in 2003. Mr. Novinski earned a Bachelor s degree with a major in Biology from Washington and Jefferson College in Washington, PA. He also studied under fellowship at the University of Pittsburgh Medical School, Department of Microbiology. Mr. Novinski s broad business and leadership experiences in the pharmaceutical and drug development industries were the reasons he was selected to lead the Company and participate as a member of our Board of Directors.

Michael R. Garone joined Emisphere in 2007 as Vice President and Chief Financial Officer. Mr. Garone has also served as the Company s Corporate Secretary since October 2009. Mr. Garone previously served as Interim Chief Executive Officer and Chief Financial Officer of Astralis, Ltd. (OTC BB: ASTR.OB). Prior to that, Mr. Garone spent 20 years with AT&T (NYSE: T), where he held several positions, including Chief Financial Officer of AT&T Alascom. Mr. Garone received a MBA from Columbia University and a BA in Mathematics from Colgate University.

John D. Harkey, Jr. has been a Director of the Company since April 2006. Mr. Harkey is Chairman and Chief Executive Officer of Consolidated Restaurant Companies, Inc. Mr. Harkey currently serves on the Board of Directors and Audit Committees of Leap Wireless International, Inc. (NASDAQ: LEAP), Loral Space & Communications, Inc.

(NASDAQ: LORL), Energy Transfer Partners, L.L.C. (NYSE: ETP) and Energy Transfer Equity, LP (NYSE: ETE), and the Board of Directors for the Baylor Health Care System Foundation. Mr. Harkey also serves on the President s Development Council of Howard Payne University, the Executive Board of Circle Ten Council of the Boy Scouts of America and is a member of the Young Presidents Organization. Mr. Harkey obtained a B.B.A. in honors and a J.D. from the University of Texas at Austin and an M.B.A. from Stanford University School of Business. Mr. Harkey s entrepreneurial background, his

Table of Contents

qualification as a financial expert, and his business and leadership experiences in a range of different industries make him an asset to our Board of Directors.

Mark H. Rachesky, M.D. has been a Director of the Company since 2005. Dr. Rachesky is the co-founder and President of MHR Fund Management LLC and affiliates, investment managers of various private investment funds that invest in inefficient market sectors, including special situation equities and distressed investments. From 1990 through June 1996, Dr. Rachesky was employed by Carl C. Icahn, initially as a senior investment officer and for the last three years as sole Managing Director of Icahn Holding Corporation, and acting chief investment advisor. Dr. Rachesky is currently the Non-Executive Chairman of the Board of Loral Space & Communications, Inc. (NASDAQ:LORL) and Leap Wireless International, Inc. (NASDAQ: LEAP) and is a member of the Board of Directors of Lions Gate Entertainment Corp. (NYSE: LGF) and Nationshealth, Inc. He formerly served on the Board of Directors of Neose Technologies, Inc (NASDAQ: NTEC). Dr. Rachesky is a graduate of Stanford University School of Medicine and Stanford University School of Business. Dr. Rachesky graduated from the University of Pennsylvania with a major in Molecular Aspects of Cancer. Dr. Rachesky s extensive investing and financial background, his thorough knowledge of capital markets and his training as an M.D., make him an asset to our Board of Directors.

Timothy G. Rothwell, has been a director since November 2009. Mr. Rothwell is the former Chairman of Sanofi-aventis U.S. From February 2007 to March 2009 Mr. Rothwell served as Chairman of Sanofi-aventis U.S. From September 2004 to February 2007, Mr. Rothwell was President and Chief Executive Officer of the company, overseeing all domestic commercial operations as well as coordination of Industrial Affairs and Research and Development activities. From May 2003 to September 2004, Mr. Rothwell was President and Chief Executive Officer of Sanofi-Synthelabo, Inc. and was instrumental in the formation of Sanofi-aventis U.S. in 2004. Prior to that, from June 1998 to May 2003, he served in various capacities at Pharmacia, including as President of the company s Global Prescription Business. From January 1995 to January 1998, Mr. Rothwell served as worldwide President of Rhone-Poulenc Rorer Pharmaceuticals and President of the company s Global Pharmaceutical Operations. In his long career, Mr. Rothwell has also served as Chief Executive Officer of Sandoz Pharmaceuticals, Vice President, Global Marketing and Sales at Burroughs Wellcome, and Senior Vice President of Marketing and Sales for the U.S. for Squibb Corporation. Mr. Rothwell holds a Bachelor of Arts from Drew University and earned his J.D. from Seton Hall University. He formerly served on the PhRMA Board of Directors, as well as the Institute of Medicine s Evidence-Based Medicine roundtable, the CEO Roundtable on Cancer, the Healthcare Businesswomen s Association Advisory Board, the Board of Trustees for the Somerset Medical Center Foundation, the Board of Trustees for the HealthCare Institute of New Jersey, and as a Trustee of the Corporate Council for America s Children at the Children s Health Fund. Presently, he serves on the Board of Directors of Antigenics (NASDAQ: AGEN), the Board of Directors of Akrimax Pharmaceuticals LLC, the Board of Visitors for Seton Hall Law School, and the PheoPara Alliance, a nonprofit 501(c) 3 organization. Mr. Rothwell s broad business and leadership experiences in the pharmaceutical industry and his affiliations with industry, educational and healthcare related organizations make him an asset to our Board of Directors.

Michael Weiser, M.D., Ph.D has been a Director of the Company since 2005. Dr. Weiser is the founder and co-chairman at Actin Biomed, a healthcare investment firm. Before joining Actin, Dr. Weiser was the Director of Research of Paramount BioCapital, Inc. Dr. Weiser completed his Ph.D. in Molecular Neurobiology at Cornell University Medical College and received his M.D. from New York University School of Medicine, where he also completed a Postdoctoral Fellowship in the Department of Physiology and Neuroscience. Dr. Weiser serves on the boards of Manhattan Pharmaceuticals, Inc. (OTCBB: MHA), Hana Biosciences, Inc. (AMEX: HNAB), Chelsea Therapeutics International Ltd. (OTCBB: CHTP), Ziopharm Oncology, Inc. (NASD ZIOP), VioQuest Pharmaceuticals, Inc. (OTCBB: VQPH) and several privately-held biotechnology companies. Dr. Weiser s background as an M.D. Ph.D., his business and financial experiences, his extensive knowledge of the healthcare industry and capital markets make him an asset to on our Board of Directors.

Table of Contents

Nicholas J. Hart, joined Emisphere in August 2009 as Vice President, Strategy and Development. Immediately before joining the Company, Mr. Hart was Leader of the Contraception Therapy Area and a member of the Corporate Executive Leadership Team at Organon, part of Schering Plough Corporation. While at Organon, he served as Senior Director/Executive Director of Marketing of the Women s Healthcare Franchise; Director of CNS Marketing, and Associate Director of Specialty Products. Prior to Organon, Mr. Hart held various marketing and sales positions with Novartis, Sankyo Parke Davis Pharmaceuticals, and Bristol-Myers Squibb Company. After graduating from the United States Military Academy at West Point, Mr. Hart received an MBA in Finance and International Business from New York University, Stern School of Business. He also served as a Field Artillery Officer in the United States Army.

M. Gary I. Riley DVM, PhD joined Emisphere in November 2007 as Vice-President of Nonclinical Development and Applied Biology. He was previously Vice President of Toxicology and Applied Biology at Alkermes, Inc., Cambridge, MA, where he spent 14 years working in the field of specialized drug delivery systems. He holds board certifications in veterinary pathology and toxicology. He was previously employed as Director of Pathobiology at Lederle Laboratories and earlier in his career held positions as a veterinary pathologist in academia and industry.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 (the Exchange Act), and the rules of the Securities and Exchange Commission (the SEC) require our directors, Executive Officers and persons who own more than 10% of Common Stock to file reports of their ownership and changes in ownership of Common Stock with the SEC. Our employees sometimes prepare these reports on the basis of information obtained from each director and Executive Officer. Based on written representations of the Company s directors and Executive Officers and on confirmation that no Form 5 was required to be filed, we believe that all reports required by Section 16(a) of the Exchange Act to be filed by its directors, Executive Officers and greater than ten (10%) percent owners during the last fiscal year were filed on time with the exception of Form 4 filings made on behalf of Michael R. Garone and M. Gary I. Riley on January 21, 2010.

Code of Conduct for Officers and Employees and Code of Business Conduct and Ethics for Directors

The Company has a Code of Conduct that applies to all of our officers and employees as well as a Code of Business Conduct and Ethics that applies specifically to the members of the Board of Directors. The directors are surveyed annually regarding their compliance with the policies as set forth in the Code of Conduct for Directors. The Code of Conduct and the Code of Business Conduct and Ethics for Directors are available on the Corporate Governance section of our website at www.emisphere.com. The contents of our website are not incorporated herein by reference and the website address provided in this Proxy Statement is intended to be an inactive textual reference only. The Company intends to disclose on its website any amendment to, or waiver of, a provision of the Code of Conduct that applies to the Chief Executive Officer, Chief Financial Officer, or Controller. Our Code of Conduct contains provisions that apply to our Chief Executive Officer, Chief Financial Officer and all other finance and accounting personnel. These provisions comply with the requirements of a company code of ethics for financial officers that were promulgated by the SEC pursuant to the Exchange Act.

Stockholder Communications

We have an Investor Relations Office for all stockholder inquiries and communications. The Investor Relations Office facilitates the dissemination of accurate and timely information to our stockholders. In addition, the Investor Relations Office ensures that outgoing information is in compliance with applicable securities laws and regulations. All investor queries should be directed to our internal Director of Corporate Communications or our Corporate Secretary.

Table of Contents

Election of Directors

The Governance and Nominating Committee identifies director nominees by reviewing the desired experience, mix of skills and other qualities to assure appropriate Board composition, taking into consideration the current Board members and the specific needs of the Company and the Board. Among the qualifications to be considered in the selection of candidates, the Committee considers the following attributes and criteria of candidates: experience, knowledge, skills, expertise, diversity, personal and professional integrity, character, business judgment and independence. Although it has no formal policy our Board recognizes that nominees for the Board should reflect a reasonable diversity of backgrounds and perspectives, including those backgrounds and perspectives with respect to business experience, professional expertise, age, gender and ethnic background.

Our Board is comprised of accomplished professionals who represent diverse and key areas of expertise including national and international business, operations, manufacturing, finance and investing, management, entrepreneurship, higher education and science, research and technology. We believe our directors wide range of professional experiences and backgrounds, education and skills has proven invaluable to the Company and we intend to continue leveraging this strength.

Nominations for the election of directors may be made by the Board of Directors or the Governance and Nominating Committee. The committee did not reject any candidates recommended within the preceding year by a beneficial owner of, or from a group of security holders that beneficially owned, in the aggregate, more than five percent (5%) of the Company s voting stock.

Although it has no formal policy regarding stockholder nominees, the Governance and Nominating Committee believes that stockholder nominees should be viewed in substantially the same manner as other nominees. Stockholders may make a recommendation for a nominee by complying with the notice procedures set forth in our by-laws. The Governance and Nominating Committee will give nominees recommended by stockholders in compliance with these procedures the same consideration that it gives to any board recommendations. To date, we have not received any recommendation from stockholders requesting that the Governance and Nominating Committee (or any predecessor) consider a candidate for inclusion among the committee s slate of nominees in the Company s proxy statement, and the Director Nominees have been nominated by the Governance and Nominating Committee.

To be considered by the committee, a Director nominee must have broad experience at the strategy/policy-making level in a business, government, education, technology or public interest environment, high-level managerial experience in a relatively complex organization or experience dealing with complex problems. In addition, the nominee must be able to exercise sound business judgment and provide insights and practical wisdom based on experience and expertise, possess proven ethical character, be independent of any particular constituency, and be able to represent all stockholders of the Company.

The committee will also evaluate whether the nominee s skills are complimentary to the existing board member s skills, and the board s needs for operational, management, financial, technological or other expertise; and whether the individual has sufficient time to devote to the interests of Emisphere. The prospective board member cannot be a board member or officer at a competing company nor have relationships with a competing company. He/she must be clear of any investigation or violations that would be perceived as affecting the duties and performance of a director.

The Governance and Nominating Committee identifies nominees by first evaluating the current members of the Board of Directors willing to continue in service. Current members of the board with skills and experience that are relevant to the business and who are willing to continue in service are considered for re-nomination, balancing the value of continuity of service by existing members of the board with that of obtaining a new perspective. If any member of the board does not wish to continue in service, or if the Governance and Nominating Committee or the board decides not

to nominate a member for re-election, the Governance and Nominating Committee identifies the desired skills and experience of a new nominee and discusses with the board suggestions as to individuals that meet the criteria.

Table of Contents

ITEM 11. *EXECUTIVE COMPENSATION*

Summary Compensation Table 2009, 2008 and 2007

The following table sets forth information regarding the aggregate compensation Emisphere paid during 2009, 2008 and 2007 to our Principal Executive Officer, our Principal Financial Officer, and the two other highest paid Executive Officers:

Name and Principal Position(1)	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)(2)	All Other Compensation($)	Total ($)
Michael V. Novinski,	2009	550,000			239,759	18,000(4)	807,759
President and CEO	2008	554,231	357,123(3)			18,000(4)	929,354
	2007	359,615			2,970,000	11,077(4)	3,340,692
Michael R. Garone,	2009	234,313			10,642		244,955
Officer and Corporate	2008	231,794					231,794
VP, Chief Financial	2007	78,731			258,000		336,731
Secretary(5)							
M. Gary I. Riley DVM,							
PhD,	2009	269,969			10,642	8,000(7)	279,011
VP of Non-Clinical	2008	267,039	40,000(6)			14,000(7)	321,039
Development and	2007	40,769			257,250	45,060(7)	343,079
Applied Biology(7)							
Nicholas J. Hart, VP,	2009	242,880			10,642		253,522
Strategy and							
Development(8)	2008	104,308	16,872(9)		173,550		294,730

(1) Only two individuals other than the Principal Executive Officer and the Principal Financial Officer served as executive officers at the end of fiscal year 2009. As a result, the named executive officers, as defined in Regulation S-K, Item 402(a)(3), of the Company are as follows: Mr. Novinski, Mr. Garone, Mr. Riley and Mr. Hart.

(2) Amounts shown in this column represent the aggregate grant date fair value of stock option awards granted during the respective year computed in accordance with Financial Accounting Standards Board ASC Topic 718. This compares to prior years, during which amounts in these columns have represented the expensed accounting value of such awards. The amounts for 2008 and 2007 have been recomputed (along with amounts in the Total column for such years) using the aggregate grant date fair value of stock option awards granted during both of those years. For assumptions used in the valuation of these awards please see Note 12 to our Financial Statements for the fiscal year ended December 31, 2009.

(3) Mr. Novinski was paid a bonus in 2008 for performance in 2007 in accordance with the terms of his employment contract.

(4) All other compensation for Mr. Novinski represents an allowance for the use of a personal automobile in accordance with the terms of his employment contract.

(5) Mr. Garone was appointed Corporate Secretary effective October 24, 2008.

(6) In accordance with the terms of his employment contract, Dr. Riley received a signing bonus, payable during 2008, when he joined the Company.

(7) All other compensation for Mr. Riley represents payments for relocation expenses.

(8) Mr. Hart accepted the position as Vice President, Strategy and Development effective July 28, 2008.

(9) Mr. Hart received a signing bonus when he joined the Company.

Table of Contents

Compensation Discussion And Analysis

Executive Summary

The discussion that follows outlines the compensation awarded to, earned by or paid to the named executive officers of the Company including a review of the principal elements of compensation, the objectives of the Company s compensation program, what the program is designed to reward and why and how each element of compensation is determined.

In general, the Company operates in a marketplace where competition for talented executives is significant. The Company is engaged in the long-term development of its technology and of drug candidates, without the benefit of significant current revenues, and therefore its operations require it to raise capital in order to continue its activities. Our operations entail special needs and risks and require that the Company attempt to implement programs that promote strong individual and group performance and retention of excellent employees. The Company s compensation program for named executive officers consists of cash compensation as base salary, medical, basic life insurance, long term disability, flexible spending accounts, paid time off, and defined contribution retirement plans as well as long term equity incentives offered through stock option plans. This program is developed in part by benchmarking against other companies in the biotechnology/pharmaceutical sectors, as well as by the judgment and discretion of our Board.

Employee salaries are benchmarked against Radford survey information. Radford is part of the Aon family brands. For more than 30 years, Radford has been the leading provider of compensation market intelligence to the high-tech and life sciences industries. Radford emphasizes data integrity and online access to data, tools and resources, as well as client service geared towards life sciences. Radford includes more than 2,000 participating companies globally. Their services offer full compensation consulting, reliable, current data analysis and reporting, customized data for competitive insight, and web access to data via the Radford Network.

Discussion and Analysis

Objectives of the compensation and reward program The biopharmaceutical marketplace is highly competitive and includes companies with far greater resources than ours. Our work involves the difficult, unpredictable, and often slow development of our technology and of drug candidates. Continuity of scientific knowledge, management skills, and relationships are often critical success factors to our business. The objectives of our compensation program for named executive officers is to provide competitive cash compensation, competitive health, welfare and defined benefit retirement benefits as well as long-term equity incentives that offer significant reward potential for the risks assumed and for each individual s contribution to the long-term performance of the Company. Individual performance is measured against long-term strategic goals, short-term business goals, scientific innovation, regulatory compliance, new business development, development of employees, fostering of teamwork and other Emisphere values designed to build a culture of high performance. These policies and practices are based on the principle that total compensation should serve to attract and retain those executives critical to the overall success of Emisphere and are designed to reward executives for their contributions toward business performance that is designed to build and enhance stockholder value.

Elements of compensation and how they are determined The key elements of the executive compensation package are base salary (as determined by the competitive market and individual performance), the executive long term disability plan and other health and welfare benefits and long-term incentive compensation in the form of periodic stock option grants. The base salary (excluding payment for accrued but unused vacation) for the named executive officers for 2009 ranged from $235,750 for its Vice President and Chief Financial Officer to $550,000 for its President and Chief Executive Officer. In determining the compensation for each named executive officer, the Company generally

considers (i) data from outside studies and proxy materials regarding compensation of executive officers at companies believed to be comparable, (ii) the input of other directors and the President and Chief Executive Officer (other than for his own compensation) regarding individual performance of each named executive officer and (iii) qualitative measures of Emisphere s performance, such as progress in the development of the Company s technology, the engagement of corporate

Table of Contents

partners for the commercial development and marketing of products, effective corporate governance, fiscal responsibility, the success of Emisphere in raising funds necessary to conduct research and development, and the pace at which the Company continues to advance its technologies in various clinical trials. Our board of directors and Compensation Committee s consideration of these factors is subjective and informal. However, in general, it has determined that the compensation for executive officers should be competitive with market data reflected within the 50th-75th percentile of biotechnology companies for corresponding senior executive positions. 2009 compensation levels were derived from the compensation plan set in 2006 and were based in part by information received from executive compensation consultants, Pearl Myer and Partners, based in New York, N.Y. Compensable factors benchmarked include market capitalization, head count and location. While the Company has occasionally paid cash bonuses in the past, there is no consistent annual cash bonus plan for named executive officers. When considering the compensation of the Company s President and Chief Executive Officer, the Company receives information and analysis prepared or secured by the Company s outside executive compensation experts and survey data prepared by human resources management personnel as well as any additional outside information it may have available.

The compensation program also includes periodic awards of stock options. The stock option element is considered a long-term incentive that further aligns the interests of executives with those of our stockholders and rewards long-term performance and the element of risk. Stock option awards are made at the discretion of the Board of Directors based on its subjective assessment of the individual contribution of the executive to the attainment of short and long-term Company goals, such as collaborations with partners, attainment of successful milestones under such collaborations and other corporate developments which advance the progress of our technology and drug candidates. Option grants, including unvested grants, for our named executive officers range from 115,000 for our current Vice President, Chief Financial Officer and Corporate Secretary; Vice President of Non-Clinical Development and Applied Biology; and Vice President, Strategy and Development, to 1,300,000 for President and Chief Executive Officer as indicated in the accompanying tables. Stock option grants to named executive officers in 2009 were made in connection with the annual compensation review. With the exception of grants made to the Company s President and Chief Executive Officer (described in Transactions with Officers and Directors), the Company s policy with respect to stock options granted to executives is that grant prices should be equal to the fair market value of the Common Stock on the date of grant, that employee stock options should generally vest over a three to five-year period and expire in ten years from date of grant, and that options previously granted at exercise prices higher than the current fair market value should not be re-priced. Once performance bonuses or awards are issued, there are currently no policies in place to reduce, restate or otherwise adjust awards if the relevant performance measures on which they are based are restated or adjusted. The Company has no policy to require its named executive officers to hold any specific equity interest in the Company. The Company does not offer its named executive officers any nonqualified deferred compensation, a defined benefit pension program or any post retirement medical or other benefits.

Section 162(m) of the Internal Revenue Code of 1986, as amended, provides that compensation in excess of $1,000,000 paid to the Chief Executive Officer or to any of the other four most highly compensated executive officers of a publicly held company will not be deductible for federal income tax purposes, unless such compensation is paid pursuant to one of the enumerated exceptions set forth in Section 162(m). The Company s primary objective in designing and administering its compensation policies is to support and encourage the achievement of the Company s long-term strategic goals and to enhance stockholder value. In general, stock options granted under the Company s 2000 and 2007 Stock Option Plans are intended to qualify under and comply with the performance based compensation exemption provided under Section 162(m) thus excluding from the Section 162(m) compensation limitation any income recognized by executives at the time of exercise of such stock options. Because salary and bonuses paid to our Chief Executive Officer and four most highly compensated executive officers have been below the $1,000,000 threshold, the Compensation Committee has elected, at this time, to retain discretion over bonus payments, rather than to ensure that payments of salary and bonus in excess of $1,000,000 are deductible. The Compensation Committee intends to

99

Table of Contents

review periodically the potential impacts of Section 162(m) in structuring and administering the Company s compensation programs.

The Company has an employment contract with its current President and Chief Executive Officer, Michael V. Novinski as described under Transactions with Executive Officers and Directors. Mr. Novinski s employment contract called for compensation and specific benefits that were negotiated at the time of execution, including expenses of an automobile up to $1,500 per month and reimbursement for life insurance up to $15,000 per year. These additional benefits are not offered to the other named executive officers. Mr. Novinski s contract also called for an annual cash bonus up to $550,000 (based on a full calendar year). In view of the Company s current liquidity constraints, the Committee determined, and Mr. Novinski agreed, that he would be paid a $150,000 cash bonus pursuant to his employment agreement with the Corporation in connection with the Company s 2009 fiscal year; additionally Mr. Novinski will receive a one time grant of options to purchase 300,000 shares in connection with his compensation for 2009. However, given the Company s current liquidity constraints, the Compensation Committee, with the consent of Mr. Novinski, agreed to defer the payment of the cash bonus until such time as the Company s liquidity has stabilized and it has sufficient funding to pay it. The Committee also determined that Mr. Novinski would be paid a special one-time cash bonus of $150,000 in connection with the successful completion of a financing during 2009. However, in light of the Company s current liquidity constraints, Mr. Novinski and the Company also agreed to defer the payment of the $150,000 special cash bonus until such time as the Company s liquidity has stabilized and it has sufficient funding to pay it. Mr. Novinski s Employment Contract allows for severance payments to Mr. Novinski in the event of certain terminations which call for payment of base salary plus bonus (depending on the circumstances) plus the continuity of health and life insurance benefits for specified time periods. In addition, certain unvested options would vest immediately upon such termination. The events which would trigger such payment by the Company are defined in the agreement.

Grants of Plan-Based Awards 2009

The following table sets forth information regarding grants of plan-based awards in 2009:

Name	Grant Date	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards ($/Sh)	Grant Date Fair Value of Option Awards
Michael V. Novinski, President and CEO	5/15/2009	300,000	$ 0.93	$ 239,759
Michael R. Garone, VP, Chief Financial Officer and Corporate Secretary	3/12/2009	20,000	0.62	10,642
M. Gary I. Riley DVM, PhD. VP of non-Clinical Development and Applied Biology	3/12/2009	20,000	0.62	10,642
Nicholas J. Hart, Vice President, Strategy and Development	3/12/2009	20,000	0.62	10,642

Table of Contents

Outstanding Equity Awards at Fiscal Year-End 2009

The following table sets forth information as to the number and value of unexercised options held by the Executive Officers named above as of December 31, 2009. There are no outstanding stock awards with executive officers:

Name	Number of Shares Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Unearned Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date
Michael V. Novinski,	375,000	125,000(1)		$ 3.19	4/6/2017
President and CEO	375,000	125,000(2)		$ 6.38	4/6/2017
	200,000	100,000(3)		$ 0.93	5/15/2019
Michael R. Garone, VP,	30,000	45,000(4)		$ 4.03	8/29/2017
Chief Financial Officer		20,000(5)		$ 0.62	4/12/2019
and Corporate Secretary					
M. Gary I. Riley DVM,	50,000	25,000(6)		$ 4.02	11/6/2017
PhD. VP of non-Clinical		20,000(5)		$ 0.62	4/12/2019
Development and Applied Biology					
Nicholas J. Hart,	15,000	60,000(7)		$ 2.71	7/14/2018
Vice President, Strategy		20,000(5)		$ 0.62	4/12/2019
and Development					

(1) 125,000 exercisable as of 4/6/2010

(2) 125,000 exercisable as of 4/6/2010

(3) 100,000 exercisable as of 12/31/2010

(4) 15,000 exercisable as of 8/29/2010, 8/29/2011 and 8/29/2012, respectively

(5) 5,000 exercisable as of 4/12/2010 and 4/12/2011; 10,000 exercisable as of 4/12/2012

(6) 25,000 exercisable as of 11/6/2010

(7) 15,000 exercisable as of 7/14/2010, 7/14/2011, 7/14/2012 and 7/14/2013, respectively

Option Exercises and Stock Vested 2009

There were no stock options exercised by Executive Officers during 2009.

Compensation Committee Report

The Compensation Committee operates under a written charter adopted by the Board of Directors. The Compensation Committee charter can be found on our website at www.emisphere.com. The contents of our website are not incorporated herein by reference and the website address provided in this Proxy Statement is intended to be an inactive textual reference only.

The Compensation Committee is responsible for the consideration of stock plans, performance goals and incentive awards, and the overall coverage and composition of the compensation arrangements related to executive officers. The Compensation Committee may delegate any of the foregoing duties and responsibilities to a subcommittee of the Compensation Committee consisting of not less than two members of the committee. The Compensation Committee has the authority to retain, at the expense of the Company, such outside counsel, experts and other advisors as deemed appropriate to assist it in the full performance of its functions. The Company s Chief Executive Officer is involved in making recommendations to the Compensation Committee for compensation of executive officers (except for himself) as well as recommending compensation levels for directors.

Table of Contents

Our executive compensation program is administered by the Compensation Committee of the Board of Directors. The Compensation Committee, which is composed of non-employee independent directors, is responsible for reviewing with Company management and approving compensation policy and all forms of compensation for executive officers and directors in light of the Company s current business environment and the Company s strategic objectives. In addition, the Compensation Committee acts as the administrator of the Company s stock option plans. The Compensation Committee s practices include reviewing and establishing executive officers compensation to ensure that base pay and incentive compensation are competitive to attract and retain qualified executive officers, and to provide incentive systems reflecting both financial and operating performance, as well as an alignment with stockholder interests. These policies are based on the principle that total compensation should serve to attract and retain those executives critical to the overall success of Emisphere and should reward executives for their contributions to the enhancement of stockholder value.

The Compensation Committee oversees risk management as it relates to our compensation plans, policies and practices in connection with structuring our executive compensation programs and reviewing our incentive compensation programs for other employees. The committee considered risk when developing our compensation programs and believes that the design of our current compensation programs do not encourage excessive or inappropriate risk taking. Our base salaries provide competitive fixed compensation, while annual cash bonuses and equity-based awards encourage long-term consideration rather than short-term risk taking.

The Compensation Committee has reviewed the Compensation Discussion and Analysis presented herein under Compensation Plans with the management of the Company. Based on that review and discussion, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in the Form 10-K and Proxy Statement of the Company.

The Members of the Compensation Committee

Michael Weiser, M.D., Ph.D. (Chairman)
Mark H. Rachesky, M.D.

Audit Committee Report

The Audit Committee operates under a written charter adopted by the Board of Directors. The Audit Committee has reviewed the relevant standards of the Sarbanes-Oxley Act of 2002, the rules of the SEC, and the corporate governance listing standards of the Nasdaq regarding committee policies. The committee intends to further amend its charter, if necessary, as the applicable rules and standards evolve to reflect any additional requirements or changes. The updated Audit Committee charter can be found on our website at www.emisphere.com. The contents of our website are not incorporated herein by reference and the website address provided in this Proxy Statement is intended to be an inactive textual reference only.

The Audit Committee is currently comprised of John D. Harkey, Jr., (chairman), Timothy G. Rothwell, who was appointed to the Committee on January 6, 2010, and Michael Weiser, M.D. All of the members of the Audit Committee are independent within the meaning of Rule 4200 of the Nasdaq. The Board of Directors has determined that John D. Harkey, Jr. is an Audit Committee financial expert, within the meaning of Item 401(h) of Regulation S-K.

On January 6, 2010, the Company dismissed PricewaterhouseCoopers LLP (PwC) as the Company s independent registered public accountants. This action was approved on January 6, 2010 by the Audit Committee of the Board of Directors of the Company. PwC s audit reports on the Company s consolidated financial statements as of and for the years ended December 31, 2008 and 2007 did not contain an adverse opinion or a disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope or accounting principles, except that for each of the years ended

December 31, 2008 and 2007 PwC s reports contained an explanatory paragraph expressing substantial doubt about the Company s ability to continue as a going concern. During the Company s two most recent fiscal years ended December 31, 2007 and 2008, in subsequent interim periods through January 6, 2010, there were no disagreements with PwC on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of PwC, would have caused PwC to make reference to the matter in their reports, and there were no reportable events (as defined in Item 304(a)(1)(v) of Regulation S-K).

Table of Contents

On January 6, 2010, with the approval of the Audit Committee of the Company, the Company engaged McGladrey & Pullen, LLP (M&P) to act as its independent registered public accounting firm. During the years ended December 2007, and 2008, respectively, in the subsequent interim periods through January 5, 2010, neither the Company or anyone acting on its behalf had consulted with M&P on any of the matters or events set forth in Item 304(a)(2) of Regulation S-K.

Management has primary responsibility for the Company s financial statements and the overall reporting process, including the Company s system of internal control over financial reporting. M&P, the Company s independent registered public accountants, audit the annual financial statements prepared by management, express an opinion as to whether those financial statements fairly present the consolidated financial position, results of operations and cash flows of the Company and its subsidiaries in conformity with accounting principles generally accepted in the United States, and report on internal control over financial reporting. M&P reports to the Audit Committee as members of the Board of Directors and as representatives of the Company s stockholders.

The Audit Committee meets with management periodically to consider the adequacy of the Company s internal control over financial reporting and the objectivity of its financial reporting. The Audit Committee discusses these matters with the appropriate Company financial personnel. In addition, the Audit Committee has discussions with management concerning the process used to support certifications by the Company s Chief Executive Officer and Chief Financial Officer that are required by the SEC and the Sarbanes-Oxley Act to accompany the Company s periodic filings with the SEC.

On an as needed basis, the Audit Committee meets privately with M&P. The Audit Committee also appoints the independent registered public accounting firm, approves in advance their engagements to perform audit and any non-audit services and the fee for such services, and periodically reviews their performance and independence from management. In addition, when appropriate, the Audit Committee discusses with M&P plans for the audit partner rotation required by the Sarbanes-Oxley Act.

Pursuant to its charter, the Audit Committee assists the board in, among other things, monitoring and reviewing (i) our financial statements, (ii) our compliance with legal and regulatory requirements and (iii) the independence, performance and oversight of our independent registered public accounting firm. Under the Audit Committee charter, the Audit Committee is required to make regular reports to the board.

During the 2009 Fiscal Year, the Audit Committee of the Board of Directors reviewed and assessed:

- the quality and integrity of the annual audited financial statements with management, including issues relating to accounting and auditing principles and practices, as well as the adequacy of internal controls, and compliance with regulatory and legal requirements;

- the qualifications and independence of the independent registered public accounting firm; and

- management s, as well as the independent auditor s, analysis regarding financial reporting issues and judgments made in connection with the preparation of our financial statements, including those prepared quarterly and annually, prior to filing our quarterly reports on Form 10-Q and annual report on Form 10-K.

The Audit Committee has reviewed the audited financial statements and has discussed them with both management and M&P, the independent registered public accounting firm. The Audit Committee has discussed with the independent auditors matters required to be discussed by the applicable Auditing Standards as periodically amended (including significant accounting policies, alternative accounting treatments and estimates, judgments and uncertainties). In addition, the independent auditors provided to the Audit Committee the written disclosures required

by the applicable requirements of the Public Company Accounting Oversight Board regarding the independent auditors communications with the Audit Committee concerning independence, and the Audit Committee and the independent auditors have discussed the auditors independence from the Company and its management, including the matters in those written disclosures. The Audit Committee also received reports from M&P regarding all critical accounting policies and practices used by the Company, any alternative treatments of financial information used, generally accepted accounting principles that have

Table of Contents

been discussed with management, ramifications of the use of alternative treatments and the treatment preferred by M&P and other material written communications between M&P and management, including management letters and schedules of adjusted differences.

In making its decision to select M&P as Emisphere s independent registered public accounting firm for 2010, the Audit Committee considers whether the non-audit services provided by M&P are compatible with maintaining the independence of M&P.

Based upon the review and discussions referenced above, the Audit Committee, as comprised at the time of the review and with the assistance of the Company s Chief Financial Officer, recommended to the Board of Directors that the audited financial statements be included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2009 and be filed with the SEC.

The Members of the Audit Committee

John D. Harkey, Jr. (Chairman)
Timothy G. Rothwell
Michael Weiser, M.D.

Compensation of Non-Employee Directors

A director who is a full-time employee of the Company receives no additional compensation for services provided as a director. It is the Company s policy to provide competitive compensation and benefits necessary to attract and retain high quality non-employee directors and to encourage ownership of Company stock to further align their interests with those of stockholders. The following represents the compensation of the non-employee members of the Board of Directors:

Prior to June 24, 2009, each non-employee director received, on the date of each regular annual stockholder s meeting, a stock option to purchase 7,000 shares of our Common Stock under the 2007 Stock Award and Incentive Plan. The stock options vest on the six month anniversary of the grant date provided the director continuously serves as a director from the grant date through such vesting date. Notwithstanding the foregoing, any director who holds any stock options granted before April 1, 2004 which remain unvested was ineligible to receive the annual 7,000-share stock option grant described in this paragraph unless and until all such prior options had vested. Stock options granted in 2009 have a stated expiration date of ten years after the date of grant, and are subject to accelerated vesting upon a change in control of Emisphere. If the holder of an option ceases to serve as a director, all previously granted options may be exercised to the extent vested within six months after termination of directorship (one year if the termination is by reason of death), except that, after April 1, 2004 (unless otherwise provided in an option agreement), if a director becomes an emeritus director of Emisphere immediately following his Board service, the vested options may be exercised for six months after termination of service as an emeritus director. All unvested options expire upon termination of Board service.

On May 15, 2009, in recognition of the roles and responsibilities of the Board of Directors and current market data, the non-employees members of the Board of Directors compensation was revised to include a special one-time grant of 50,000 options to purchase shares of Common Stock granted on May 15, 2009, an annual retainer of $35,000, payable quarterly in cash, and an annual stock option grant of 40,000 options to purchase shares of Common Stock. The annual stock option grants are granted each year on the date of the annual meeting of stockholders of the Company. The director must be an eligible director on the dates the retainers are paid and the stock options are granted. The options subject to the special one-time stock option grant and annual stock option grant would vest over three years in equal amounts on each anniversary of the grant date

provided the director continuously serves as a director from the grant date through such vesting date, subject to accelerated vesting upon a change in control of Emisphere. Such options, once vested, remain exercisable through the period of the option term.

All newly appointed directors shall receive an initial stock option grant on the date of appointment of 50,000 options to purchase shares of Common Stock. The options subject to such initial stock option grant vest over three years in equal amounts on each anniversary of the grant date provided the director

Table of Contents

continuously serves as a director from the grant date through such vesting date, subject to accelerated vesting upon a change in control of Emisphere. Such options, once vested, remain exercisable through the period of the option term.

On May 15, 2009, Messrs. Moch and Berger, who comprised the Special Committee of the Board of Directors, each received a one-time special stock option grant of 25,000 shares of Common Stock and a one-time fee of $10,000. Also on May 15, 2009, Messrs. Weiser, Harkey and Rachesky received a one-time special stock option grant of 25,000 shares of Common Stock and a one-time fee of $10,000 in recognition for their length of service on the Board of Directors. The options subject to these one-time stock option grants vest over three years in equal amounts on each anniversary of the grant date provided the director continuously serves as a director from the grant date through such vesting date, subject to accelerated vesting upon a change in control of Emisphere. Such options, once vested, remain exercisable through the period of the option term.

Additional committee and chairperson fees are paid as follows:

$10,000 audit committee chairperson fee;

$2,500 audit committee member fee;

$5,000 compensation committee chairperson fee;

$1,000 compensation committee member fee;

$2,500 governance and nominating committee chairperson fee; and

$500 governance and nominating committee member fee.

The director must be an eligible director on the dates such fees are paid.

Director Compensation Table 2009

The table below represents the compensation paid to our non-employee directors during the year ended December 31, 2009:

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)(1)	Option Awards ($)(1)	All Other Compensation ($)	Total ($)
Franklin M. Berger(2)	23,918				23,918
Stephen K. Carter, M.D.(3)	5,000				5,000
Kenneth I. Moch(4)	39,980				39,980
John D. Harkey, Jr.	31,365		16,941		48,306
Mark H. Rachesky, M.D.	31,519		19,756		51,275
Timothy G. Rothwell			1,466		1,466
Michael Weiser, M.D.	39,250		16,941		56,191

(1)

The value listed in the above table represents the fair value of the options recognized as expense under FASB ASC Topic 718 during 2009, including unvested options granted before 2009 and those granted in 2009. Fair value is calculated as of the grant date using a Black-Scholes-Merton (Black-Scholes) option-pricing model. The determination of the fair value of share-based payment awards made on the date of grant is affected by our stock price as well as assumptions regarding a number of complex and subjective variables. Our assumptions in determining fair value are described in note 12 to our audited financial statements for the year ended December 31, 2009, included in our Annual Report on Form 10-K.

(2) Mr. Berger resigned from the Board of Directors effective October 23, 2009.

(3) Dr. Carter resigned from the Board of Directors effective April 30, 2009.

(4) Mr. Moch resigned from the Board of Directors effective November 10, 2009.

Table of Contents

The following table summarizes the aggregate number of option awards and stock awards held by each non-employee director at December 31, 2009.

	Option Awards					Stock Awards	
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Unearned Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date	Number of Shares of Units of Stock That Have not Vested (#)	Market Value of Shares or Units of Stock That Have not Vested ($)
John D. Harkey, Jr.	7,000			8.97	5/26/2016		
	7,000			3.76	4/20/2017		
	7,000			3.79	8/8/2018		
		75,000		0.93	5/15/2019		
Mark H. Rachesky, M.D.	7,000			3.76	4/20/2017		
	7,000			3.79	8/8/2018		
		75,000		0.93	5/15/2019		
Michael Weiser, M.D.	7,000			8.97	5/26/2016		
	7,000			3.76	4/20/2017		
	7,000			3.79	8/8/2018		
		75,000		0.93	5/15/2019		
Timothy G. Rothwell		50,000		0.70	11/5/2019		

ITEM 12. *SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS*

Securities Available For Future Issuance Under Equity Plans

The following table provides information as of December 31, 2009 about the Common Stock that may be issued upon the exercise of options granted to employees, consultants or members of our Board of Directors under our existing equity compensation plans, including the 1991 Stock Option Plan, 1995 Stock Option Plan, 2000 Stock Option Plan, the 2002 Broad Based Plan, the 2007 Stock Award and Incentive Plan (collectively the Plans) the Stock Incentive Plan for Outside Directors and the Directors Deferred Compensation Plan:

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options	(b) Weighted Average Exercise Price of Outstanding Options	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity Compensation Plans Approved by Security Holders			
The Plans	2,734,736	$ 6.29	2,055,977
Stock Incentive Plan for Outside Directors	121,000	15.59	
Directors Deferred Compensation Plan			
Equity Compensation Plans not approved by Security Holders(1)	10,000	3.64	
Total	2,865,736	$ 6.29	2,055, 977

(1) Our Board of Directors has granted options which are currently outstanding for a former consultant. The Board of Directors determines the number and terms of each grant (option exercise price, vesting and expiration date). These grants were made on 7/12/2002 and 7/14/2003.

Table of Contents

Common Stock Ownership by Directors and Executive Officers and Principal Holders

Directors, Executive Officers and Principal Holder of Common Stock

The following table sets forth certain information, as of March 1, 2010, regarding the beneficial ownership of the Common Stock by (i) each director, including the Director Nominees; (ii) each Executive Officer; (iii) all of our directors and Executive Officers as a group; and (iv) information regarding beneficial owners of more than five (5%) percent of the outstanding shares of Common Stock as of March 1, 2010. The number of shares beneficially owned by each director or Executive Officer is determined under the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under these rules, beneficial ownership includes any shares as to which the individual has the sole or shared voting power (which includes power to vote, or direct the voting of, such security) or investment power (which includes power to dispose of, or direct the disposition of, such security). In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of Common Stock subject to options, warrants or convertible notes held by that person that are currently exercisable or convertible into Common Stock or will become exercisable or convertible into Common Stock within 60 days after March 1, 2010 are deemed outstanding, while such shares are not deemed outstanding for purposes of computing percentage ownership of any other person. Unless otherwise indicated, all persons named as beneficial owners of Common Stock have sole voting power and sole investment power with respect to the shares indicated as beneficially owned:

Name and Address(a)	Common Shares Beneficially Owned (b)	Common Shares Underlying Options	Percent Of Class
Michael V. Novinski	1,340,000	1,300,000	3.1%
Michael R. Garone	35,000	35,000	*
Gary Riley, DVM, Ph.D.	75,500	55,000	*
Nicholas Hart	20,000	20,000	*
Mark H. Rachesky, M.D.	21,730,242(c)	11,044,545(d)	40.9%
Timothy Rothwell			*
Michael Weiser, M.D.	24,775	21,000	*
John D. Harkey, Jr.	24,775	21,000	*
All directors and executive officers as a group	23,250,292	12,496,545	44.4%

* Less than 1%

(a) Unless otherwise specified, the address of each beneficial owner is c/o Emisphere Technologies, Inc., 240 Cedar Knolls Road, Suite 200, Cedar Knolls, New Jersey 07927.

(b) The number of shares set forth for each Director and Executive Officer consists of direct and indirect ownership of shares, including stock options, deferred common share units, restricted stock and, in the case of Dr. Rachesky, shares of Common Stock that can be obtained upon conversion of convertible notes and exercise of warrants, as further described in footnotes (c) and (d) below.

(c) This number consists of:

10,685,697 shares of Common Stock held for the accounts of the following entities:

4,331,164 shares held for the account of MHR Capital Partners Master Account LP (Master Account)

589,045 shares held for the account of MHR Capital Partners (100) LP (Capital Partners (100))

1,636,741 shares held for the account of MHR Institutional Partners II LP (Institutional Partners II)

Table of Contents

4,123,449 shares held for the account of MHR Institutional Partners IIA LP (Institutional Partners IIA)

5,298 shares held directly by Mark H. Rachesky, M.D.

6,205,564 shares of Common Stock that can be obtained by the following entities upon conversion of the Convertible Notes, including 222,418 shares of Common Stock issuable to the following entities as payment for accrued but unpaid interest on the Convertible Notes since the most recent interest payment date (December 31, 2009) through the date that is 60 days after March 1, 2010:

1,249,599 shares held by Master Account

170,885 shares held by Capital Partners (100)

1,359,666 shares held by Institutional Partners II

3,425,414 shares held by Institutional Partners IIA

4,824,981 shares of Common Stock that can be obtained by the following entities upon exercise of warrants:

1,585,569 shares held by Master Account

217,782 shares held by Capital Partners (100)

858,587 shares held by Institutional Partners II

2,163,043 shares held by Institutional Partners IIA

7,000 shares of Common Stock that can be obtained by Dr. Rachesky upon the exercise of currently vested stock options at a price of $3.76 per share

7,000 shares of Common Stock that can be obtained by Dr. Rachesky upon the exercise of currently vested stock options at a price of $3.79 per share

MHR Advisors LLC (Advisors) is the general partner of each of Master Account and Capital Partners (100), and, in such capacity, may be deemed to beneficially own the shares of Common Stock held for the accounts of each of Master Account and Capital Partners (100). MHR Institutional Advisors II LLC (Institutional Advisors II) is the general partner of each of Institutional Partners II and Institutional Partners IIA, and, in such capacity, may be deemed to beneficially own the shares of Common Stock held for the accounts of each of Institutional Partners II and Institutional Partners IIA. MHR Fund Management LLC (Fund Management) is a Delaware limited liability company that is an affiliate of and has an investment management agreement with Master Account, Capital Partners (100), Institutional Partners II and Institutional Partners IIA, and other affiliated entities, pursuant to which it has the power to vote or direct the vote and to dispose or to direct the disposition of the shares of Common Stock held by such entities and, accordingly, Fund Management may be deemed to beneficially own the shares of Common Stock held for the account of each of Master Account, Capital Partners (100), Institutional Partners II and Institutional Partners IIA. Dr. Rachesky is the managing member of Advisors, Institutional Advisors II, and Fund Management, and, in such capacity, may be deemed to beneficially own the shares of Common Stock held for the accounts of each of Master Account, Capital Partners (100), Institutional Partners II and Institutional Partners IIA.

(d) This number consists of (i) 6,205,564 shares of Common Stock that can be obtained by Master Account, Capital Partners (100), Institutional Partners II and Institutional Partners IIA upon conversion of the Convertible Notes, (ii) 4,824,981 shares of Common Stock that can be obtained by Master Account, Capital Partners (100), Institutional Partners II and Institutional Partners IIA upon exercise of warrants, (iii) 14,000 shares of Common Stock that can be obtained by Dr. Rachesky upon the exercise of currently vested stock options,.

Table of Contents

ITEM 13. *CERTAIN RELATIONSHIPS, RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE*

Related Party Transaction Approval Policy

In February 2007, our Board of Directors adopted a written related party transaction approval policy, which sets forth our Company s polices and procedures for the review, approval or ratification of any transaction required to be reported in our filings with the Securities and Exchange Commission. The Company s policy with regard to related party transactions is that all material transactions non-compensation related are to be reviewed by the Audit Committee for any possible conflicts of interest. The Compensation Committee will review all material transactions that are related to compensation. All related party transactions approved by either the Audit Committee or Compensation Committee shall be disclosed to the Board of Directors at the next meeting.

Employment Agreement with Michael V. Novinski, President and Chief Executive Officer

On April 6, 2007, the Company entered into an Employment Agreement with Michael V. Novinski, setting forth the terms and conditions of his employment as President and Chief Executive of the Company. The Agreement is for a term of three years, renewable annually thereafter. Under the Agreement, Mr. Novinski will receive a base salary of $550,000 per year, less applicable local, state and federal withholding taxes. Mr. Novinski was also granted options to purchase 1,000,000 shares of the Company s Common Stock; the exercise price for 500,000 of the shares was $3.19, the fair market value of the Common Stock on the date of grant, and the exercise price for the remaining 500,000 shares is equal to two times the fair market value of the Common Stock on the date of grant. At December 31, 2009, options to purchase 750,000 shares were vested; another twenty-five percent (250,000 shares) will vest on the third anniversary of the date of grant. In addition, he will be eligible for an annual cash bonus up to $550,000 (based on a full calendar year). In view of the Company s current liquidity constraints, the Committee determined, and Mr. Novinski agreed, that he would be paid a $150,000 cash bonus pursuant to his employment agreement with the Corporation in respect of the Company s 2009 fiscal year; additionally Mr. Novinski will receive a one time grant of options to purchase 300,000 shares in connection with his compensation for 2009. However, given of the Company s current liquidity constraints, the Compensation Committee, with the consent of Mr. Novinski, agreed to defer the payment of the cash bonus until such time as the Company s liquidity has stabilized and it has sufficient funding to pay it. The Committee also determined that Mr. Novinski would be paid a special one-time cash bonus of $150,000 in connection with the successful completion of a financing during 2009. However, in light of the Company s current liquidity constraints, Mr. Novinski and the Company also agreed to defer the payment of the $150,000 special cash bonus until such time as the Company s liquidity has stabilized and it has sufficient funding to pay it. Mr. Novinski s Employment Contract allows for severance payments to Mr. Novinski in the event of certain terminations which call for payment of base salary plus bonus (depending on the circumstances) plus the continuity of health and life insurance benefits for specified time periods. In addition, certain unvested options would vest immediately upon such termination. The events which would trigger such payment by the Company are defined in the agreement.

In addition, Mr. Novinski s Employment Agreement provides that he will be provided (a) four weeks paid vacation, a car allowance of $18,000 per year (up to $1,500 per month), and reimbursement of up to $15,000 of life insurance payments per year. If Emisphere terminates Mr. Novinski without Cause or if Mr. Novinski terminates his employment for Good Reason (each capitalized term as defined in the Employment Agreement), subject to certain conditions, Mr. Novinski will be entitled to (a) payment of salary through the termination date, (b) payment of pro-rata bonus based on the target bonus for the year of termination, (c) payment equal to nine months of salary, (d) acceleration of the next two scheduled vesting dates of the above option grants, (all options will be accelerated in the event of a Change in Control as defined in the Employment Agreement), (e) continued participation in Emisphere s health benefit plan for up to 12 months, and (f) payment of benefits or other amounts earned, accrued, or owning under Emisphere s plans or programs.

If Emisphere terminates Mr. Novinski s employment due to Death or Long-Term Disability (each capitalized term as defined in the Employment Agreement), subject to certain conditions, Mr. Novinski will be

Table of Contents

entitled to (a) payment of salary through the termination date, (b) payment of pro-rata bonus based on the target bonus for the year of termination, (c) acceleration of the scheduled vesting dates of the above option grants, (d) continued participation in Emisphere s health benefit plan for up to 12 months, and (e) payment of benefits or other amounts earned, accrued or owning under Emisphere s plans or programs.

Agreement with M. Gary I. Riley, Vice President on Non-Clinical Development and Applied Biology

The Company has an agreement with M. Gary I. Riley by which, in the event that there is a Change in Control during Mr. Riley s first twenty-four months of employment at Emisphere resulting in termination of employment during such twenty-four month period, a severance amount, equivalent to one year s base salary (excluding bonus and relocation assistance), will be provided to the executive. In the event there is a Change in Control after Mr. Riley s first twenty-four months of employment, a severance amount, equivalent to six month s base salary, will be provided to him.

In addition, in the event that there is a Change in Control during Mr. Riley s employment at Emisphere resulting in termination of employment, he shall receive, in addition to the options already vested and subject to approval by the Board of Directors, immediate vesting of all remaining options as set forth in the Plan.

Agreement with Nicholas J. Hart, Vice President, Strategy and Development

The Company has an agreement with Nicholas J. Hart by which, in the event that there is a Change in Control during Mr. Hart s term of employment at Emisphere resulting in termination of employment, a severance amount, equivalent to six month s base salary (excluding bonus) will be provided to Mr. Hart.

In addition, in the event that there is a Change in Control during his employment at Emisphere resulting in termination of employment, he shall receive, in addition to the options already vested and subject to approval by the Board of Directors, immediate vesting of all remaining options as set forth in the Plan.

Information about Board of Directors

Our business is overseen by the Board of Directors. It is the duty of the Board of Directors to oversee the Chief Executive Officer and other senior management in the competent and ethical operation of the Company on a day-to-day basis and to assure that the long-term interests of the stockholders are being served. To satisfy this duty, our directors take a proactive, focused approach to their position, and set standards to ensure that the Company is committed to business success through maintenance of the highest standards of responsibility and ethics. The Board of Directors is kept advised of our business through regular verbal or written reports, Board of Directors meetings, and analysis and discussions with the Chief Executive Officer and other officers of the Company.

Members of the Board of Directors bring to us a wide range of experience, knowledge and judgment. Our governance organization is designed to be a working structure for principled actions, effective decision-making and appropriate monitoring of both compliance and performance.

The Board of Directors has affirmatively determined that Dr. Stephen K. Carter, Mr. John D. Harkey, Jr., Dr. Mark H. Rachesky, Mr. Timothy G. Rothwell, Dr. Michael Weiser, Mr. Kenneth I. Moch, and Mr. Franklin M. Berger are independent directors within the meaning of Rule 4200 of the Marketplace Rules of the Nasdaq Stock Market, Inc. (Nasdaq). The independent directors meet in separate sessions at the conclusion of board meetings and at other times as deemed necessary by the independent directors, in the absence of Mr. Michael V. Novinski, the sole non-independent director. Dr. Carter resigned from the Board of Directors effective April 30, 2009. Mr. Berger resigned the Board of Directors effective October 23, 2009. Mr. Moch resigned from the Board of Directors effective

November10, 2009. None of the members of the Board of Directors currently serve as Chairman; leadership of the Board is provided through consensus of the Directors. Matters are explored in Committee and brought to the full Board for discussion or action.

Table of Contents

Committees of the Board of Directors

The Board of Directors has established an Audit Committee, a Compensation Committee and a Governance and Nominating Committee. Each of the committees of the Board of Directors acts pursuant to a separate written charter adopted by the Board of Directors. On March 31, 2009, the Board of Directors also established a Special Committee consisting of Mr. Moch and Mr. Berger. The Special Committee was disbanded on September 22, 2009.

The Audit Committee is currently comprised of Mr. Harkey (chairman), Mr. Rothwell and Dr. Weiser. Mr. Moch served on the Audit Committee between December 23, 2008 and November 10, 2009. Mr. Rothwell became a member of the Audit Committee on January 6, 2010. All members of the Audit Committee are independent within the meaning of Rule 4200 of the Nasdaq. The Board of Directors has determined that Mr. Harkey is an Audit Committee financial expert, within the meaning of Item 401(h) of Regulation S-K. The Audit Committee s responsibilities and duties are summarized in the report of the Audit Committee and in the Audit Committee charter which is available on our website (www.emisphere.com).

The Compensation Committee is currently comprised of Dr. Weiser (chairman) and Dr. Rachesky. Dr. Carter served on the Compensation Committee until February 12, 2009. Mr. Moch served on the Compensation Committee between February 12, 2009 and November 10, 2009. All members of the Compensation Committee are independent within the meaning of Rule 4200 of the Nasdaq, non-employee directors within the meaning of the rules of the Securities and Exchange Commission and outside directors within the meaning set forth under Internal Revenue Code Section 162(m). The Compensation Committee s responsibilities and duties are summarized in the report of the Compensation Committee and in the Compensation Committee charter also available on our website.

The Governance and Nominating Committee is currently comprised of Dr. Weiser (chairman) and Dr. Rachesky. Dr. Carter served on the Governance and Nominating Committee until February 12, 2009. Mr. Moch served on the Governance and Nominating Committee between February 12, 2009 and November 10, 2009. All members of the Governance and Nominating Committee are independent within the meaning of Rule 4200 of the Nasdaq. The Governance and Nominating Committee s responsibilities and duties are set forth in the Governance and Nominating Committee charter on our website. Among other things, the Governance and Nominating Committee is responsible for recommending to the board the nominees for election to our Board of Directors and the identification and recommendation of candidates to fill vacancies occurring between annual stockholder meetings.

The table below provides membership information for each committee of the Board of Directors during 2009:

Name	Board	Audit	Compensation	Governance and Nominating
Kenneth I. Moch(1)	X	X	X	X
Michael V. Novinski(2)	X			
Mark H. Rachesky, M.D.(2)	X		X	X
Michael Weiser, M.D.(2)(4)	X	X	X*	X*
Franklin M. Berger(3)(5)	X			
Stephen K. Carter, M.D.(3)(6)	X		X	X
John D. Harkey, Jr.(3)	X	X*		
Timothy G. Rothwell(3)	X	X		

* Chair

(1) Class II directors: Term as director was expected to expire in 2010. However, Mr. Moch resigned from the Board of Directors effective November 10, 2009.

(2) Class III directors: Term as director is expected to expire in 2011.

(3) Class I directors: Term as director is expected to expire in 2012.

Table of Contents

(4) On February 12, 2009, Dr. Weiser was appointed to the Compensation and Governance and Nominating committees and assumed the role of chairman of both committees.

(5) Mr. Berger resigned from the Board of Directors effective October 23, 2009.

(6) Dr. Carter resigned from the Board of Directors effective April 30, 2009.

Board Involvement in Risk Oversight

Our Board of Directors is responsible for oversight of the Company s risk assessment and management process. We believe risk can arise in every decision and action taken by the Company, whether strategic or operational. Our comprehensive approach is reflected in the reporting processes by which our management provides timely and fulsome information to the Board of Directors to support it s role in oversight, approval and decision-making.

The Board of Directors closely monitors the information it receives from management and provides oversight and guidance to our management team concerning the assessment and management of risk. The Board of Directors approves the Company s high level goals, strategies and policies to set the tone and direction for appropriate risk taking within the business.

The Board of Directors delegated to the Compensation Committee basic responsibility for oversight of management s compensation risk assessment, and that committee reports to the board on its review. Our Board of Directors also delegated tasks related to risk process oversight to our Audit Committee, which reports the results of its review process to the Board of Directors. The Audit Committee s process includes a review, at least annually, of our internal audit process, including the organizational structure, as well as the scope and methodology of the internal audit process. The Governance and Nominating Committee oversees risks related to our corporate governance, including director performance, director succession, director education and governance documents.

In addition to the reports from the Board committees, our board periodically discusses risk oversight.

Meetings Attendance

During the 2009 fiscal year, our Board of Directors held 11 meetings. With the exception of Dr. Carter, who did not attend meetings during 2009, each director attended 100 percent of the aggregate number of Board of Directors meetings and committees of which he was a member that were held during the period of his service as a director.

The Audit Committee met 5 times during the 2009 fiscal year.

The Compensation Committee met 1 time during the 2009 fiscal year.

The Governance and Nominating Committee 1 time during the 2009 fiscal year.

The Company does not have a formal policy regarding attendance by members of the Board of Directors at the Company s annual meeting of stockholders, although it does encourage attendance by the directors.

ITEM 14. ***PRINCIPAL ACCOUNTANT FEES AND SERVICES***

The following table presents fees for professional audit services rendered by M&P and PwC for the audit of our annual financial statements for the years ended December 31, 2009 and December 31, 2008, respectively, and fees

billed for other services rendered by M&P and/or PwC during the respective periods.

Types of Fees	**2009**	**2008**
Audit Fees(1)	$ 284,296	$ 787,000
Audit-Related Fees(2)	218,198	
Total PwC Fees	502,494	787,000
M&P(3)	150,000	

Table of Contents

(1) Audit fees for 2009 and 2008 were for professional services rendered for the audit of the Company s financial statements for the fiscal year, including attestation services required under Section 404 of the Sarbanes-Oxley Act of 2002, and reviews of the Company s quarterly financial statements included in its Form 10-Q filings.

(2) All other fees are for services related to our registration statements on Form S-3 financing transactions, and fees related to the restatement of first and second quarter SEC Form 10-Q reports during 2009.

(3) Audit fees for 2009 were for professional services rendered for the audit of the Company s financial statements for the fiscal year.

The Audit Committee has determined that the neither M&P nor PwC provided non-audit services in 2009 and that neither M&P nor PwC were impaired. All decisions regarding selection of independent registered public accounting firms and approval of accounting services and fees are made by our Audit Committee in accordance with the provisions of the Sarbanes-Oxley Act of 2002 and related SEC rules.

The Audit Committee pre-approves all audit and permissible non-audit services provided by the independent registered public accounting firm; these services may include audit services, audit related services, tax services and other services. The committee has adopted a policy for the pre-approval of services provided by the independent registered public accounting firm, where pre-approval is generally provided for up to one year and any pre-approval is detailed as to the particular service or category of services and is subject to a specific budget. For each proposed service, the independent auditor is required to provide detailed communication at the time of approval. The committee may delegate pre-approval authority to one or more of its members, who must report same to the Committee members at the next meeting. The Audit Committee, after discussion with M&P, agreed that any additional audit or tax service fees could be paid by us, subject to the pre-approval of the Audit Committee chairman.

The Audit Committee intends to select M&P to serve as independent registered public accounting firm for the fiscal year ending December 31, 2010.

PART IV

ITEM 15. *EXHIBITS AND FINANCIAL STATEMENT SCHEDULES*

(a) *(1) Financial Statements*

A list of the financial statements filed as a part of this report appears on page 58.

(2) *Financial Statement Schedules*

Schedules have been omitted because the information required is not applicable or is shown in the Financial Statements or the corresponding Notes to the Financial Statements.

(3) *Exhibits*

A list of the exhibits filed as a part of this report appears on pages 115 thru 119.

(b) See Exhibits listed under the heading Exhibit Index set forth on page 115.

(c) Schedules have been omitted because the information required is not applicable or is shown in the Financial Statements or the corresponding Notes to the Financial Statements.

Table of Contents

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.

Emisphere Technologies, Inc.

By: /s/ Michael V. Novinski

Michael V. Novinski
President and Chief Executive Officer

Date: March 25, 2010

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.

Name and Signature	Title	Date
/s/ Michael V. Novinski Michael V. Novinski	President and Chief Executive Officer (principal executive officer)	March 25, 2010
/s/ John D. Harkey, Jr. John D. Harkey, Jr.	Director	March 25, 2010
/s/ Mark H. Rachesky, M.D. Mark H. Rachesky, M.D.	Director	March 25, 2010
/s/ Timothy Rothwell Timothy Rothwell	Director	March 25, 2010
/s/ Michael Weiser, M.D. Michael Weiser, M.D.	Director	March 25, 2010
/s/ Michael R. Garone Michael R. Garone	Chief Financial Officer (principal financial and accounting officer)	March 25, 2010

Table of Contents

EXHIBIT INDEX

Exhibit		Incorporated by Reference (1)	
3.1	Amended and restated Certificate of Incorporation of Emisphere Technologies, Inc., as amended by the Certificate of Amendment of Amended and Restated Certificate of Incorporation of Emisphere Technologies, Inc., dated April 20, 2007	R	
3.2(a)	By-Laws of Emisphere Technologies, Inc., as amended December 7, 1998 and September 26, 2005	A, L	
3.2(b)	Amendment to the By-Laws, as amended, of Emisphere Technologies, Inc.	V	
4.1	Restated Rights Agreement dated as of April 7, 2006 between Emisphere Technologies, Inc. and Mellon Investor Services, LLC	P	
10.1(a)	1991 Stock Option Plan, as amended	F	(2)
10.1(b)	Amendment to the 1991 Stock Option Plan	Q	(2)
10.2(a)	Stock Incentive Plan for Outside Directors, as amended	C	(2)
10.2(b)	Amendment to the Amended and Restated Stock Incentive Plan for Outside Directors	Q	(2)
10.3(a)	Directors Deferred Compensation Stock Plan	E	(2)
10.3(b)	Amendment to the Directors Deferred Compensation Stock Plan	Q	(2)
10.4(a)	Employee Stock Purchase Plan, as amended	B	(2)
10.4(b)	Amendment to Emisphere Technologies, Inc. Employee Stock Purchase Plan	H	(2)
10.5	Non-Qualified Employee Stock Purchase Plan	B	(2)
10.6(a)	1995 Non-Qualified Stock Option Plan, as amended	B	(2)
10.6(b)	Amendment to the 1995 Non-Qualified Stock Option Plan	Q	(2)
10.7(a)	Emisphere Technologies, Inc. 2000 Stock Option Plan	G	(2)
10.7(b)	Amendment to Emisphere Technologies, Inc. 2000 Stock Option Plan	Q	(2)
10.8(a)	Emisphere Technologies, Inc. 2002 Broadbased Stock Option Plan	H	(2)
10.8(b)	Amendment to Emisphere Technologies, Inc. 2002 Broadbased Stock Option Plan	Q	(2)
10.9	Emisphere Technologies, Inc. 2007 Stock Award and Incentive Plan	R	(2)
10.10	Amended and Restated Employment Agreement, dated April 28, 2005, between Michael M. Goldberg and Emisphere Technologies, Inc.	N	(2)
10.11	Stock Option Agreements, dated January 1, 1991, February 15, 1991, December 1, 1991, August 1, 1992 and October 6, 1995 between Michael M. Goldberg and Emisphere Technologies, Inc.	B	(2)(3)
10.12	Stock Option Agreement, dated July 31, 2000, between Michael M. Goldberg and Emisphere Technologies, Inc.	G	(2)
10.13	Employment Agreement dated April 6, 2007 between Michael V. Novinski and Emisphere Technologies, Inc.	S	(2)
10.14	Nonqualified Stock Option Agreement dated April 6, 2007 between Michael V. Novinski and Emisphere Technologies, Inc.	R	(2)
10.15	Incentive Stock Option Agreement dated February 12, 2007 between Lewis H. Bender and Emisphere Technologies, Inc.	R	(2)
10.16	Form of Nonqualified Stock Option Agreement	R	(2)
10.17	Form of Incentive Stock Option Agreement	R	(2)
10.18	Form of Restricted Stock Option Agreement	R	(2)

10.19	Agreement and Release by and between Shepard Goldberg and Emisphere Technologies, Inc., dated June 25, 2007	U	(2)
10.20	Agreement and Release by and between Steve Dinh and Emisphere Technologies, Inc.	X	(2)

Table of Contents

Exhibit		Incorporated by Reference (1)	
10.21	Agreement and Release by and between Lewis Henry Bender and Emisphere Technologies, Inc.	X	(2)
10.22(a)	Amendment to Lease Agreement, dated as of March 31, 2000, between Emisphere Technologies, Inc. and Eastview Holdings, LLC	G	
10.22(b)	Amendment to Lease Agreement, dated as of March 31, 2000, between Emisphere Technologies, Inc. and Eastview Holdings, LLC	G	
10.22(c)	Amendment to Lease Agreement, dated as of September 23, 2003, between Emisphere Technologies, Inc. and Eastview Holdings, LLC	I	
10.22(d)	Thirteenth Amendment to Lease	T	
10.22(e)	Fourteenth Amendment to Lease	X	
10.23	Lease Agreement, dated as of November 1, 2007 between The Realty Associates Fund VI, L.P. and Emisphere Technologies, Inc.	W	
10.24	Research Collaboration and Option Agreement dated as of December 3, 1997 between Emisphere Technologies, Inc. and Novartis Pharma AG	D	(3)
10.25	Agreement, dated September 23, 2003, between Emisphere Technologies, Inc. and Progenics Pharmaceuticals, Inc	I	
10.26	License Agreement dated as of September 23, 2004 between Emisphere Technologies, Inc. and Novartis Pharma AG, as amended on November 4, 2005	J	(3)
10.27(a)	Research Collaboration Option and License Agreement dated December 1, 2004 by and between Emisphere Technologies, Inc. and Novartis Pharma AG	J	(3)
10.27(b)	Convertible Promissory Note due December 1, 2009 issued to Novartis Pharma AG	J	(3)
10.27(c)	Registration Rights Agreement dated as of December 1, 2004 between Emisphere Technologies, Inc. and Novartis Pharma AG	J	
10.28	Development and License Agreement between Genta Incorporated and Emisphere Technologies, Inc., dated March 22, 2006	O	
10.29(a)	Senior Secured Loan Agreement between Emisphere Technologies, Inc. and MHR, dated September 26, 2005, as amended on November 11, 2005	L	
10.29(b)	Investment and Exchange Agreement between Emisphere Technologies, Inc. and MHR, dated September 26, 2005	L	
10.29(c)	Pledge and Security Agreement between Emisphere Technologies, Inc. and MHR, dated September 26, 2005	L	
10.29(d)	Registration Rights Agreement between Emisphere Technologies, Inc. and MHR, dated September 26, 2005	L	
10.29(e)	Amendment No. 1 to the Senior Secured Term Loan Agreement, dated November 11, 2005	M	
10.29(f)	Form of 11% Senior Secured Convertible Note	L	
10.29(g)	Form of Amendment to 11% Senior Secured Convertible Note	R	
10.30(a)	Warrant dated as of March 31, 2005 between Emisphere Technologies, Inc. and NR Securities LTD	K	
10.30(b)	Warrant adjustment notice between Emisphere Technologies, Inc. and NR Securities LTD	W	
10.31(a)	Warrant dated as of March 31, 2005 between Emisphere Technologies, Inc. and Atticus European Fund LTD	K	
10.31(b)		W	

	Warrant adjustment notice between Emisphere Technologies, Inc. and Atticus European Fund, LTD	
10.32(a)	Warrant dated as of March 31, 2005 between Emisphere Technologies, Inc. and Elan International Services, Ltd.	K

Table of Contents

Exhibit		Incorporated by Reference (1)	
10.32(b)	Warrant adjustment notice between Emisphere Technologies, Inc. and Elan International Services, Ltd.	W	
10.33	Warrant dated as of September 23, 2005 between Emisphere Technologies, Inc. and MHR Capital Partners (100) LP	Q	
10.34	Warrant dated as of September 23, 2005 between Emisphere Technologies, Inc. and MHR Capital Partners (500) LP	Q	
10.35(a)	Warrant dated as of September 23, 2005 between Emisphere Technologies, Inc. and Michael Targoff	Q	
10.35(b)	Warrant adjustment notice between Emisphere Technologies, Inc. and Michael B. Targoff	W	
10.36	Warrant dated as of September 21, 2006 between Emisphere Technologies, Inc. and MHR Institutional Partners IIA LP	Q	
10.37	Warrant dated as of September 21, 2006 between Emisphere Technologies, Inc. and MHR Institutional Partners II LP	Q	
10.38	Warrant dated as of September 21, 2006 between Emisphere Technologies, Inc. and MHR Capital Partners (100) LP	Q	
10.39	Warrant dated as of September 21, 2006 between Emisphere Technologies, Inc. and MHR Capital Partners Masters Account LP	Q	
10.40	Warrant adjustment notice between Emisphere Technologies, Inc. and MHR Capital Partners (100) LP, MHR Capital Partners Master Account, LP (formerly MHR Capital Partners (500) LP), MHR Institutional Partners IIA LP, MHR Institutional Partners II LP, MHR Capital Partners (100) LP and MHR Capital Partners Master Account LP	W	
10.41	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and SF Capital Partners, Ltd.	W	
10.42	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and Fort Mason Master, L.P.	W	
10.43	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and Fort Mason Partners, L.P.	W	
10.44	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and Montaur Capital/Platinum Life Montaur Life Sciences Fund I LLC	W	
10.45	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and MHR Institutional Partners II LP	W	
10.46	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and MHR Institutional Partners IIA LP	W	
10.47	Emisphere Technologies, Inc.- Mankind Corporation Patent Purchase Agreement, dated February 8, 2008	X	
10.48	Development and License Agreement, dated as of June 21, 2008, between Emisphere Technologies, Inc. and Novo Nordisk AS.	Y	(3)
10.49	Lease Termination Agreement, date April 29,2009, between Emisphere Technologies, Inc. and BMR-LANDMARK AT EASTVIEW LLC	Z	
10.50	Form of Non-Employee Director Non-Qualified Stock Option Agreement	AA	(2)
10.51	Placement Agency Agreement dated as of August 19, 2009, Between Emisphere Technologies, Inc. and Rodman & Rensahw, LLC	BB	
10.52		BB	

	Securities Purchase Agreement dated as of August 19, 2009, between Emisphere Technologies and the Purchasers named therein	
10.53	Securities Purchase Agreement dated as of August 19, 2009, between Emisphere Technologies and MHR Fund Management, LLC	BB

Table of Contents

Exhibit		Incorporated by Reference (1)
10.54	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and BAM Opportunity Fund LP	CC
10.55	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and MOG Capital, LLC	CC
10.56	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and MHR Capital Partners Master Account LP	CC
10.57	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and MHR Capital Partners (100) LP	CC
10.58	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and MHR Institutional Partners II LP	CC
10.59	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and MHR Institutional Partners IIA LP	CC
10.60	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and Rodman & Renshaw, LLC	CC
10.61	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and Benjamin Bowen	CC
10.62	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and Noam Rubinstein	CC
10.63	Warrant adjustment notice between Emisphere Technologies, Inc. and Elan International Services, Ltd. dated October 20, 2009	CC
10.64	Warrant adjustment notice between Emisphere Technologies, Inc. and NR Securities LTD dated October 22, 2009	CC
10.65	Warrant adjustment notice between Emisphere Technologies, Inc. and Atticus European Fund, LTD dated October 22, 2009	CC
10.66	Warrant adjustment notice between Emisphere Technologies, Inc. and Michael B. Targoff dated October 22, 2009	CC
10.67	Agreement to Extend the Maturity Date of the Convertible Promissory Note Due December 1, 2009, between Emisphere Technologies and Novartis Pharma AG dated November 25, 2009	*
10.68	Agreement to Extend the Maturity Date of the Convertible Promissory Note Due December 1, 2009, between Emisphere Technologies and Novartis Pharma AG dated February 23, 2010	*
14.1	Emisphere Technologies, Inc. Code of Business Conduct and Ethics	I
16.1	Letter from PricewaterhouseCoopers LLP to the Securities Exchange Commission dated January 11, 2010	DD
23.1	Consent of Independent Registered Public Accounting Firm McGladrey & Pullen, LLP	*
23.2	Consent of Independent Registered Public Accounting Firm PwC	*
31.1	Certification Pursuant to Rule 13a-14(a) and 15d-14(a), as adopted pursuant to section 302 of the Sarbanes-Oxley Act of 2002	*
31.2	Certification Pursuant to Rule 13a-14(a) and 15d-14(a), as adopted pursuant to section 302 of the Sarbanes-Oxley Act of 2002	*
32.1	Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*

* Filed herewith

(1) If not filed herewith, filed as an exhibit to the document referred to by letter as follows:

A. Quarterly Report on Form 10-Q for the quarterly period ended January 31, 1999

Table of Contents

B. Annual Report on Form 10-K for the fiscal year ended July 31, 1995

C. Annual Report on Form 10-K for the fiscal year ended July 31, 1997

D. Quarterly Report on Form 10-Q for the quarterly period ended October 31, 1997

E. Annual Report on Form 10-K for the fiscal year ended July 31, 1998

F. Annual Report on Form 10-K for the fiscal year ended July 31, 1999

G. Annual Report on Form 10-K for the fiscal year ended July 31, 2000

H. Registration statement on Form S-8 dated and filed on November 27, 2002

I. Annual Report on Form 10-K for the year ended December 31, 2003

J. Registration on Form S-3/A dated and filed February 1, 2005

K. Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2005

L. Current Report on Form 8-K, filed September 30, 2005

M. Current Report on Form 8-K, filed November 14, 2005

N. Current Report on Form 8-K filed May 4, 2005

O. Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2006

P. Current Report on Form 8-K, filed April 10, 2006

Q. Annual Report on Form 10-K for the fiscal year ended December 31, 2006

R. Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2007

S. Current Report on Form 8-K, filed April 11, 2007

T. Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2007

U. Current Report on Form 8-K, filed June 29, 2007

V. Current Report on Form 8-K, filed September 14, 2007

W. Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2007

X. Annual Report on Form 10-K for the fiscal year ended December 31, 2007

Y. Current Report on Form 8-K, filed August 11, 2008

Z. Current Report on Form 8-K, filed May 5, 2009

AA. Current Report on Form 8-K, filed May 21, 2009

BB. Current Report on Form 8-K, filed August 20, 2009

CC. Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2009

DD. Current Report on Form 8-K, filed January 12, 2010

(2) Management contract or compensatory plan or arrangement

(3) Portions of this exhibit have been omitted based on a request for confidential treatment filed separately with the Securities and Exchange Commission.