

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

Form 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2011

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number 0-17758

EMISPHERE TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

240 Cedar Knolls Road, Suite 200

Cedar Knolls, NJ

(Address of principal executive offices)

13-3306985

(I.R.S. Employer
Identification Number)

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 No

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 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.

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

Accelerated filer

Non-accelerated filer

Smaller reporting company

(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 No

As of June 30, 2011 (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 \$33,984,496 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 1, 2012 was 60,687,478.

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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 in Part 1, 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 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 decreasing time to 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 deliver certain therapeutic molecules orally without altering their chemical form or biological activity. 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. 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, by applying the Eligen® Technology to those drugs or nutrients. Our development efforts are conducted internally or in collaboration with corporate development partners. Typically, the drugs that we target are at an advanced stage of development, or have already received regulatory approval, and are currently available on the market. Our website is www.emisphere.com. The contents of that website are not incorporated herein by reference. 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.QB to obtain quotes.

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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 changes. New senior management was hired, the Eligen® Technology was reevaluated and our corporate strategy was refocused on commercializing it 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. We continue to develop potential product candidates in-house and we demonstrated and enhanced the value of the Eligen® Technology. Further development, exploration and commercialization of the technology entail risk and operational expenses. However, we have refocused 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. The Eligen® Technology not only facilitates absorption, but it acts rapidly in the upper sections of the GI where absorption is thought to occur. With the Eligen® Technology, most of the molecules reach the general circulation in less than an hour post-dose. Rapid absorption can limit enzymatic degradation that typically affects macromolecules or can be advantageous in cases where time to onset of action is important (i.e. analgesics). Another characteristic that distinguishes Eligen® from the competition is absorption 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, Eligen® Technology carriers are rapidly absorbed, distributed, metabolized and eliminated from the body, they do not accumulate in the organs and tissues and they are considered safe at anticipated doses and dosing regimens.

Results from two clinical studies recently published by F Hoffmann-La Roche Ltd illustrate important safety characteristics of Emisphere's Eligen® Technology. These studies were performed with novel oral ibandronate formulations using Emisphere's SNAC carrier, an Eligen® Technology compound. The first study (J Drug Del Technol 2011; 21: 521-5) showed that SNAC needs to be co-formulated with ibandronate and not simply co-dosed in order to increase ibandronate bioavailability. The second study (Arzelmittelforschung 2011; 61:707-13) demonstrated that co-dosing of a SNAC/ibandronate formulation with metformin, a drug widely used in Type 2 Diabetes patients, did not influence the absorption of metformin. Together, these studies support the hypothesis that Eligen® Technology facilitates oral absorption only when co-formulated with the intended active ingredient, and that co-dosing with other ingredients should not result in accidental or incidental absorption of unintended ingredients.

Another important safety characteristic of the Eligen® Technology was recently demonstrated by the results of three clinical safety studies conducted by Novartis International AG with the former osteoporosis and osteoarthritis treatment candidate SMC021. SMC021 used Emisphere's permeation enhancer 5-CNAC, an Eligen® Technology compound, in combination with salmon calcitonin ("SCT"). These studies addressed the potential for SMC021 drug interaction with several widely used drugs and found, in each case, no evidence to indicate a safety concern for drug interaction. Scientific posters describing the results of these clinical studies were presented at the annual meeting of the American Society of Clinical Pharmacology and Therapeutics on March 17th 2012. The first study (The effect of esomeprazole on the pharmacokinetics and pharmacodynamics of SMC021 in healthy volunteers. Choi L et al.) concluded that pre-treatment with the proton pump inhibitor, esomeprazole, decreased SCT exposure by approximately 30%, without impacting the pharmacodynamic response to SCT. The second study (Pharmacokinetic interaction assessment between SMC021 and ibuprofen and between SMC021 and acetaminophen. Choi L et al.) concluded that ibuprofen and acetaminophen did not significantly alter the pharmacokinetics of SMC021 when used jointly with either of these analgesics. The third study (Pharmacokinetic interaction assessment between SMC021 and rosiglitazone. Choi L et al.) concluded that SMC021 did not inhibit the drug metabolizing enzyme CYP2C8 when SMC021 and rosiglitazone, a type II diabetes drug metabolized by CYP2C8, were administered together at expected clinical doses. Together, these studies support the hypothesis that Eligen® Technology does not pose a safety risk for drug interaction.

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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 effective 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 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 molecules.

Emisphere Today

During 2011, the Company faced formidable challenges, yet continued to focus on efforts to apply the Eligen® Technology and realize its value by developing profitable commercial applications. 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. 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 needs. Our goal is to implement our Eligen® Technology to enhance overall healthcare, including patient accessibility and compliance, while benefiting the commercial pharmaceutical/healthcare marketplace and driving company valuation.

To accelerate commercialization of the Eligen® Technology, Emisphere embarked on a two-pronged strategy. First, we concentrated on 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 potential partners and attempting 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 Sodium N-[8-(2-hydroxybenzoyl) Amino] Caprylate (“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. Given sufficient time and resources, the Company intends to apply this strategy to develop other products. Examples of other GRAS substances that may be developed into additional commercial products using this strategy would include vitamins such as other B Vitamins, minerals such as iron, and other supplements such as the polyphenols and catechins, among others. A higher dose (1000 mcg) formulation of Eligen® B12, for use by patients who are Vitamin B12 deficient, is under development.

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. Notwithstanding the Company’s optimism for the technology, Emisphere was adversely affected by the announcement by its research collaboration partner Novartis Pharma AG (“Novartis”) of the termination of its oral human growth hormone, osteoarthritis, and osteoporosis programs involving Emisphere’s Eligen® technology, as discussed further below.

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The Company also continues to focus on improving operational efficiency. By terminating the lease of our research and development facility in Tarrytown, NY and by utilizing independent contractors to conduct research and development, we reduced our annual operating costs by approximately 80% from 2008 levels. Annual cash expenditures in 2010 and 2011 were reduced by approximately \$1.1 million and \$3.4 million, respectively, and the resulting cash burn rate to support continuing operations is approximately \$6 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.

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. During 2011, the Company received \$1.5 million by participating in the Technology Business Tax Certificate Transfer Program, sponsored by the New Jersey Economic Development Authority. That amount is sufficient to support the Company's continuing operations for approximately three months. 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 capital resources will enable us to continue operations through approximately September 26, 2012, at which time the MHR Convertible Notes, described below, come due, or earlier if unforeseen events or circumstances arise that negatively affect our liquidity. Further, we have significant future commitments and obligations. On September 26, 2005, we executed a Senior Secured Loan Agreement (the "Loan Agreement") with MHR Fund Management, LLC and entities affiliated with it (collectively, "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 11% senior secured convertible notes (the "MHR Convertible Notes") with substantially the same terms as the Loan Agreement, except that the MHR 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 MHR Convertible Notes rather than in cash. The MHR Convertible Notes are secured by a first priority lien in favor of MHR on substantially all of our assets. As of December 31, 2011, the book value of MHR Notes outstanding including principal, interest and discount for warrant purchase option and embedded conversion features is \$25.4 million. The amount payable at maturity will be approximately \$30.5 million.

On September 26, 2012, or earlier if an event of default occurs, the MHR Convertible Notes provide for the immediate repayment of the 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 MHR Convertible 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.

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. Consequently, the audit reports prepared by our independent registered public accounting firm relating to our financial statements for the years ended December 31, 2011, 2010 and 2009 include an explanatory paragraph expressing the substantial doubt about our ability to continue as a going concern. We are pursuing new as well as enhanced collaborations and exploring other financing options, with the objective of minimizing dilution and disruption. If we fail to raise additional capital or obtain substantial cash inflows from existing partners prior to September 26, 2012, we could be forced to cease operations.

Overall Product Pipeline

Emisphere's product pipeline includes prescription and medical food product candidates in varying stages of development. We have one prescription product in Phase I and a number of pre-clinical (research stage) projects. Some of the pre-clinical projects are partnered; others are Emisphere-initiated. We continue to assess therapeutic molecules for their potential compatibility with our technology and market need. Our intent is to 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. Depending on the molecule, market potential and interest, we intend to pursue potential product development opportunities through development alliances or internal development.

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Vitamin B12

The Company has developed an oral formulation of Eligen® B12 (1000 mcg) which can be marketed as a medical food for use by B12 deficient individuals. During the fourth quarter 2010, the Company completed a clinical trial which demonstrated that both oral Eligen® B12 (1000 mcg) and injectable B12 (current standard of care) can efficiently and quickly restore normal Vitamin B12 levels in deficient individuals. The manuscript summarizing the results from that clinical trial has been published in the July 2011 edition of the journal *Clinical Therapeutics* (Volume 33, pages 934 — 945). We also conducted market research to help assess the potential commercial opportunity for our potential Eligen® B12 (1000 mcg) product. On August 5, 2011, we received notice from the United States Patent Office that the U.S. patent application directed to the oral Eligen® B12 formulation (US Patent 8,022,048) was allowed. This new patent provides intellectual property protection for Eligen® B12 through approximately October 2029. Currently, we are evaluating the results of our clinical trials and market research and exploring alternative development and commercialization options with the purpose of maximizing the commercial and health benefits potential of our Eligen® B12 asset.

Vitamin 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 conditions. Another estimated five million people 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.

The data from our first pharmacokinetic study of our new Vitamin B12 formulation 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 (T_{max}) 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.

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

We have obtained patents for the carrier we are using in the oral B12 formulation, the oral Eligen® B12 formulation (as described above), and have filed applications covering the combination of the carrier and many other compounds.

Discontinued Phase III Programs

On the prescription side of our business, the Company had two products in Phase III with our partner Novartis, which was using our drug delivery technology in combination with salmon calcitonin. Their most advanced programs were testing oral formulations of salmon calcitonin ("oCT") to treat osteoarthritis and osteoporosis.

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On October 13, 2011 the Company reported that following completion of Study 2302 assessing the safety and efficacy of oral calcitonin (“oCT”) in the treatment of osteoarthritis of the knee, Novartis informed Emisphere that it has reviewed the first interpretable results and advised Emisphere of its top line conclusions as follows: preliminary analysis of two year study data showed both co-primary endpoints and secondary endpoints of the study were not met. Additionally, preliminary analysis of Study 2302 data showed a positive safety profile. Study 2302, along with its companion Study 2301, incorporated Emisphere’s unique and proprietary Eligen® Drug Delivery Technology for the improved oral absorption of salmon calcitonin.

On November 14, 2011, the Company announced that it had been informed by Novartis that Novartis has released first interpretable results (FIR) from its three-year Phase III Study 2303 assessing the safety and efficacy of oral calcitonin (SMC021) in the treatment of post-menopausal osteoporosis, conducted by its license partner Nordic Bioscience A/S (“Nordic Bioscience”). According to Novartis, review of first interpretable results found that, although Study 2303 observed the desired biological effect, a statistically significant treatment effect for the increase in lumbar spine bone mineral density in the SMC021 treatment group relative to placebo, the study failed to demonstrate a statistically significant treatment effect between treatment groups on the reduction of the occurrence of new vertebral fractures at three years, the primary endpoint of the study. In addition, according to Novartis, no statistically significant response was observed on key secondary endpoints: e.g. new non-vertebral fractures or new clinical fractures. This preliminary analysis of data also showed that SMC021 displayed a positive safety profile and that Study 2303 observed fewer overall vertebral fractures than expected.

In December 2011, Novartis informed the Company that it will not pursue further clinical development of the investigational drug SMC021 (oral calcitonin) being studied by Nordic Bioscience as a treatment option in osteoarthritis and for post-menopausal osteoporosis and that it will not seek regulatory submission for SMC021 in both indications. Novartis advised the Company that its decision to stop the clinical program of SMC021 in both indications was based on analysis and evaluation of data from Studies 2303, 2302 and 2301.

Novartis has not provided Emisphere with any further data from Studies 2303, 2302 or 2301 at this time. The Company informed Novartis that it will require additional information from Novartis in order to further analyze and evaluate the results of Study 2303 in osteoporosis, as well as data from Phase III Studies 2301 and 2302 in osteoarthritis, in order to fully understand the methodologies and results of such studies and determine next steps.

Phase I Programs

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

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. 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. Emisphere had previously conducted extensive tests on native insulin and native GLP-1 which demonstrated that both macromolecules can be effectively delivered using the Eligen® Technology. With the progress that has been made in the development of second generation proteins, we concluded that a more productive pathway is to move forward with GLP-1 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 (the “GLP-1 License Agreement”). Under the GLP-1 License 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.

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During January 2010, we announced that Novo Nordisk had initiated its first Phase I clinical trial with a long-acting oral GLP-1 analog (NN9924). This milestone released a \$2 million payment to Emisphere, whose proprietary Eligen® Technology is used in the formulation of NN9924. 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. The first Phase I Trial investigated the safety, tolerability and bioavailability of NN9924 in healthy volunteers. The trial enrolled 155 individuals and was completed in May 2010. Novo Nordisk also conducted a multiple-dose Phase I trial. This multiple-dose trial investigated safety, tolerability, pharmacokinetics and pharmacodynamics of NN9924 in healthy male subjects. The trial enrolled 96 individuals and was completed in July 2011.

In its quarterly report on research and development activities for the 4th Quarter, 2011, Novo Nordisk reported that it had completed single-dose and multiple-dose phase 1 trials with a novel oral GLP-1, NN9924, and that planning of additional phase 1 trials is on-going.

Discontinued Phase I Program

Novartis was engaged in research using the Eligen® Technology and PTH-1-34 to develop a safe and effective oral formulation of Parathyroid Hormone ("PTH") for the treatment of postmenopausal osteoporosis. 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. Recombinant PTH is currently available only by injection. In April 2010, we announced that Novartis initiated a second Phase I trial for an oral PTH-1-34 which uses Emisphere's Eligen® Technology, and was in development for the treatment of postmenopausal osteoporosis. The study was a partially blinded, placebo controlled, active comparator study to explore the safety, tolerability, pharmacokinetics and pharmacodynamics in postmenopausal women after daily oral doses of PTH-1-34. The study had two parts (A and B) and enrolled a total of approximately 120 postmenopausal women. In Part A of the trial, ascending doses of oral PTH-1-34 using the Eligen® Technology were tested for safety, tolerability and pharmacokinetics and compared to Forsteo®. In Part B, in addition to safety and tolerability of oral PTH-1-34 using the Eligen® Technology, pharmacodynamic responses were measured by bone biomarker levels and bone mineral density, and compared to Forsteo®. The first patient was enrolled in April 2010. On June 17, 2011, the Company announced that Novartis informed Emisphere of the results of its recently completed Proof of Concept study for an oral PTH-1-34 using Emisphere's Eligen® Technology in post-menopausal women with osteoporosis or osteopenia. Novartis informed Emisphere that, although the study confirmed that oral PTH-1-34 was both safe and well-tolerated, several clinical endpoints were not met. Based on the data analyzed, Novartis has terminated the study and anticipates no further work on the oral formulation of PTH-1-34. The Company has requested additional information from Novartis in order to further analyze and evaluate the results of this trial.

Previously, Novartis had 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 ("5-CNAC"), for the treatment of postmenopausal osteoporosis. The study was designed to assess the bioavailability profile of increasing doses of PTH-1-34 combined with different amounts of 5-CNAC administered orally. The results from the single-center, partially-blinded, incomplete cross-over study was presented October 19, 2009 in a poster session at the 73rd Annual Scientific Meeting of the American College of Rheumatology in Philadelphia, PA. The results demonstrated 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.

Preclinical Programs

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

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

In December 2010, the Company entered into an agreement to develop and commercialize oral formulations of Novo Nordisk's insulins using Emisphere's Eligen® Technology (the "Insulins License Agreement"). This was the second license agreement between the two companies. As described above under the heading "Phase I Programs", the GLP-1 License Agreement was signed in June 2008, with a potential drug currently in a Phase I clinical trial. The Insulins License Agreement included \$57.5 million in potential product development and sales milestone payments to Emisphere, of which \$5 million was paid upon signing, as well as royalties on sales. This extended partnership with Novo Nordisk has the potential to offer significant new solutions to millions of people with diabetes worldwide and it also serves to further validate our Eligen® Technology.

Other Product Related Activities

Professor 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 conducted research assessing the feasibility of using the Eligen® Technology combined with PYY3-36 and native GLP-1, as a potential treatment for obesity. During September 2010, we announced that a clinical study conducted by Professor Beglinger found that the Company's proprietary oral SNAC, in combination with two digestive hormones, was successful in reducing food intake and increasing satiety in healthy male subjects. The study was published in the August 18, 2010, online edition of the *American Journal of Clinical Nutrition*, the official publication of the American Society for Nutrition. As described in the publication, 12 healthy male subjects were studied in a randomized double-blind, placebo-controlled 4-way crossover trial. Each subject received (in random order) 2.0 mg Native GLP-1, 1.0 mg PYY3-36, or 2.0 mg Native GLP-1, plus 1.0 mg PYY3-36. Researchers observed that both digestive hormones, native GLP-1 and PYY3-36, were rapidly absorbed from the gut, leading to plasma concentrations several times higher than those in response to a normal meal. Native GLP-1 alone, but not PYY3-36, significantly reduced total food intake. Co-administration of both hormones, taken in combination with SNAC in a single oral dose, reduced both total food intake by 21.5 percent, and increased fullness at meal onset ($P < 0.05$). The 24-hour food intake was not affected by the single oral administration of the native hormones likely due to their short half-life. The two digestive hormones utilized in the study are released naturally in proportion to ingested calories and signal satiety, or fullness, to the brain. SNAC, which is based on Emisphere's Eligen® Technology, facilitates transport of these and other hormones with low oral bioavailability across biological membranes, such as those of the gastrointestinal tract. Emisphere had previously announced that SNAC had achieved GRAS status for its intended use in combination with nutrients added to food and dietary supplements.

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, 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 SNAC carrier (150 mg) and 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

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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.

Intravenous or subcutaneous applications of therapeutic peptide molecules 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

Business Financing

Since our inception in 1986, we have generated significant losses from operations and we anticipate that we will continue to generate significant losses from operations for the foreseeable future.

As of December 31, 2011, our accumulated deficit was approximately \$465.9 million. Our loss from operations was \$8.1 million, \$11.5 million and \$14.6 million for the years ended December 31, 2011, 2010 and 2009, respectively. Our net income was \$15.1 million for the year ended December 31, 2011, and our net loss was \$56.9 million and \$16.8 million for the years ended December 31, 2010 and 2009, respectively. Our net cash outlays from operations and capital expenditures were \$9.7 million, \$4.9 million and \$11.9 million for the years ended December 31, 2011, 2010 and 2009, respectively. Net cash outlays include receipts of deferred revenue of \$0.06 million, \$7.1 million, and \$0.17 million for 2011, 2010, and 2009, respectively. Our stockholders' deficit was \$64.5 million and \$82.5 million as of December 31, 2011 and 2010, respectively.

On January 31, 2012, the Company received approximately \$1.5 million by participating in the 2011 Technology Business Tax Certificate Transfer Program, sponsored by the New Jersey Economic Development Authority. This amount is sufficient to support the Company's continuing operations for approximately three months. After receiving the \$1.5 million through the program, the Company had approximately \$4.2 million in cash.

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 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 capital resources will enable us to continue operations through approximately September 26, 2012, at which time the MHR Convertible Notes come due, or earlier if unforeseen events or circumstances arise that negatively affect our liquidity.

As of December 31, 2011, the book value of MHR Notes outstanding including principal, interest and discount for warrant purchase option and embedded conversion features is \$25.44 million. The amount payable at maturity will be approximately \$30.5 million. The MHR Convertible Notes are secured by a first priority lien in favor of MHR on substantially all of our assets, and provide for certain events of default including, among other things, 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 the occurrence of any governmental action that renders us unable to honor or perform our obligations under the MHR Convertible Notes or results in a material adverse effect on our operations. If an event of default occurs, the MHR Convertible Notes provide for the immediate repayment of the Notes and certain additional amounts as set forth in the MHR Convertible Notes. On September 26, 2012, the maturity date of the MHR Convertible Notes, or earlier if an event of default occurs, we may not be able to make the required payments, and 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 September 26, 2012.

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. Consequently, the audit reports prepared by our independent registered public accounting firm relating

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to our financial statements for the years ended December 31, 2011, 2010 and 2009 include an explanatory paragraph expressing the substantial doubt about our ability to continue as a going concern. We are pursuing new as well as enhanced collaborations and exploring other financing options, with the objective of minimizing dilution and disruption. If we fail to raise additional capital or obtain substantial cash inflows from existing partners prior to early September 26, 2012, we could be forced to cease operations.

Even in the event that 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. For further discussion, see Part I, Item 1A “**Risk Factors.**”

On June 30, 2011, we entered into a securities purchase agreement with various institutional investors to sell an aggregate of 4,300,438 shares of our common stock and warrants to purchase a total of 3,010,306 shares of our common stock for gross proceeds, before deducting fees and expenses and excluding the proceeds, if any, from the exercise of the warrants of \$3,749,982 (the “2011 Private Placement”). The 2011 Private Placement closed on July 6, 2011. In connection with the 2011 Private Placement, we entered into a securities purchase agreement on the same date with MHR Fund Management LLC to sell an aggregate of 4,300,438 shares of our common stock and warrants to purchase a total of 3,010,306 shares of our common stock for gross proceeds, before deducting fees and expenses and excluding the proceeds, if any, from the exercise of the warrants of \$3,749,982 (the “2011 MHR Private Placement”). Simultaneous with closing the 2011 Private Placement, we closed the 2011 MHR Private Placement with MHR and certain of its affiliated investment funds. In connection with the 2011 Private Placement and the 2011 MHR Private Placement, we entered into a waiver agreement with MHR, pursuant to which MHR waived certain anti-dilution adjustment rights under its senior secured notes and certain warrants that would otherwise have been triggered by the 2011 Private Placement. As consideration for such waiver, we issued to MHR warrants to purchase 795,000 shares of our common stock and agreed to reimburse MHR for up to \$25,000 of its legal fees. In both the 2011 Private Placement and the 2011 MHR Private Placement (together, the “July 2011 Financing”), each unit, consisting of one share of common stock and a warrant to purchase 0.7 shares of common stock, were sold at a purchase price of \$0.872. All of the warrants issued in the July 2011 Financing are exercisable at an exercise price of \$1.09 per share and will expire on July 6, 2016.

The Company received total net proceeds from the July 2011 Financing of approximately \$7.18 million after deducting fees and expenses and excluding the proceeds, if any, from the exercise of the warrants that were issued in the transactions. Proceeds from these transactions are being used to fund the Company’s operations, (including investments in new product development and commercialization) and to meet the Company’s obligations as they may arise. In accordance with the terms of a registration rights agreement with the investors in the 2011 Private Placement, the Company filed a registration statement on July 26, 2011, which was declared effective October 12, 2011.

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

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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 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 manufacturers 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

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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.

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.

Novo Nordisk A/S

GLP-1 Receptor Agonists Agreement

During June 2008, we entered into the GLP-1 License Agreement, pursuant to which Novo Nordisk will develop and commercialize oral formulations of Novo Nordisk proprietary GLP-1 receptor agonists in combination with Emisphere carriers. Under the GLP-1 License 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 GLP-1 License 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 analog (NN9924). This milestone released a \$2 million payment to Emisphere, whose proprietary Eligen® Technology is used in the formulation of NN9924. 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. 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 first Phase I Trial investigated the safety, tolerability and bioavailability of NN9924 in healthy volunteers. The trial enrolled 155 individuals and was completed in May 2010. Novo Nordisk also conducted a multiple-dose Phase I trial. This multiple-dose Trial investigated safety, tolerability, pharmacokinetics and pharmacodynamics of NN9924 in healthy male subjects. The trial enrolled 96 individuals and was completed in July 2011.

In its quarterly report on research and development activities for the 4th Quarter, 2011, Novo Nordisk reported that it has completed single-dose and multiple-dose phase 1 trials with a novel oral GLP-1, NN9924, and that planning of additional phase 1 trials is on-going.

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Insulins License Agreement

During December 2010, the Company entered into the Insulins License Agreement to develop and commercialize oral formulations of Novo Nordisk's insulins using Emisphere's Eligen® Technology. The Insulins License Agreement included \$57.5 million in potential product development and sales milestone payments to Emisphere, of which \$5 million was paid upon signing, as well as royalties on sales.

This extended partnership with Novo Nordisk has the potential to offer significant new solutions to millions of people with diabetes worldwide and it also serves to further validate our Eligen® Technology.

Novartis Pharma AG

Discontinued Oral Salmon Calcitonin Program for Osteoporosis and Osteoarthritis

We have collaborated with Novartis in connection with the development and testing of oral formulations of salmon calcitonin ("sCT") to treat osteoarthritis and osteoporosis (the "Salmon Calcitonin Program"). We entered into a Research Collaboration and Option Agreement, dated as of December 3, 1997, as amended on October 20, 2000 (the "Salmon Calcitonin Option Agreement") with Novartis to develop an oral form of sCT, which 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. Pursuant to the Salmon Calcitonin Option Agreement, the Company granted Novartis the option to acquire from the Company a license to develop and commercialize oral sCT utilizing Emisphere's Eligen® Technology and the right to commence research collaboration with the Company with respect to a second compound, in exchange for certain option exercise payments. Novartis also agreed to reimburse the Company with respect to certain research and development costs incurred by the Company in connection with the sCT Program. Furthermore, under the Salmon Calcitonin Option Agreement, the Company is obligated to help to manage this program through a joint "steering committee" with Novartis. The Salmon Calcitonin Option Agreement expires upon the expiration of the last to expire of the patents of the Company described therein, subject to certain early termination rights, including termination by either party for material breach of the other party and termination by Novartis in favor of a license executed thereunder.

In February 2000, Novartis agreed to execute its option under the Salmon Calcitonin Option Agreement to acquire a license to develop and commercialize oral sCT and as a result, Novartis made a \$2 million milestone payment to us. In March 2000, we entered into a License Agreement, dated as of March 8, 2000, with Novartis for the development of an oral sCT product for the treatment of osteoarthritis and osteoporosis (the "Salmon Calcitonin License Agreement"). 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. In addition, Novartis agreed to pay the Company certain milestone and royalty payments in the event that a calcitonin product was ultimately commercialized and to reimburse the Company for certain research and development costs incurred by the Company in connection with the sCT Program. The Salmon Calcitonin License Agreement expires upon the expiration of the last to expire of the patents of the Company described therein, subject to certain early termination rights, including termination by either party for material breach of the other party, and termination by Novartis on prior notice to us.

In February 2007, Novartis and its development partner Nordic Bioscience notified us of the initiation of a three year Phase III clinical trial for the treatment of osteoporosis ("OP") 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 was a three year trial with enrollment of over 4,500 patients, and explored 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 was conducted in North and South America, Europe and Asia.

In May 2007, Novartis and Nordic Bioscience notified the Company that they were initiating a Phase III clinical study of SMC021 for the treatment of osteoarthritis ("OA") using the Company's Eligen® Technology. A second Phase III study of SMC021 for the treatment of OA, designed to meet FDA requirements for U.S. registration, was initiated by Novartis and Nordic Bioscience in October 2008.

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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, which date was subsequently extended to June 2010. On June 4, 2010, the Company and Novartis entered into a Master Agreement and Amendment (the “Novartis Agreement”). Pursuant to the Novartis Agreement, the Company was released and discharged from its obligations under the Novartis Note in exchange for: (i) the reduction of future royalty and milestone payments up to an aggregate amount of \$11.0 million due the Company under the Salmon Calcitonin Option Agreement and the Salmon Calcitonin License Agreement; (ii) the right for Novartis to evaluate the feasibility of using Emisphere’s Eligen® Technology with two new compounds to assess the potential for new product development opportunities; and (iii) other amendments to the Salmon Calcitonin Option Agreement and Salmon Calcitonin License Agreement. As of the date of the Novartis Agreement, the outstanding principal balance and accrued interest of the Novartis Note was approximately \$13.0 million. The Company recognized the full value of the debt released as consideration for the transfer of the rights and other intangibles to Novartis and deferred the related revenue in accordance with applicable accounting guidance for the sale of rights to future revenue until the earnings process has been completed based on achievement of certain milestones or other deliverables.

As discussed above under the heading “Terminated Phase III Programs”, on December 14, 2011, the Company announced that Novartis had informed the Company that it will not pursue further clinical development of the investigational drug SMC021 (oral calcitonin) as a treatment option in osteoarthritis and for post-menopausal osteoporosis and that it will not seek regulatory submission for SMC021 in either indication. Novartis advised the Company that its decision to stop the clinical program of SMC021 in both indications was based on analysis and evaluation of data from three Phase III clinical trials (two in osteoarthritis and one in osteoporosis) conducted by Nordic Bioscience that showed that SMC021 failed to meet key efficacy endpoints in all three trials, despite displaying a favorable safety profile.

The potential aggregate milestones payable to the Company under the Salmon Calcitonin Program originally involved in excess of \$14 million. To date, we have received approximately \$12.4 million in payments from Novartis under the Salmon Calcitonin Program and in light of Novartis’ decision not to pursue further clinical development or regulatory approval, we do not anticipate further payments. Under the terms of the Salmon Calcitonin Option Agreement and Salmon Calcitonin License Agreement, we were entitled to receive future royalties based on sales, in the event that an sCT product would be ultimately commercialized by Novartis. In light of Novartis’s decision, we do not anticipate receiving any royalties in the future. In the likely event that Novartis determines to terminate the Salmon Calcitonin Option Agreement and the Salmon Calcitonin License Agreement, we will reacquire the rights to our technology licensed to Novartis thereunder.

Oral PTH-1-34 Program

As discussed above under the heading “Terminated Phase I Programs”, we have collaborated with Novartis in connection with the development and testing of oral formulations of PTH-1-34 (“PTH”) to treat osteoarthritis and osteoporosis (the “PTH 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 (the “PTH Option Agreement”). On March 7, 2006, Novartis exercised its option to the license. PTH is produced by the parathyroid glands to regulate the amount of calcium and phosphorus in the body. Recombinant PTH, currently approved for the treatment of osteoporosis, is available only by injection. 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. During April 2010, we announced that Novartis initiated a second Phase I trial for an oral PTH-1-34 which uses Emisphere’s Eligen® Technology, and was in development for the treatment of postmenopausal osteoporosis. On June 17, 2011, the Company announced that Novartis informed Emisphere of the results of its recently completed Proof of Concept study for an oral PTH1-34 using Emisphere’s Eligen® Technology in post-menopausal women with osteoporosis or osteopenia. Novartis informed Emisphere that, although the study confirmed that oral PTH1-34 was both safe and well-tolerated, several clinical endpoints were not met. Based on the data analyzed, Novartis has terminated the study and

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anticipates no further work on the oral formulation of PTH1-34. The Company has requested additional information from Novartis in order to further analyze and evaluate the results of this trial. Although Novartis has not informed Emisphere of its intention to terminate the PTH Option Agreement in accordance with relevant terms thereunder, Emisphere would reacquire the rights to develop and/or commercialize the product should Novartis so terminate the Agreement.

Previously, Novartis had 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 ("5-CNAC"), for the treatment of postmenopausal osteoporosis. The study was designed to assess the bioavailability profile of increasing doses of PTH-1-34 combined with different amounts of 5-CNAC administered orally. The results from the single-center, partially-blinded, incomplete cross-over study were presented October 19, 2009 in a poster session at the 73rd Annual Scientific Meeting of the American College of Rheumatology in Philadelphia, PA. The results demonstrated 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 potential aggregate sales and development milestones that might have become payable to the Company under the PTH Program originally involved in excess of \$25 million. Furthermore, Emisphere would have been entitled to receive future royalties based on sales, in the event that a PTH product would be ultimately commercialized by Novartis. However, in light of Novartis' decision not to pursue further clinical development; we do not anticipate further payments in connection with the achievement of future sales royalties or sales or development milestones. In the likely event that Novartis determines to terminate the PTH Option Agreement, we will reacquire the rights to our technology licensed to Novartis thereunder.

Terminated 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 (the "Oral HGH Program"). We entered into a Research and Collaboration Agreement with Novartis, dated September 22, 2004, whereby Novartis licensed the right to develop a convenient oral human growth hormone product using the Eligen® Technology (the "Oral HGH Agreement"). Under this agreement, Novartis had an exclusive worldwide license to develop, make, have made, use and sell products developed under this program. On May 1, 2006, we announced that Novartis initiated the development of an oral rhGH product using Emisphere's Eligen® Technology.

On August 3, 2011, the Company received notification from Novartis that Novartis terminated the Oral HGH Agreement. In connection with this termination, Emisphere has reacquired the rights to develop and/or commercialize the product. Emisphere has requested that Novartis provide the data generated from the collaboration that would be necessary for the Company to continue to develop and commercialize an oral human growth hormone product using the Eligen® Technology. The Company has not incurred any penalties in connection with the termination of the Oral HGH Agreement.

To date, we have received \$6 million in non-refundable payments from Novartis under the Oral HGH Program, including the \$5 million milestone payment received in 2006. Under the Oral HGH Agreement, Emisphere might have received up to \$28 million in additional development milestones that might have become payable to the Company under the Oral HGH Program. Furthermore, Emisphere would have been entitled to receive future royalties based on sales, in the event that an oral rhGH product had been ultimately commercialized by Novartis. However, in light of Novartis's decision to terminate the Oral HGH Agreement, we do not anticipate further payments in connection with the achievement of future sales royalties or sales or development milestones. In connection with Novartis' termination of the Oral HGH Agreement, Emisphere reacquired the rights to our technology licensed to Novartis thereunder.

Oral Gallium Program

In March 2006, we announced that we had entered into an exclusive worldwide licensing agreement with Genta, Incorporated ("Genta") to develop an oral formulation of a gallium-containing compound. Under the

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agreement, we agreed to utilize our Eligen® Technology to supply a finished oral dosage form to Genta, and Genta is 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 for gallium on July 31, 2007. Genta has released final results from its 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 the 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 was featured in a poster session at the annual meeting of the American Society of Clinical Oncology in 2008.

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 Part I, Item 1A. "Risk Factors" below, relating to the progress of our product candidates 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 2011(1)
	2011	2010	2009	
	(In thousands)			
Research(2)	\$ 90	\$ 50	\$ 70	\$ 52,058
Feasibility projects				
Self-funded	467	1,642	1,287	13,153
Partnered	39	34	38	4,297
Development projects				
Oral heparin (self-funded)	117	37	148	99,591
Oral insulin (self-funded)	1	—	3	21,288
Partnered	—	—	2	12,157
Other(3)	<u>1,237</u>	<u>732</u>	<u>2,498</u>	<u>105,924</u>
Total all projects	<u>\$1,951</u>	<u>\$2,495</u>	<u>\$4,046</u>	<u>\$308,468</u>

- (1) Cumulative spending from August 1, 1995 through December 31, 2011.
- (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 (please refer to Part I, Item 1A "Risk Factors" for further discussion of how 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,

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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 1, 2012, Emisphere had been granted more than 110 U.S. patents and more than 200 foreign patents. Emisphere also has more than 50 pending U.S. patent applications as well as more than 200 counterpart applications pending in foreign countries.

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.

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").

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, 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.

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.

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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.

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:

1. GLP-1 Agonists
2. Pulmonary Insulin
3. DPP-IV Inhibitors
4. 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.

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.

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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, 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.

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 food 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, 2011, we had 11 employees, 7 of whom are engaged in scientific research and technical functions and 4 of whom are performing accounting, information technology, engineering, facilities maintenance, legal and regulatory and administrative functions. Of the 7 scientific employees, 3 hold Ph.D. and/or D.V.M. degrees. We believe our relations with our employees are good.

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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

Special Note Regarding Forward-Looking Statements

From time to time, information provided by us, statements made by our employees or information included in our filings with the SEC (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 (the "Exchange Act"). In some cases you can identify forward-looking statements by terminology such as "may," "should," "could," "will," "expect," "intend," "plans," "predict," "anticipate," "estimate," "continue," "believe" or the negative of these terms or other similar words. These statements discuss future expectations, contain projections of results of operations or of financial condition or 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 SEC.

Risks Related to the Company

We have limited capital resources and we may default on our obligations to MHR.

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 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 capital resources will enable us to continue operations through approximately September 26, 2012, at which time the MHR Convertible Notes, described below, come due, or earlier if unforeseen events or circumstances arise that negatively affect our liquidity. Further, we have significant future commitments and obligations. On September 26, 2005, we executed a Senior Secured Loan Agreement (the "Loan Agreement") with MHR Fund Management, LLC and entities affiliated with it (collectively, "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 11% senior secured convertible notes (the "MHR Convertible Notes") with substantially the same terms as the Loan Agreement, except that the MHR Convertible Notes are convertible, at the sole discretion of MHR or

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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 MHR Convertible Notes rather than in cash. The MHR Convertible Notes are secured by a first priority lien in favor of MHR on substantially all of our assets. As of December 31, 2011, the book value of MHR Notes outstanding including principal, interest and discount for warrant purchase option and embedded conversion features is \$25.44 million. The amount payable at maturity will be approximately \$30.5 million.

On September 26, 2012, or earlier if an event of default occurs, the MHR Convertible Notes provide for the immediate repayment of the Notes in full. 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 MHR Convertible 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.

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. Consequently, the audit reports prepared by our independent registered public accounting firm relating to our financial statements for the years ended December 31, 2011, 2010 and 2009 include an explanatory paragraph expressing the substantial doubt about our ability to continue as a going concern. We are pursuing new as well as enhanced collaborations and exploring other financing options, with the objective of minimizing dilution and disruption. If we fail to raise additional capital or obtain substantial cash inflows from existing partners prior to September 26, 2012, we could be forced to cease operations.

We have a history of operating losses and we may never achieve profitability.

As of December 31, 2011, we had approximately \$3.1 million in cash and cash equivalents, approximately \$33.2 million in working capital deficiency, a stockholders' deficit of approximately \$64.5 million and an accumulated deficit of approximately \$465.9 million. Our operating loss for the twelve months ended December 31, 2011 was approximately \$8.1 million. 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.

In light of the approximately \$7.5 million raised in the recent July 2011 Financing (as discussed below), we anticipate that our existing capital resources will enable us to continue operations through approximately September 26, 2012, 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 September 26, 2012, 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 meet the covenants detailed in the MHR Convertible Notes, 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.

The MHR Convertible Notes provide for certain events of default including, among other things, failure to perfect liens in favor of MHR created by the transaction, failure to observe any covenant or agreement, failure to

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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 the occurrence of any governmental action that renders us unable to honor or perform our obligations under the MHR Convertible Notes or results in a material adverse effect on our operations. If an event of default occurs, the MHR Convertible Notes provide for the immediate repayment of the Notes and certain additional amounts as set forth in the MHR 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 MHR Convertible 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 September 26, 2012.

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

We expended substantial resources on the development of an oral dosage form of Vitamin B12 which can be marketed as a medical food for use by B12 deficient individuals. We completed a clinical trial which demonstrated that both oral Eligen® B12 (1000 mcg) and injectable B12 (current standard of care) can efficiently and quickly restore normal Vitamin B12 levels in deficient individuals. 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. During the third quarter 2010, we terminated our distributor agreement for the marketing, distribution and sale of oral Eligen® B12 (100mcg) with Quality Vitamins and Supplements, Inc. to allow us to focus on the development of a higher dose, oral formulation of Eligen® B12 (1000 mcg) to be offered for B12 deficient patients. Our inability or delay in 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 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 commercialization of our B12 product candidate 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 currently have collaborative agreements for candidates in clinical development with Novartis, Novo Nordisk and Genta, although Novartis has indicated that it has ceased work on all of the programs it had entered into with us.

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;

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- ☒ 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.

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.

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. Novartis has discontinued all active clinical programs with us, and it is likely that it will terminate all remaining collaboration and license agreements with us in connection with those programs. 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 our products are 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

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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 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

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Additionally, we face the risk that our competitors may gain FDA approval for a product before we do. Having a competitor reach the market before we do 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.

In particular, the European Medical Agency (“EMA”) announced in January 2011 that its committee for Medicinal Products for Human Use has begun to review available data relevant to the potential for increased risk of prostate cancer progression and other types of malignancies in patients taking calcitonin-containing medicines for the prevention of acute bone loss. The announcement indicated that the decision to review followed review of two clinical trials which suggested an increased frequency of malignancies. The EMA indicated it intended to assess the data obtained in the balance of risks and benefits of calcitonin-containing medicines.

Our collaboration partner Novartis has indicated to us that it has responded to the EMA’s request for information. Novartis notified us that it has informed the FDA of the EMA request, and has provided the FDA with relevant data regarding calcitonin at its request. Subsequent to these actions, Novartis announced that it is discontinuing the oral salmon calcitonin program.

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 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. Royalties 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.

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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 FDA 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 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 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.

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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. The loss of one or more members of our executive officers or key employees could have an adverse effect on our business, financial condition and results of operations, 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. We do not maintain “key-man” life insurance policies for any of our executive officers.

In February 2011, Michael V. Novinski resigned as a director of the Company and from his position as President and Chief Executive Officer of the Company. A comprehensive search is underway to identify our next Chief Executive Officer. However, we cannot assure you that we will be able to find a qualified permanent replacement for Mr. Novinski. In addition, the loss of one or more of our other executive officers or key employees or a delay or inability to hire a new Chief Executive Officer could seriously harm our business.

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, the Board of Directors has the authority to designate that number of shares of Series A Junior Participating Cumulative Preferred Stock (“A Preferred Stock”) as is required under our stockholders rights plan described below. Those shares of preferred stock not designated as A Preferred Stock 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 stockholders rights plan, commonly referred to as a “poison pill,” in which A 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 combination, as defined in the stockholders rights plan, 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 in the stockholders rights plan. 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 holders of A Preferred Stock would 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

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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 in 2005, 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 and certificate of incorporation. 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 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, certain amendments to the bylaws 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 bylaws 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 bylaws 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 bylaws 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 bylaws 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 and announcements of the results or further actions in respect of any partnerships or collaborations, including termination of same;
- innovations or new products by us or our competitors;
- governmental regulation;
- developments in patent or other proprietary rights;

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- 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, 2011, our 52-week high and low closing market price for our common stock was \$2.41 and \$0.145, respectively.

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. Additionally, as of December 31, 2011, there were outstanding options to purchase up to 2,523,669 shares of our common stock that are currently exercisable, and additional outstanding options to purchase up to 644,961 shares of common stock that are exercisable over the next several years. As of December 31, 2011, the MHR Convertible Notes were convertible into 7,447,995 shares of our common stock. As of December 31, 2011, there were outstanding warrants to purchase 17,843,728 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 shareholders. 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 \$3.03 and the weighted average exercise price of warrants is \$1.22 which compares to the \$0.215 market price at closing on December 31, 2011. Additionally, there may be additional shares available on the market if we are required to file additional re-sale registration statements on Form S-1, including if MHR exercises its registration rights under its Registration Rights Agreement with the Company dated September 26, 2005.

We identified a material weakness in our internal control over financial reporting that resulted in the restatement of our financial statements. This material weakness could continue to adversely affect our ability to report our results of operations and financial condition accurately and in a timely manner.

The Company's senior management is responsible for establishing and maintaining a system of internal control over financial reporting designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. In connection with the preparation of our 2010 financial statements, management performed a reevaluation of our system of internal control over financial reporting for the quarterly periods ended March 31, June 30, and September 30, 2009 and 2010, and in our Annual Report for the years ended December 31, 2009 and 2010, and concluded that our disclosure controls and procedures were not effective as of the periods reported as a result of the material weakness in our internal control over financial reporting. Specifically, we concluded that the Company's system of internal controls did not effectively ensure completeness and accuracy with regard to the proper recognition, presentation and disclosure of accounting for certain non-cash interest expense and debt discounts in connection the MHR Convertible Notes arising from the adoption of Financial Accounting Standards Board Accounting Codification Topic 815-40-15-5, "Evaluating Whether an Instrument Is Considered Indexed to an Entity's Own Stock" ("FASB ASC 815-40-15-5") effective January 1, 2009.

We have designed new procedures and controls intended to address the material weakness described above. However, we note that a system of procedures and controls, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. If we are unable to establish appropriate internal controls, we may not have adequate, accurate or timely financial information, and we may be unable to meet our reporting obligations or comply with the requirements of the SEC or the Sarbanes-Oxley Act of 2002, which could result in the imposition of sanctions, including the inability of registered broker dealers to make a market in our common shares, or investigation by regulatory authorities. Any

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such action or other negative results caused by our inability to meet our reporting requirements or comply with legal and regulatory requirements or by disclosure of an accounting, reporting or control issue could adversely affect the trading price of our securities. Further and continued determinations that there are significant deficiencies or material weaknesses in the effectiveness of our internal controls could also reduce our ability to obtain financing or could increase the cost of any financing we obtain and require additional expenditures to comply with applicable requirements.

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 "Lease 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 Lease Agreement, the lease was terminated effective as of April 1, 2009. The Lease Agreement provided that the Company make the following payments to BMR: (a) \$1 million, paid upon execution of the Lease Agreement, (b) \$0.5 million, paid six months after the execution date of the Lease Agreement, and (c) \$0.75 million, payable twelve months after the execution date of the Lease 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 Lease Agreement (the "Lease Amendment"). According to the Lease 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. Through December 31, 2011, the Company has paid in full \$800,000 of the principal plus \$25,250 interest for late payments in accordance with the terms of the termination agreement.

ITEM 3. LEGAL PROCEEDINGS

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

The Company's securities began trading on the OTCQB, 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.QB to obtain quotes.

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The following table sets forth the range of high and low intra-day sale prices as reported by the OTCQB electronic quotation service for each period indicated:

	High	Low
2010		
First quarter	2.75	0.92
Second quarter	3.75	2.07
Third quarter	3.20	0.77
Fourth quarter	2.68	1.01
2011		
First quarter	2.48	1.23
Second quarter	1.80	0.85
Third quarter	1.99	0.75
Fourth quarter	1.99	0.14
2012		
First quarter (through March 1, 2012)	0.35	0.17

As of March 1, 2012 there were 224 stockholders of record, including record owners holding shares on behalf of an indeterminate number of beneficial owners, and 60,687,478 shares of common stock outstanding. The closing price of our common stock on March 1, 2012 was \$0.27.

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, 2011 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:

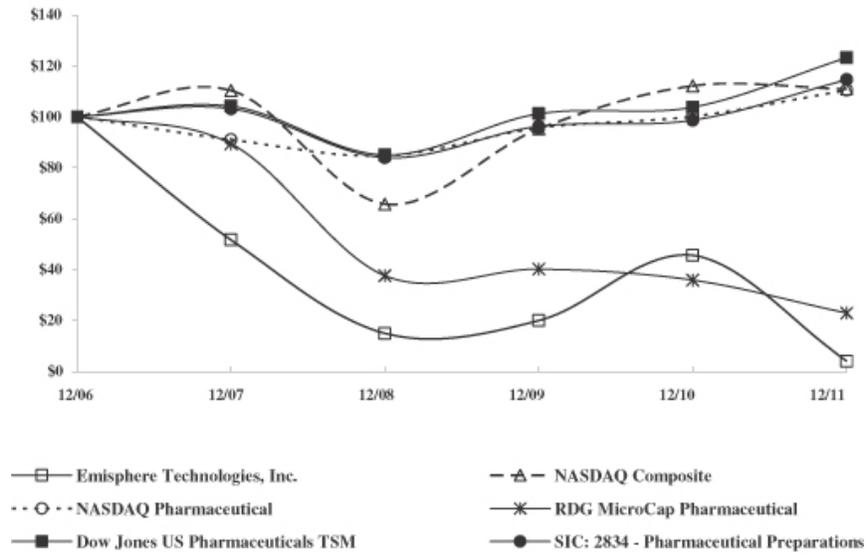
Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options	(b) Weighted Average Exercise Price of Outstanding Options	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity Compensation Plans Approved by Security Holders			
The Plans	3,079,630	\$ 2.87	1,399,618
Stock Incentive Plan for Outside Directors	79,000	9.27	—
Directors Deferred Compensation Plan	—	—	—
Equity Compensation Plans not approved by Security Holders(1)			
	10,000	3.64	—
Total	3,168,630	\$ 3.03	1,399,618

- (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.

Comparative Stock Performance Graph

The graph below compares the cumulative total stockholder return through December 31, 2011 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 U.S. Pharmaceuticals Total Stock Market Index, and SIC Code: 2834 — Pharmaceutical Preparations, assuming an investment of \$100 on December 31, 2006 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 12/31/06 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

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ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data for the years ended December 31, 2011, 2010, 2009, 2008, and 2007 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,				
	2011	2010	2009	2008	2007
	(in thousands, except per share data)				
Revenue	\$ —	\$ 100	\$ 92	\$ 251	\$ 4,077
Cost of goods sold	—	22	15	—	—
Costs and expenses					
Research and development expenses	1,951	2,495	4,046	12,785	21,076
General and administrative expenses	5,310	7,963	10,068	9,176	14,459
Other costs and expenses	277	835	(422)	779	1,083
Impairment of intangible asset	598	—	—	—	—
Restructuring charge	—	50	(356)	3,831	—
(Income) expense from lawsuit, net	—	278	1,293	—	(11,890)
Total costs and expenses	8,136	11,621	14,629	26,571	24,728
Operating loss	(8,136)	(11,543)	(14,552)	(26,320)	(20,651)
Sale of patent	—	500	500	1,500	—
Research and development tax credit	137	252	—	—	—
Change in fair value of derivative instruments	28,696	(23,651)	(2,473)	2,220	5,057
Interest expense	(5,646)	(3,595)	(659)	(2,956)	(2,615)
Loss on extinguishment of debt	—	(17,014)	—	—	—
Financing fees	—	(1,858)	—	—	—
Net income (loss)	15,051	(56,909)	(16,821)	(24,388)	(16,928)
Net income (loss) per share — basic	0.27	(1.23)	(0.49)	(0.80)	(0.58)
Net income (loss) per share — diluted	0.25	(1.23)	(0.49)	(0.80)	(0.76)

	December 31,				
	2011	2010	2009	2008	2007
	(In thousands)				
Balance Sheet Data:					
Cash, cash equivalents, restricted cash and investments	\$ 3,069	\$ 5,326	\$ 3,566	\$ 7,469	\$ 14,100
Working capital (deficit)	(33,221)	(20,568)	(20,441)	(7,954)	9,868
Total assets	4,221	7,276	5,587	10,176	19,481
Derivative instruments	10,199	34,106	10,780	267	2,487
Long-term liabilities and deferrals	31,597	51,966	11,669	31,531	27,648
Accumulated deficit	(465,892)	(480,943)	(424,034)	(433,688)	(409,300)
Stockholders' deficit	(64,527)	(82,520)	(35,227)	(37,028)	(13,674)

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 incorporated herein 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 they relate 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 decreasing time to 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 activity. 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 changes. A new senior management team was hired, the Eligen® Technology was reevaluated and our corporate strategy was refocused on commercializing it 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 development programs. We continue to develop potential product candidates in-house and we demonstrated and enhanced the value of the Eligen® Technology. Further development, exploration and commercialization of the technology entail risk and operational expenses. However, we refocused our efforts on strategic development initiatives and cost control and continue to aggressively seek to reduce non-strategic spending.

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 2011, we continued to develop our product pipeline utilizing the Eligen® Technology with prescription and nonprescription product

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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 to develop 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.

We are planning to expand our current collaborative relationships to take advantage of the critical knowledge that others have gained by working with our technology. We will also continue to pursue product candidates for internal development and commercialization. We believe that these internal candidates must be capable of development with reasonable investments in an acceptable time period and with a reasonable risk-benefit profile. Notwithstanding the Company's optimism for the technology, Emisphere was adversely affected by its partner Novartis's announcement of the termination of its oral human growth hormone, osteoarthritis, and osteoporosis programs involving Emisphere's Eligen® technology, as discussed further elsewhere in this Report.

Our product pipeline includes prescription and medical food product candidates that are being developed in partnership or internally. During 2011 our development partner Novo Nordisk continued their development programs and we continued to make progress on our internally developed Eligen® B12 product.

Novo Nordisk is using our Eligen® drug delivery technology in combination with its proprietary GLP-1 receptor agonists and insulins. During December 2010, the Company entered into the Insulins License Agreement with Novo Nordisk to develop and commercialize oral formulations of Novo Nordisk's insulins using Emisphere's Eligen® Technology. This was the second license agreement between the two companies. The GLP-1 License Agreement, signed in June 2008, provided for the development of oral formulations of GLP-1 receptor agonists, with a potential drug currently in a Phase I clinical trial. The Insulins License Agreement included \$57.5 million in potential product development and sales milestone payments to Emisphere, of which \$5 million was paid upon signing, as well as royalties on sales.

During January 2010, we announced that Novo Nordisk had initiated its first Phase I clinical trial with a long-acting oral GLP-1 analog (NN9924). This milestone released a \$2 million payment to Emisphere, whose proprietary Eligen® Technology is used in the formulation of NN9924. 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. 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 first Phase I Trial investigated the safety, tolerability and bioavailability of NN9924 in healthy volunteers. The trial enrolled 155 individuals and was completed in May 2010. Novo Nordisk also conducted a multiple-dose Phase I trial. This multiple-dose Trial investigated safety, tolerability, pharmacokinetics and pharmacodynamics of NN9924 in healthy male subjects. The trial enrolled 96 individuals and was completed in July 2011. In its quarterly report on research and development activities for the 4th Quarter, 2011, Novo Nordisk reported that it has completed single-dose and multiple-dose phase 1 trials with a novel oral GLP-1, NN9924, and that planning of additional phase 1 trials is on-going.

The Company has developed an oral formulation of Eligen® B12 (1000 mcg) as a medical food for use by B12 deficient individuals. During the fourth quarter 2010, the Company completed a clinical trial which showed that oral Eligen® B12 (1000 mcg) can efficiently and quickly restore Vitamin B12 levels in deficient individuals as effectively as the injectable formulation, which is the current standard of care. The results from that clinical trial have been submitted for publication. We also conducted market research to help assess the potential commercial opportunity for our potential Eligen® B12 (1000 mcg) product. Currently, we are evaluating the results of our clinical trials and market research and exploring alternative development and commercialization options with the purpose of maximizing the commercial and health benefits potential of our Eligen® B12 asset.

Vitamin 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

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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 conditions. Another estimated five million people 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 April 2010, the Company had announced that interim data from its recently completed study demonstrated that its oral Eligen® B12 (1000 mcg) given to individuals with low B12 levels restored normal B12 serum concentrations. Normal levels of serum B12 were achieved by all study participants who had taken oral Eligen® B12 (1000 mcg) 15 days into the 90-day study when the first blood samples were taken. This data, in Abstract Number 8370, was presented at the Experimental Biology 2010 Conference in Anaheim, California. In this open-label, randomized, parallel-group, 90-day study, serum cobalamin (B12) and holotranscobalamin (active B12) were collected and measured at Baseline, Day 15, Day 31, Day 61 and Day 91. A total of 49 study participants were enrolled (26 on IM injection and 23 on oral) and received either nine 1000 mcg intramuscular injections of Vitamin B12 or once daily tablets of oral Eligen® B12 (1000 mcg). The results from the interim analysis showed that serum cobalamin and active B12 returned to the normal range with both products and normalization was maintained. With participants in the oral Eligen® B12 (1000 mcg) group showing the ability to rapidly achieve normalized serum and active B12 levels, the study illustrates the potential of the Eligen® Technology and of the high dose, oral Eligen® B12 (1000 mcg) formulation to offer an alternative to painful and inconvenient IM injections.

As is further described in Item 1 under the headings “Terminated Phase III Programs”, “Terminated Phase I Programs”, and “Collaborative Agreements”, we have collaborated with Novartis in connection with the development and testing of oral formulations of salmon calcitonin to treat osteoarthritis and osteoporosis, the development and testing of oral formulations of PTH-1-34 to treat osteoarthritis and osteoporosis, and the development of an oral rhGH product using Emisphere’s Eligen® Technology. Although all three of these development programs have either been terminated or discontinued by Novartis, Novartis still has the right to evaluate the feasibility of using Emisphere’s Eligen® Technology with two new compounds to assess the potential for new product development opportunities. Novartis is considering its options accordingly. If Novartis chooses to develop oral formulations of these new compounds using the Eligen® Technology, the parties will negotiate additional agreements. In that case, Emisphere could be entitled to receive development milestone and royalty payments in connection with the development and commercialization of these potentially new products.

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.

Liquidity and Capital Resources

Since our inception in 1986, we have generated significant losses from operations and we anticipate that we will continue to generate significant losses from operations for the foreseeable future. We also have significant obligations to MHR coming due in 2012, which we may not be able to satisfy.

As of December 31, 2011, our working capital deficit was \$33.2 million, our accumulated deficit was approximately \$465.9 million and our stockholders deficit was \$64.5 million. Our operating loss was \$8.1 million, \$11.5 million and \$14.6 million for the years ended December 31, 2011, 2010, and 2009, respectively. Our net income was \$15.1 million for the year ended December 31, 2011 and our net loss was \$56.9 million, and \$16.8 million for the years ended December 31, 2010, and 2009, respectively. Our net cash outlays from operations and capital expenditures were \$9.7 million, \$4.9 million and \$11.9 million for the years ended December 31, 2011, 2010 and 2009, respectively. Net cash inflows include receipts of deferred revenue of \$0.1 million, \$7.1 million, and \$0.2 million for the years ended 2011, 2010 and 2009, respectively. On December 31, 2011 we had \$3.1 million cash and on January 31, 2012, we had \$4.2 million cash, after receiving \$1.5 million

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through participating in the 2011 Technology Business Tax Certificate Transfer Program, sponsored by the New Jersey Economic Development Authority.

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 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 capital resources will enable us to continue operations through approximately September 26, 2012, at which time the MHR Convertible Notes, described below, come due, or earlier if unforeseen events or circumstances arise that negatively affect our liquidity. Further, we have significant future commitments and obligations. On September 26, 2005, we executed the Loan Agreement with 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 the MHR Convertible Notes with substantially the same terms as the Loan Agreement, except that the MHR 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 MHR Convertible Notes rather than in cash. The MHR Convertible Notes are secured by a first priority lien in favor of MHR on substantially all of our assets. As of December 31, 2011, the book value of MHR Notes outstanding including principal, interest and discount for warrant purchase option and embedded conversion features is \$25.44 million. The amount payable at maturity will be approximately \$30.5 million.

The MHR Convertible Notes provide for certain events of default including, among other things, 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 the occurrence of any governmental action that renders us unable to honor or perform our obligations under the MHR Convertible Notes or results in a material adverse effect on our operations. If an event of default occurs, the MHR Convertible Notes provide for the immediate repayment of the Notes and certain additional amounts as set forth in the MHR Convertible Notes. On September 26, 2012, the maturity date of the MHR Convertible Notes, or earlier if an event of default occurs, we may not be able to make the required payments, and 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 September 26, 2012.

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. Consequently, the audit reports prepared by our independent registered public accounting firm relating to our financial statements for the years ended December 31, 2011, 2010 and 2009 include an explanatory paragraph expressing the substantial doubt about our ability to continue as a going concern. We are pursuing new as well as enhanced collaborations and exploring other financing options, with the objective of minimizing dilution and disruption. If we fail to raise additional capital or obtain substantial cash inflows from existing partners prior to early September 26, 2012, we could be forced to cease operations.

In the event that 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. For further discussion, see Part I, Item 1A "**Risk Factors.**"

During the year ended December 31, 2011, our cash liquidity (consisting of \$3.1 million cash at December 31, 2011) decreased as follows:

Cash and Cash Equivalents:

	(In thousands)
At December 31, 2010	\$ 5,326
At December 31, 2011	3,069
Decrease in cash and cash equivalents	<u>\$ (2,257)</u>

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The decrease (or increase) in cash and cash equivalents is comprised of the following components for the years ended December 31, 2011 and 2010:

	2011	2010
	(In thousands)	
Proceeds, net, from issuance of equity securities	\$ 7,500	\$ 6,700
Proceeds from notes payable	—	500
Proceeds from collaboration, sale of patent, real estate sublease and other projects	400	8,100
Sources of cash and cash equivalents	7,900	15,300
Cash used in operations	10,200	13,000
Repayment of debts	—	500
Uses of cash and cash equivalents	10,200	13,500
(Decrease) increase in cash and cash equivalents	<u>\$ (2,300)</u>	<u>\$ 1,800</u>

During the year ended December 31, 2011, our working capital liquidity decreased by \$12.7 million as follows:

	December 31,		
	2011	2010	Change
	(In thousands)		
Current assets	\$ 3,900	\$ 6,100	\$ (2,200)
Current liabilities	37,200	26,700	10,500
Working capital (deficiency)	<u>\$(33,300)</u>	<u>\$(20,600)</u>	<u>\$(12,700)</u>

The decrease in current assets is driven primarily by the decrease in cash and cash equivalents. The increase in current liabilities is driven primarily by the reclassification of the MHR Convertible Notes, and the MHR Promissory Notes to current liabilities net of a reduction in derivative liabilities.

Primary Sources of Cash

During 2011, we received net proceeds of \$7.2 million through the issuance of common stock and associated derivative instruments from the July 2011 Financing. On January 31, 2012, the Company received approximately \$1.5 million from the sale of NJ State Net Operating Losses from prior periods through the 2011 Technology Business Tax Certificate Transfer Program, sponsored by the New Jersey Economic Development Authority. This payment is sufficient to support the Company's continuing operations for approximately three months. At January 31, 2012, the Company had approximately \$4.2 million in cash, which we anticipate will enable us to continue operations through approximately September 26, 2012, the date on which the MHR Convertible Notes, come due, or earlier if unforeseen events or circumstances arise that negatively affect our liquidity.

During 2010, we received net proceeds of \$6.7 million through the issuance of common stock and associated derivative instruments from the August 2010 Financing. We also received \$5.0 million as an upfront payment from Novo Nordisk in connection with the development and license agreement to develop and commercialize oral formulations of Novo Nordisk's insulins using the Company's proprietary delivery agents pursuant to the Insulins License Agreement, and we received a \$2.0 million milestone payment from Novo Nordisk for their initiation of a Phase I clinical trial in connection with the GLP-1 License Agreement. Also during 2010, we received a \$0.5 million installment payment for sale of certain Emisphere patents and patent application relating to diketopiperazine technology to MannKind Corporation and \$0.5 million from MHR from the issuance of a note payable.

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 also received

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\$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. Also during 2009, 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.

Results of Operations

Year Ended December 31, 2011 Compared to Year Ended December 31, 2010

	Year Ended December 31,		Change
	2011	2010	
	(In thousands)		
Revenue	\$ —	\$ 100	\$ (100)
Operating expenses	\$ 8,136	\$ 11,643	\$ (3,507)
Operating loss	\$ (8,136)	\$ (11,543)	\$ 3,407
Change in fair value of derivative instruments	\$28,696	\$ (23,651)	\$ (52,347)
Interest expense	\$ (5,646)	\$ (3,595)	\$ (2,051)
Loss on extinguishment of debt	\$ —	\$ (17,014)	\$ 17,014
Financing fees	\$ —	\$ (1,858)	\$ 1,858
Other non-operating income (expenses)	\$ 137	\$ 752	\$ (615)
Net income (loss)	\$15,051	\$ (56,909)	\$ 71,960

Revenue decreased \$0.1 million for the year ended December 31, 2011 compared to December 31, 2010 due primarily to the termination of the Life Extension Foundation contract for the sale of Eligen® B12 (100 mcg), in 2010.

Our principal operating costs include the following items as a percentage of total expense.

	Year Ended	
	December 31, 2011	December 31, 2010
Human resource costs, including benefits	34%	36%
Professional fees for legal, intellectual property, accounting and consulting	39%	38%
Occupancy for our laboratory and operating space	4%	3%
Clinical costs	3%	7%
Depreciation and amortization	4%	3%
Other	16%	13%

Operating expenses decreased by \$3.5 million (30%) as a result of the following items:

	(In thousands)
Decrease in human resource costs	\$ (1,500)
Decrease in professional and consulting fees	(1,200)
Decrease in clinical costs and laboratory fees	(500)
Decrease in all other	(300)
Net decrease	<u>\$ (3,500)</u>

Human resource costs decreased approximately \$1.5 million due primarily to a \$1.0 million reduction in headcount and \$0.5 million in non-cash compensation resulting from headcount reductions.

Professional and consulting fees decreased approximately \$1.2 million due to a decrease of approximately \$1.0 million in legal fees, a \$0.4 million reduction in consulting fees, primarily from B-12 program and R&D, offset by a \$0.2 million increase in recruitment fees.

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Clinical costs and lab fees decreased approximately \$0.5 million due to the completion of our B-12 clinical trial in 2010.

Occupancy costs were unchanged in 2011 compared to 2010.

Depreciation and amortization expense were unchanged in 2011 compared to 2010.

All other operating costs decreased \$0.3 million primarily due to events in 2010 which included a \$0.5 million fee to terminate our Distributor Agreement for the marketing, distribution and sale of oral Eligen® B12 (100mcg) with Quality Vitamins and Supplements, Inc. during the third quarter 2010, by the incremental accrual of \$0.3 million expense in connection with the final ruling of the arbitrator awarding legal fees to Dr. Goldberg resolved in 2010 and an approximate \$0.1 million decrease in various other operating costs, offset by a \$0.6 million charge for the impairment of intangible asset.

As a result of the factors above, Emisphere's operating expenses were \$8.1 million for the year ended December 31, 2011, which represents a decrease of \$3.5 million or 30% compared to operating expenses for the year ended December 31, 2010.

Other non-operating expense decreased by approximately \$68.6 million for the year ended December 31, 2011 in comparison to the same period last year due primarily to a \$52.3 million decrease in the change in the value of derivative instruments, a \$16.8 million decrease in interest expense due primarily to the extinguishment of debt of \$17.0 million and financing fees of \$1.9 million associated with warrants and promissory notes issued to MHR in connection with the Novartis Agreement and the letter agreement entered into with MHR in connection therewith (the "MHR Letter Agreement") in 2010, a \$0.6 million decrease in other income primarily from \$0.5 million proceeds from the final installment on a sale of patent in 2009. Expense from the change in the fair value of derivative instruments for 2011 and 2010 is the result of a decrease in stock price from \$2.41 on December 31, 2010 to \$0.22 on December 31, 2011 and from the increase in stock price from \$1.06 on December 31, 2009 to \$2.41 on December 31, 2010, the addition of 6,020,612 warrants in connection with the July 2011 Financing, and 795,000 warrants to MHR for consent to the July 2011 offering. The change in value of derivative instruments and increases in value of the underlying shares of the Company's common stock increases the liability which is recognized as a corresponding loss 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. These potential future gains and losses could be material.

As a result of the above factors, we reported a net income of \$15.1 million, which was \$72.0 million (126%) higher than the net loss of \$56.9 million for the year ended December 31, 2010.

Year Ended December 31, 2010 Compared to Year Ended December 31, 2009

	Year Ended December 31,		Change
	2010	2009	
	(In thousands)		
Revenue	\$ 100	\$ 92	\$ 8
Operating expenses	\$ 11,643	\$ 14,644	\$ (3,001)
Operating loss	\$(11,543)	\$(14,552)	\$ 3,009
Change in fair value of derivative instruments	\$(23,651)	\$ (2,473)	\$(21,178)
Interest expense	\$ (3,595)	\$ (659)	\$ (2,936)
Loss on extinguishment of debt	\$(17,014)	\$ —	\$(17,014)
Financing fees	\$ (1,858)	\$ —	\$ (1,858)
Other non-operating income (expenses)	\$ 752	\$ 863	\$ (111)
Net loss	\$(56,909)	\$(16,821)	\$(40,088)

Revenue increased \$8 thousand for the year ended December 31, 2010 compared to December 31, 2009 due primarily to the recognition of \$28 thousand deferred revenue from development partners from prior years and

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the receipt of \$72 thousand from the sale of Eligen® B12 (100 mcg), compared to the receipt of \$92 thousand from the sale of Eligen® B12 (100 mcg) during 2009.

Our principal operating costs include the following items as a percentage of total expense.

	Year Ended	
	December 31, 2010	December 31, 2009
Human resource costs, including benefits	36%	35%
Professional fees for legal, intellectual property, accounting and consulting	38%	35%
Occupancy costs	3%	8%
Clinical costs	7%	8%
Depreciation and amortization	3%	3%
Other	13%	11%

Operating expenses decreased by \$3.0 million (21%) as a result of the following items:

	(In thousands)
Decrease in human resource costs	\$ (900)
Decrease in clinical costs and lab fees	(800)
Decrease in professional and consulting fees	(800)
Decrease in occupancy costs	(800)
Reduction in depreciation and amortization	(100)
All other	400
Net decrease	<u>\$ (3,000)</u>

Human resource costs decreased approximately \$0.9 million due primarily to a \$0.8 million reduction in non-cash compensation resulting from an increase in the estimated forfeiture rate of stock options, and a \$0.1 million reduction commensurate with a reduction in personnel during 2010.

Clinical costs and lab fees decreased approximately \$0.8 million primarily due to a decrease of \$0.5 million in costs incurred for our studies and clinical testing costs, a decrease of \$0.2 million in costs to close of our laboratory facilities in Tarrytown during 2009, and a \$0.06 million decrease in material production costs.

Professional and consulting fees decreased approximately \$0.8 million primarily due to a decrease of approximately \$0.5 million in legal fees, a \$0.2 million reduction in fees relating to investor relations, and a \$0.1 million reduction in accounting fees.

Occupancy costs decreased \$0.8 million primarily due to the closure of our laboratory facilities in Tarrytown, NY during 2009.

Depreciation and amortization expense decreased \$0.1 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 during 2009.

All other operating costs increased \$0.4 million primarily due to a \$0.5 million fee to terminate our Distributor Agreement for the marketing, distribution and sale of oral Eligen® B12 (100mcg) with Quality Vitamins and Supplements, Inc. during the third quarter 2010, a \$0.7 million gain on the sale of fixed assets during 2009, and a \$0.4 million increase in restructuring costs related to a credit in 2009, offset by a \$0.4 million decrease in insurance, travel related, software licensing, maintenance, and other operating expenses during 2010, and by the incremental accrual of \$0.8 million expense in connection with the final ruling of the arbitrator awarding legal fees to Dr. Goldberg recorded in 2009.

As a result of the factors above, Emisphere's operating expenses were \$11.6 million for the year ended December 31, 2010, which represents a decrease of \$3.0 million or 21% compared to operating expenses for the year ended December 31, 2009.

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Other non-operating expense increased by approximately \$43.1 million for the year ended December 31, 2010 in comparison to the same period last year due primarily to a \$21.2 million increase in the change in the value of derivative instruments, a \$21.8 million increase in interest expense due primarily to the extinguishment of debt of \$17.0 million and financing fees of \$1.9 million associated with warrants and promissory notes issued to MHR in connection with the Novartis Agreement and the letter agreement entered into with MHR in connection therewith (the “MHR Letter Agreement”). Expense from the change in the fair value of derivative instruments for 2010 and 2009 is the result of an increase in stock price from \$1.06 on December 31, 2009 to \$2.41 on December 31, 2010 and from the increase in stock price from \$0.79 on December 31, 2008 to \$1.06 on December 31, 2009, the addition of 5,246,292 warrants in connection with the August 2010 Financing, 865,000 warrants to MHR for consent of the Novartis Agreement and 975,000 warrants to MHR for consent to the August 2010 offering. The change in value of derivative instruments and increases in value of the underlying shares of the Company’s common stock increases the liability which is recognized as a corresponding loss 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. These potential future gains and losses could be material.

As a result of the above factors, we reported a net loss of \$56.9 million, which was \$40.1 million (238%) greater than the net loss of \$16.8 million for the year ended December 31, 2009.

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 (“Black-Scholes”) option-pricing 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 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, 2011, we do not believe that reasonable changes in the projections would have had a material effect on share-based compensation expense.

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Revenue Recognition — Revenue includes amounts earned from sales of our oral Eligen® B12 (100 mcg) product, collaborative agreements and feasibility studies. Revenue earned from the sale of oral Eligen® B12 (100 mcg) was recognized when the product was shipped, when all revenue recognition criteria were met in accordance with Staff Accounting Bulletin No. 104, “Revenue Recognition” (codified under ASC 605 “Revenue Recognition”). Our Distributor Agreement for the marketing, distribution and sale of oral Eligen® B12 (100 mcg) with Quality Vitamins and Supplements, Inc. was terminated during the third quarter, 2010. 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 2012. 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, 2011.

With regard to revenue recognition in connection with the Insulins License Agreement and the GLP-1 License Agreements with Novo Nordisk, such agreements include multiple deliverables including license grants, 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 agreements 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 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

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agreements, including the initial \$10 million upfront payment and any payments received for support services in connection with the GLP-1 License Agreement and the \$5 million upfront payment from the Insulins License Agreement 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, 2011 total deferred revenue from the GLP-1 License agreement was \$13.6 million, comprised of the \$12.0 million non-refundable license fee and \$1.6 million in support services. Total deferred revenue from the Insulins License Agreement was \$5 million.

With regard to revenue recognition in connection with Novartis' discontinued oral salmon calcitonin program for osteoporosis and osteoarthritis, discontinued oral PTH-1-34 program for osteoporosis, and terminated oral recombinant human growth hormone program: all such agreements include(d) multiple deliverables including license grants, several versions of the Company's Eligen® Technology (or carriers) and support services. Emisphere's management reviewed the relevant terms of each development license agreement with Novartis 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 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. Such conclusion will be reevaluated as each item in the arrangement is delivered or the status of each agreement changes. Consequently, any payments received from Novartis pursuant to such agreements have been deferred and included in Deferred Revenue within our balance sheet.

During 2011, Novartis terminated its oral human growth hormone program and informed the Company of its intention not to continue development of its oral calcitonin and oral PTH programs involving Emisphere's Eligen® Technology. However, Novartis did not terminate its development license agreements in calcitonin or PTH. At such time that Novartis terminates its oral calcitonin and oral PTH agreements, or does not demonstrate reasonable commercial effort to continue developing oral calcitonin or oral PTH products, then the Company will recognize revenue in connection with past receipts of payments from Novartis derived from those agreements which are currently included in Deferred Revenue within our balance sheet. Management will pay close attention to Novartis's actions and reevaluate circumstances that influence this determination in future.

As of December 31, 2011 total deferred revenue from all Novartis development license programs was approximately \$13.0 million, comprised of the principal value (\$10 million) plus interest (\$3.0 million) we recorded on June 4, 2010, upon executing the Novartis Agreement, pursuant to which the Company was released and discharged from its obligations under the Novartis Note described in Note 8 to the financial statements included herein.

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. In December 2011, the Company reviewed its purchased technology in light of industry trends and advances in reformulating and stabilizing active pharmaceutical ingredients through the development of fractions and analogs, and determined that its technology is no longer applicable in the development of a potential future oral formulation of heparin. As a result the net book value of the purchased technology was not deemed recoverable and the Company realized an impairment charge of \$0.6 million.

Warrants — Warrants issued in connection with various equity financings and described above 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 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. For a more complete discussion on the volatility in market value of derivative instruments, see Part I, Item 7A "**Quantitative and Qualitative Disclosures about Market Risk.**"

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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. In December 2011, the Company reviewed its purchased technology in light of industry trends and advances in reformulating and stabilizing active pharmaceutical ingredients through the development of fractions and analogs, and determined that its technology is no longer applicable in the development of a potential future oral formulation of heparin. As a result the net book value of the purchased technology was not deemed recoverable and the Company realized an impairment charge of \$0.6 million. 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 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 December 2011, the Financial Accounting Standards Board ("FASB") issued ASU No. 2011-11, "*Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities*" ("ASU 2011-11"). ASU 2011-11 enhances current disclosures about financial instruments and derivative instruments that are either offset on the statement of financial position or subject to an enforceable master netting arrangement or similar agreement, irrespective of whether they are offset on the statement of financial position. Entities are required to provide both net and gross information for these assets and liabilities in order to facilitate comparability between financial statements prepared on the basis of U.S. GAAP and financial statements prepared on the basis of IFRS. ASU 2011-11 is effective for annual reporting periods beginning on or after January 1, 2013, and interim periods within those annual periods. ASU 2011-11 is not expected to have a material impact on the Company's financial position or results of operations.

In September 2011, the FASB issued Accounting Standards Update No. 2011-08 ("ASU 2011-08"), which updates the guidance in ASC Topic 350, *Intangibles – Goodwill & Other*. The amendments in ASU 2011-08 permit an entity to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than the carrying amount as a basis for determining whether it is necessary to perform

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the two-step goodwill impairment test described in ASC Topic 350. The more-likely-than-not threshold is defined as having a likelihood of more than fifty percent. If, after assessing the totality of events or circumstances, an entity determines that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary. The amendments in ASU 2011-08 include examples of events and circumstances that an entity should consider in evaluating whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. However, the examples are not intended to be all-inclusive and an entity may identify other relevant events and circumstances to consider in making the determination. The examples in this ASU 2011-08 supersede the previous examples under ASC Topic 350 of events and circumstances an entity should consider in determining whether it should test for impairment between annual tests, and also supersede the examples of events and circumstances that an entity having a reporting unit with a zero or negative carrying amount should consider in determining whether to perform the second step of the impairment test. Under the amendments in ASU 2011-08, an entity is no longer permitted to carry forward its detailed calculation of a reporting unit's fair value from a prior year as previously permitted under ASC Topic 350. ASU 2011-08 is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. ASU 2011-08 is not expected to have a material impact on the Company's financial position or results of operations.

In May 2011, the FASB issued Accounting Standards Update 2011-04 ("ASU 2011-04"), which updated the guidance in ASC Topic 820, *Fair Value Measurement*. The amendments in ASU 2011-04 generally represent clarifications of Topic 820, but also include some instances where a particular principle or requirement for measuring fair value or disclosing information about fair value measurements has changed. ASU 2011-04 results in common principles and requirements for measuring fair value and for disclosing information about fair value measurements in accordance with U.S. GAAP and International Financial Reporting Standards. The amendments in ASU 2011-04 are to be applied prospectively. For public entities, the amendments are effective for interim and annual periods beginning after December 15, 2011, and early application is not permitted. ASU 2011-04 is not expected to have a material impact on the Company's financial position or results of operations.

In December 2010, the FASB issued ASU 2010-29, "*Business Combinations (ASC Topic 805): Disclosure of Supplementary Pro Forma Information for Business Combinations*" ("ASU 2010-29"). The amendments in ASU 2010-29 affect any public entity as defined by ASC Topic 805 that enters into business combinations that are material on an individual or aggregate basis. The amendments in ASU 2010-29 specify that if a public entity presents comparative financial statements, the entity should disclose revenue and earnings of the combined entity as though the business combination(s) that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period only. The amendments also expand the supplemental pro forma disclosures to include a description of the nature and amount of material, nonrecurring pro forma adjustments directly attributable to the business combination included in the reported pro forma revenue and earnings. The amendments in ASU 2010-29 are effective prospectively for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010. The adoption of ASU 2010-29 did not have a material impact on the Company's results of operations or financial condition.

In December 2010, the FASB issued ASU 2010-28, "*Intangibles — Goodwill and Other (ASC Topic 350): When to Perform Step 2 of the Goodwill Impairment Test for Reporting Units with Zero or Negative Carrying Amounts*" ("ASU 2010-28"). The amendments in ASU 2010-28 modify Step 1 of the goodwill impairment test for reporting units with zero or negative carrying amounts. For those reporting units, an entity is required to perform Step 2 of the goodwill impairment test if it is more likely than not that a goodwill impairment exists. In determining whether it is more likely than not that goodwill impairment exists, an entity should consider whether there are any adverse qualitative factors indicating that an impairment may exist. The qualitative factors are consistent with the existing guidance and examples, which require that goodwill of a reporting unit be tested for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. For public entities, the amendments in ASU 2010-28 are effective for fiscal years, and interim periods within those years, beginning after December 15, 2010. The adoption of ASU 2010-28 did not have a material impact on the Company's results of operations or financial condition.

In April 2010, the FASB issued ASU 2010-17, "*Revenue Recognition — Milestone Method*" ("ASU 2010-17"). ASU 2010-17 provides guidance on the criteria that should be met for determining whether the milestone

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- (2) We have outstanding \$25.4 million (net of discounts) in Convertible Notes payable to MHR and its affiliates (“MHR”) due September 26, 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 MHR Convertible Notes rather than in cash. The amount payable at maturity will be approximately \$30.5 million. The MHR Convertible Notes are subject to acceleration upon the occurrence of certain events of default. We also issued to MHR non-interest bearing promissory notes for \$0.6 million due on June 4, 2012. The notes were recorded at a discount using a rate of 10% which is being amortized over the life of the agreements. The notes, net of discounts, total \$0.58 million.
- (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.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Fair Value of Warrants and Derivative Liabilities. At December 31, 2011, the value of derivative instruments was \$10.2 million. We estimate the fair values of these instruments using the Black-Scholes 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. Furthermore, the Company computes the fair value of these instruments using multiple Black-Scholes model calculations to account for the various circumstances that could arise in connection with the contractual terms of said instruments. The Company weights each Black-Scholes model calculation based on its estimation of the likelihood of the occurrence of each circumstance and adjusts relevant Black-Scholes model input to calculate the value of the derivative at the reporting date. 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:

	<u>Increase/(Decrease)</u> <u>(In thousands)</u>
25% increase in stock price	\$ 915
50% increase in stock price	1,861
5% increase in assumed volatility	245
25% decrease in stock price	(871)
50% decrease in stock price	(1,690)
5% decrease in assumed volatility	(254)

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ITEM 8. *FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA*

EMISPHERE TECHNOLOGIES, INC.
FINANCIAL STATEMENTS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have audited the accompanying balance sheets of Emisphere Technologies, Inc. as of December 31, 2011 and 2010, and the related statements of operations, stockholders' deficit, and cash flows for each of the three years in the period ended December 31, 2011. These financial statements are the responsibility of Emisphere Technologies, Inc.'s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits 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 audits provide 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, 2011 and 2010, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2011, in conformity with U.S. generally accepted accounting principles.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Emisphere Technologies, Inc.'s internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 21, 2012 expressed an unqualified opinion on the effectiveness of Emisphere Technologies, Inc.'s internal control over financial reporting.

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 exceed 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.

/s/ McGladrey and Pullen, LLP

New York, New York
March 21, 2012

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have audited Emisphere Technologies, Inc.'s internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Emisphere Technologies, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying *Controls and Procedures*. Our responsibility is to express an opinion on the company's internal control over financial reporting 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 effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, 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.

In our opinion, Emisphere Technologies, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the balance sheets of Emisphere Technologies, Inc. as of December 31, 2011 and 2010, and the related statements of operations, stockholders' deficit and cash flows for each of the three years in the period ended December 31, 2011 and our report dated March 21, 2012 expressed an unqualified opinion.

/s/ McGladrey and Pullen, LLP

New York, New York
March 21, 2012

EMISPHERE TECHNOLOGIES, INC.
BALANCE SHEETS

	December 31,	
	2011	2010
	(In thousands, except share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 3,069	\$ 5,326
Accounts receivable, net of allowance of \$31 in 2011 and \$0 in 2010.	22	14
Inventories	258	260
Prepaid expenses and other current assets	581	496
Total current assets	3,930	6,096
Equipment and leasehold improvements, net	44	82
Purchased technology, net	—	838
Restricted cash	247	260
Total assets	<u>\$ 4,221</u>	<u>\$ 7,276</u>
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Notes payable, related party, including accrued interest and net of related discount	\$ 26,016	\$ —
Accounts payable and accrued expenses	894	2,954
Derivative instruments:		
Related party	9,371	17,293
Others	828	5,647
Contract termination liability, current	—	435
Restructuring charge, current	—	300
Other current liabilities	42	35
Total current liabilities	37,151	26,664
Notes payable, related party, including accrued interest and net of related discount	—	20,385
Derivative instrument, related party	—	11,166
Deferred revenue	31,593	31,535
Deferred lease liability and other liabilities	4	46
Total liabilities	<u>68,748</u>	<u>89,796</u>
Commitments and contingencies	—	—
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 60,977,210 shares (60,687,478 outstanding) in 2011 and 52,178,834 shares (51,889,102 outstanding) in 2010	610	522
Additional paid-in capital	404,707	401,853
Accumulated deficit	(465,892)	(480,943)
Common stock held in treasury, at cost; 289,732 shares	(3,952)	(3,952)
Total stockholders' deficit	<u>(64,527)</u>	<u>(82,520)</u>
Total liabilities and stockholders' deficit	<u>\$ 4,221</u>	<u>\$ 7,276</u>

(See accompanying Notes to the Financials)

EMISPHERE TECHNOLOGIES, INC.
STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2011	2010	2009
	(In thousands, except share and per share data)		
Revenue	\$ —	\$ 100	\$ 92
Cost of goods sold	—	22	15
Gross profit	—	78	77
Costs and expenses:			
Research and development	1,951	2,495	4,046
General and administrative	5,310	7,963	10,068
Gain on disposal of fixed assets	—	(1)	(789)
Restructuring charge	—	50	(356)
Depreciation and amortization	277	294	367
Impairment of intangible asset	598	—	—
Contract termination expense	—	542	—
Expense from settlement of lawsuit	—	278	1,293
Total costs and expenses	8,136	11,621	14,629
Operating loss	(8,136)	(11,543)	(14,552)
Other non-operating income (expense):			
Sale of patent	—	500	500
Sublease income	—	—	232
Investment and other income	137	252	131
Change in fair value of derivative instruments:			
Related party	21,957	(15,988)	(1,853)
Others	6,739	(7,663)	(620)
Interest expense:			
Related party	(5,631)	(3,201)	(82)
Others	(15)	(394)	(577)
Loss on extinguishment of debt	—	(17,014)	—
Financing fees	—	(1,858)	—
Total other non-operating income (expense)	23,187	(45,366)	(2,269)
Net income (loss)	\$ 15,051	\$ (56,909)	\$ (16,821)
Net income (loss) per share, basic	\$ 0.27	\$ (1.23)	\$ (0.49)
Net income (loss) per share, diluted	\$ 0.25	\$ (1.23)	\$ (0.49)
Weighted average shares outstanding, basic	56,292,511	46,206,803	34,679,321
Weighted average shares outstanding, diluted	59,281,325	46,206,803	34,679,321

(See accompanying Notes to the Financials)

EMISPHERE TECHNOLOGIES, INC.
STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2011	2010	2009
	(In thousands)		
Cash flows from operating activities:			
Net income (loss)	\$ 15,051	\$(56,909)	\$(16,821)
Adjustments to reconcile net income (loss) to net cash used in operating activities:			
Depreciation and amortization	277	294	367
Non-cash interest expense:			
Related party	5,631	22,073	82
Others	—	394	577
Changes in the fair value of derivative instruments:			
Related party	(21,957)	15,988	1,853
Others	(6,739)	7,663	620
Non-cash restructuring charge	—	—	—
Non-cash compensation	315	799	1,587
Gain on disposal of fixed assets	—	(1)	(789)
Impairment of purchased technology	598	—	—
Provision for bad debts	31	—	—
Changes in assets and liabilities excluding non-cash charges:			
(Increase) decrease in accounts receivable	(39)	145	73
(Increase) decrease in inventories	2	(24)	(20)
(Increase) decrease in prepaid expenses and other current assets	(85)	(344)	(95)
Increase (decrease) in accounts payable, accrued expenses and other	(2,488)	(1,554)	2,613
Increase in deferred revenue	58	7,072	166
Decrease in deferred lease and other liabilities	(42)	(35)	(14)
Decrease in restructuring charge	(300)	(450)	(2,130)
Total adjustments	(24,738)	52,020	4,890
Net cash used in operating activities	(9,687)	(4,889)	(11,931)
Cash flows from investing activities:			
Decrease (increase) in restricted cash	13	(1)	(4)
Proceeds from sale of fixed assets	—	1	989
Net cash provided by investing activities	13	—	985
Cash flows from financing activities:			
Proceeds from notes payable	—	500	—
Payments on notes payable	—	(525)	—
Proceeds from exercise of stock options and warrants	242	—	—
Net proceeds from issuance of common stock and warrants	7,175	6,674	7,298
Net cash provided by financing activities	7,417	6,649	7,298
Net increase (decrease) in cash and cash equivalents	(2,257)	1,760	(3,648)
Cash and cash equivalents, beginning of year	5,326	3,566	7,214
Cash and cash equivalents, end of year	\$ 3,069	\$ 5,326	\$ 3,566
Supplemental disclosure of cash flow information:			
Interest paid	\$ 16	\$ 6	\$ —
Non-cash investing and financing activities:			
Issuance of liability warrants in connection with common stock offering	\$ 5,138	\$ 4,920	\$ 4,523
Reclassification of liability warrants to equity	\$ 349	\$ —	\$ —
Exchange of debt as deferred revenue (Note 8)	\$ —	\$ 13,000	\$ —
Common stock issued to settle accrued directors' compensation	\$ —	\$ 10	\$ —

(See accompanying Notes to the Financials)

EMISPHERE TECHNOLOGIES, INC.
STATEMENTS OF STOCKHOLDERS' DEFICIT
For the years ended December 31, 2011, 2010 and 2009

	<u>Common Stock</u>		Additional Paid-in Capital	Accumulated Deficit	Common Stock Held in Treasury		Total
	Shares	Amount			Shares	Amount	
	(In thousands except share data)						
Balance, December 31, 2008	<u>30,630,810</u>	<u>\$ 306</u>	<u>\$400,306</u>	<u>\$(433,688)</u>	<u>289,732</u>	<u>\$(3,952)</u>	<u>\$(37,028)</u>
Net Loss				(16,821)			(16,821)
Cumulative effect of change in accounting principle — implementation of ASC 915-40-15-5			(12,215)	26,475			14,260
Equity proceeds from issuance of common stock, net of share issuance expenses	11,729,323	118	2,657				2,775
Stock based compensation for employees			1,532				1,532
Stock based compensation for directors			55				55
Balance, December 31, 2009	<u>42,360,133</u>	<u>\$ 424</u>	<u>\$392,335</u>	<u>\$(424,034)</u>	<u>289,732</u>	<u>\$(3,952)</u>	<u>\$(35,227)</u>
Net Loss				(56,909)			(56,909)
Issuance of common stock to directors	13,674		10				10
Reclassification of derivative liability due to exercise of warrants			7,053				7,053
Exercise of warrants	2,809,971	28	(28)				—
Equity proceeds from issuance of common stock, net of share issuance expenses	6,995,056	70	1,684				1,754
Stock based compensation for employees			723				723
Stock based compensation for directors			76				76
Balance, December 31, 2010	<u>52,178,834</u>	<u>\$ 522</u>	<u>\$401,853</u>	<u>\$(480,943)</u>	<u>289,732</u>	<u>\$(3,952)</u>	<u>\$(82,520)</u>
Net Income				15,051			15,051
Reclassification of derivative liability due to exercise of warrants			349				349
Exercise of warrants	187,500	2	234				236
Equity proceeds from issuance of common stock, net of share issuance expenses	8,600,876	86	1,950				2,036
Exercise of options	10,000	—	6				6
Stock based compensation for employees			188				188
Stock based compensation for directors			127				127
Balance, December 31, 2011	<u>60,977,210</u>	<u>\$ 610</u>	<u>\$404,707</u>	<u>\$(465,892)</u>	<u>289,732</u>	<u>\$(3,952)</u>	<u>\$(64,527)</u>

(See accompanying Notes to the Financials)

EMISPHERE TECHNOLOGIES, INC.
NOTES TO 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 biopharmaceutical company that focuses on a unique and improved delivery of therapeutic molecules and pharmaceutical compounds using its Eligen® Technology. These molecules and compounds are currently available or are under development.

Our core business strategy is to develop oral forms of drugs or medical foods that are not currently available or have poor bioavailability in oral form, by applying the Eligen® Technology to those drugs or medical foods. Our development efforts are conducted internally or in collaboration with corporate development partners. Typically, the drugs that we target are at an advanced stage of development, or have already received regulatory approval, and are currently available on the market.

Risks and Uncertainties. We have no prescription products currently approved for sale by the U.S. FDA. 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, 2011, we had approximately \$3.1 million in cash, approximately \$33.2 million in working capital deficiency, a stockholders’ deficit of approximately \$64.5 million and an accumulated deficit of approximately \$465.9 million. Our net income for the year ended December 31, 2011 was \$15.1 million and our operating loss for the year ended December 31, 2011 was approximately \$8.1 million. On January 31, 2012, the Company received approximately \$1.5 million from the sale of NJ State Net Operating Losses from prior periods through the 2011 Technology Business Tax Certificate Transfer Program, sponsored by the New Jersey Economic Development Authority. This payment is sufficient to support the Company’s continuing operations for approximately three months. At January 31, 2012, the Company had approximately \$4.2 million in cash, which we anticipate will enable us to continue operations through approximately September 26, 2012, at which time the MHR Convertible Notes, described below, come due, or earlier if unforeseen events or circumstances arise that negatively affect our liquidity.

Since our inception in 1986, we have generated significant losses from operations. 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 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. Further, we have significant future commitments and obligations. On September 26, 2005, we executed a Senior Secured Loan Agreement (the “Loan Agreement”) with MHR Fund Management, LLC and entities affiliated with it (collectively, “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 11% senior secured convertible notes (the “MHR Convertible Notes”) with substantially the same terms as the Loan Agreement, except that the MHR 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 MHR Convertible Notes rather than in cash. The MHR Convertible Notes are secured by a first priority lien in favor of MHR on substantially all of our assets. As of December 31, 2011, the book value of MHR Notes outstanding including principal, interest and discount for warrant purchase option and embedded conversion features is \$25.44 million. The amount payable at maturity will be approximately \$30.5 million.

The MHR Convertible Notes provide for certain events of default including, among other things, 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, merger with another entity without the prior consent of MHR, or the occurrence of any governmental action that renders us

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

unable to honor or perform our obligations under the MHR Convertible Notes or results in a material adverse effect on our operations. If an event of default occurs, the MHR Convertible Notes provide for the immediate repayment of the Notes and certain additional amounts as set forth in the MHR Convertible Notes. On September 26, 2012, the maturity date of the MHR Convertible Notes, or earlier if an event of default occurs, we may not be able to make the required payments, and 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 September 26, 2012.

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. Consequently, the audit reports prepared by our independent registered public accounting firm relating to our financial statements for the years ended December 31, 2011, 2010 and 2009 include an explanatory paragraph expressing the substantial doubt about our ability to continue as a going concern. We are pursuing new as well as enhanced collaborations and exploring other financing options, with the objective of minimizing dilution and disruption. If we fail to raise additional capital or obtain substantial cash inflows from existing partners prior to September 26, 2012, we could be forced to cease 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.

In the event that we are successful in raising additional capital to continue operations, our business will still require substantial additional investment to fully develop new products or technologies. Expenses may be partially offset with income-generating license agreements, if possible. However, we cannot assure you that financing will be available on favorable terms or at all. For further discussion, see Part I, Item 1A "Risk Factors."

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, 2011, 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.

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

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 was being amortized on a straight line basis over 15 years, until 2014, which represents the average life of the patents acquired. In December 2011, the Company reviewed its purchased technology in light industry trends and advances in reformulating and stabilizing active pharmaceutical ingredients through the development of fractions and analogs, and determined that its technology is no longer applicable in the development of a potential future oral formulation of heparin. As a result the net book value of the purchased technology was not deemed recoverable and the Company realized an impairment charge of \$0.6 million.

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 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 (100 mcg) product, collaborative agreements and feasibility studies. Revenue earned from the sale of oral Eligen® B12 (100 mcg) was recognized when the product was shipped, when all revenue recognition criteria were met in accordance with Staff Accounting Bulletin No. 104, "Revenue Recognition" (codified under ASC 605 "Revenue Recognition"). Our distributor agreement for the marketing, distribution and sale of oral Eligen® B12 (100 mcg) with Quality Vitamins and Supplements, Inc. was terminated during the third quarter, 2010. 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 R&D activities performed by us and time spent for 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

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

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 2012. 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.

With regard to revenue recognition in connection with development and license agreements that include multiple deliverables, Emisphere’s management reviews the relevant terms of the agreements and determines whether such deliverables should be accounted for as a single unit of accounting in accordance with FASB ASC 605-25, *Multiple-Element Arrangements*. If it is determined that a 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, then such deliverables are accounted for as a single unit of accounting and any payments received pursuant to such agreement, including any upfront or development milestone payments and any payments received for support services, will be deferred and included in deferred revenue within our balance sheet until such time as management can estimate when all of such deliverables will be delivered, if ever. Management reviews and reevaluates such conclusions as each item in the arrangement is delivered and circumstances of the development arrangement change. See Note 13 for more information about the Company’s accounting for revenue from specific development and license agreements.

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 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

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

realized. In assessing the likelihood of realization, management considered estimates of future taxable income.

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 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. At December 31, 2011, the carrying value of the MHR Convertible Notes and accrued interest was \$25.4 million, which reflects its original cost net of unamortized discounts. See Note 8 for further discussion of the notes payable.

Derivative Instruments. Derivative instruments consist of common stock warrants, and certain instruments embedded in 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.

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 if an asset were to be sold 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 for 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

Future Impact of Recently Issued Accounting Standards

New Accounting Pronouncements

In December 2011, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2011-11, “*Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities*” (“ASU 2011-11”). ASU 2011-11 enhances current disclosures about financial instruments and derivative instruments that are either offset

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

on the statement of financial position or subject to an enforceable master netting arrangement or similar agreement, irrespective of whether they are offset on the statement of financial position. Entities are required to provide both net and gross information for these assets and liabilities in order to facilitate comparability between financial statements prepared on the basis of U.S. GAAP and financial statements prepared on the basis of IFRS. ASU 2011-11 is effective for annual reporting periods beginning on or after January 1, 2013, and interim periods within those annual periods. ASU 2011-11 is not expected to have a material impact on the Company's financial position or results of operations.

In September 2011, the FASB issued Accounting Standards Update No. 2011-08 ("ASU 2011-08"), which updates the guidance in ASC Topic 350, *Intangibles – Goodwill & Other*. The amendments in ASU 2011-08 permit an entity to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than the carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test described in ASC Topic 350. The more-likely-than-not threshold is defined as having a likelihood of more than fifty percent. If, after assessing the totality of events or circumstances, an entity determines that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary. The amendments in ASU 2011-08 include examples of events and circumstances that an entity should consider in evaluating whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. However, the examples are not intended to be all-inclusive and an entity may identify other relevant events and circumstances to consider in making the determination. The examples in this ASU 2011-08 supersede the previous examples under ASC Topic 350 of events and circumstances an entity should consider in determining whether it should test for impairment between annual tests, and also supersede the examples of events and circumstances that an entity having a reporting unit with a zero or negative carrying amount should consider in determining whether to perform the second step of the impairment test. Under the amendments in ASU 2011-08, an entity is no longer permitted to carry forward its detailed calculation of a reporting unit's fair value from a prior year as previously permitted under ASC Topic 350. ASU 2011-08 is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. ASU 2011-08 is not expected to have a material impact on the Company's financial position or results of operations.

In May 2011, the FASB issued Accounting Standards Update 2011-04 ("ASU 2011-04"), which updated the guidance in ASC Topic 820, *Fair Value Measurement*. The amendments in ASU 2011-04 generally represent clarifications of Topic 820, but also include some instances where a particular principle or requirement for measuring fair value or disclosing information about fair value measurements has changed. ASU 2011-04 results in common principles and requirements for measuring fair value and for disclosing information about fair value measurements in accordance with U.S. GAAP and International Financial Reporting Standards. The amendments in ASU 2011-04 are to be applied prospectively. For public entities, the amendments are effective for interim and annual periods beginning after December 15, 2011, and early application is not permitted. ASU 2011-04 is not expected to have a material impact on the Company's financial position or results of operations.

In December 2010, the FASB issued ASU 2010-29, "*Business Combinations (ASC Topic 805): Disclosure of Supplementary Pro Forma Information for Business Combinations*" ("ASU 2010-29"). The amendments in ASU 2010-29 affect any public entity as defined by ASC Topic 805 that enters into business combinations that are material on an individual or aggregate basis. The amendments in ASU 2010-29 specify that if a public entity presents comparative financial statements, the entity should disclose revenue and earnings of the combined entity as though the business combination(s) that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period only. The amendments also expand the supplemental pro forma disclosures to include a description of the nature and amount of material, nonrecurring pro forma adjustments directly attributable to the business combination included in the reported pro forma revenue and earnings. The amendments in ASU 2010-29 are effective prospectively for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010. The adoption of ASU 2010-29 did not have a material impact on the Company's results of operations or financial condition.

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

In December 2010, the FASB issued ASU 2010-28, “*Intangibles — Goodwill and Other (ASC Topic 350): When to Perform Step 2 of the Goodwill Impairment Test for Reporting Units with Zero or Negative Carrying Amounts*” (“ASU 2010-28”). The amendments in ASU 2010-28 modify Step 1 of the goodwill impairment test for reporting units with zero or negative carrying amounts. For those reporting units, an entity is required to perform Step 2 of the goodwill impairment test if it is more likely than not that a goodwill impairment exists. In determining whether it is more likely than not that goodwill impairment exists, an entity should consider whether there are any adverse qualitative factors indicating that an impairment may exist. The qualitative factors are consistent with the existing guidance and examples, which require that goodwill of a reporting unit be tested for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. For public entities, the amendments in ASU 2010-28 are effective for fiscal years, and interim periods within those years, beginning after December 15, 2010. The adoption of ASU 2010-28 did not have a material impact on the Company’s results of operations or financial condition.

In April 2010, the FASB issued ASU 2010-17, “*Revenue Recognition — Milestone Method*” (“ASU 2010-17”). ASU 2010-17 provides guidance on the criteria that should be met for determining whether the milestone method of revenue recognition is appropriate. A vendor can recognize consideration that is contingent upon achievement of a milestone in its entirety as revenue in the period in which the milestone is achieved only if the milestone meets all criteria to be considered substantive. The following criteria must be met for a milestone to be considered substantive: the consideration earned by achieving the milestone should (i) be commensurate with either the level of effort required to achieve the milestone or the enhancement of the value of the item delivered as a result of a specific outcome resulting from the vendor’s performance to achieve the milestone; (ii) be related solely to past performance; and (iii) be reasonable relative to all deliverables and payment terms in the arrangement. No bifurcation of an individual milestone is allowed and there can be more than one milestone in an arrangement. Accordingly, an arrangement may contain both substantive and non-substantive milestones. ASU 2010-17 is effective on a prospective basis for milestones achieved in fiscal years, and interim periods within those years, beginning on or after June 15, 2010. The adoption of ASU 2010-17 did not have a material effect on the Company’s results of operations or financial condition.

In October 2009, the FASB issued ASU 2009-13, “*Multiple-Deliverable Revenue Arrangements*” (“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 in ASU 2009-13 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 adoption of ASU 2009-13 did not have a material impact on the Company’s results of operations or financial condition.

Management does not believe there would have been a material effect on the accompanying financial statements had any other recently issued, but not yet effective, accounting standards been adopted in the current period.

3. Inventory

Inventory consists of the following:

	December 31,	
	2011	2010
	(In thousands)	
Work in process	\$258	\$260

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

4. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following:

	December 31,	
	2011	2010
	(In thousands)	
Prepaid corporate insurance	\$ 36	\$ 41
Deposit on inventory	420	420
Prepaid expenses and other current assets	125	35
	\$581	\$496

5. Fixed Assets

Equipment and leasehold improvements, net, consists of the following:

	Useful Lives In Years	December 31,	
		2011	2010
		(In thousands)	
Equipment	3-7	\$1,370	\$1,370
Leasehold improvements	Term of lease	61	61
		1,431	1,431
Less, accumulated depreciation and amortization		1,387	1,349
		\$ 44	\$ 82

Depreciation expense for the years ended December 31, 2011, 2010 and 2009, was \$38 thousand, \$56 thousand and \$128 thousand, respectively.

6. Purchased Technology

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

	December 31,	
	2011	2010
	(In thousands)	
Gross carrying amount	\$4,533	\$4,533
Less, accumulated amortization	3,935	3,695
Less, impairment	598	—
Net book value	\$ —	\$ 838

Annual amortization of purchased technology was \$0.2 million for 2011, 2010 and 2009.

The purchased technology is comprised of patents for one of the Company's carriers underlying unfractionated heparin ("UFH") in a liquid form, UFH in a solid form and solid low molecular weight heparin. The patents expire June 30, 2014. In December 2011, the Company's management reviewed the purchased technology in light of industry trends and advances in reformulating and stabilizing active pharmaceutical ingredients through the development of fractions and analogs, and determined that its technology is no longer applicable in the development of a potential future oral formulation of heparin. As such, the Company recognized an impairment of \$0.6 million which represented the net book value at that time.

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

7. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consist of the following:

	December 31,	
	2011	2010
	(In thousands)	
Accounts payable	\$318	\$2,201
Accrued bonus	—	300
Accrued legal, professional fees and other	513	375
Accrued vacation	24	69
Clinical trial expenses and contract research	39	9
	<u>\$894</u>	<u>\$2,954</u>

8. Notes Payable and Restructuring of Debt

Notes payable consist of the following:

	December 31,	
	2011	2010
	(In thousands)	
MHR Convertible Note	\$25,441	\$19,864
MHR Promissory Notes.	575	520
	<u>\$26,016</u>	<u>\$20,385</u>

MHR Convertible Notes. 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. 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 “MHR Convertible Notes”) with substantially the same terms as the Loan Agreement, except that the MHR Convertible Notes are convertible, at the sole discretion of MHR, into shares of our common stock at a price per share of \$3.78. As of December 31, 2011, the MHR Convertible Notes were convertible into 7,447,995 shares of our common stock. The MHR 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 MHR Convertible Notes rather than in cash. Effective September 27, 2011, the MHR Convertible Notes were reclassified as a short term liability in accordance with their September 26, 2012 maturity date.

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 Convertible Notes, and \$0.2 million were allocated to the related derivative instruments. Of the \$1.9 million allocated to the MHR Convertible Notes, \$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

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

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 MHR Convertible Notes provide MHR with the right to require us to redeem the notes 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 model for the conversion option that would exist under the MHR Convertible Notes. 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, 2011, 2010 and 2009, 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.

In connection with the MHR Convertible Notes 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 MHR Convertible Notes provide for various events of default including the 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 the occurrence of any governmental action that 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 MHR Convertible Notes provide for the immediate repayment and certain additional amounts as set forth in the MHR Convertible Notes. We currently have a waiver from MHR for failure to perfect liens on certain intellectual property rights through September 26, 2012.

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 Convertible Notes have 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 Convertible Notes and increasing prospectively the amount of interest expense to be recognized over the life of the MHR Convertible Notes using the effective yield method. At December 31, 2011, the MHR Convertible Notes were convertible into 7,447,995 shares of our common stock.

As consideration for its consent and limitation of rights in connection with the Novartis Agreement (as defined below), the Company granted MHR warrants to purchase 865,000 shares of its common stock (the “June 2010 MHR Warrants”) under the MHR Letter Agreement (as defined below). The Company estimated the fair value of the June 2010 MHR Warrants on the date of grant using Black-Scholes models to be \$1.9 million. The Company determined that the resulting modification of the MHR Convertible Notes was substantial in accordance with ASC 470-50, *Modifications and Extinguishments*. As such the modification of the MHR Convertible Notes was accounted for as an extinguishment and restructuring of the debt, and the warrants issued to MHR were expensed as a financing fee. The fair value of the MHR Convertible Notes, as of June 4, 2010 was estimated by calculating the present value of future cash flows discounted at a market rate of return for comparable debt instruments to be \$17.2 million. The Company recognized a loss on extinguishment of debt in the amount of \$17.0 million which represented the difference between the net carrying amount of the MHR Convertible Notes and their fair value as of the date of the Novartis Agreement and the MHR Letter Agreement.

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

The book value of the MHR Convertible Notes is comprised of the following:

	December 31,	
	2011	2010
	(In thousands)	
Face value of the note (including accrued interest)	\$28,153	\$25,233
Discount (related to the warrant purchase option and embedded conversion feature)	(2,712)	(5,369)
	<u>\$25,441</u>	<u>\$19,864</u>

Novartis Note. On June 4, 2010, the Company and Novartis entered into a Master Agreement and Amendment (the “Novartis Agreement”), pursuant to which the Company was released and discharged from its obligations under that certain convertible note to Novartis (the “Novartis Note”) in exchange for (i) the reduction of future royalty and milestone payments up to an aggregate amount of \$11.0 million due the Company under the Research Collaboration and Option Agreement, dated as of December 3, 1997, as amended on October 20, 2000 (the “Research Collaboration and Option Agreement”), and the License Agreement, dated as of March 8, 2000, for the development of an oral salmon calcitonin product for the treatment of osteoarthritis and osteoporosis (the “Oral Salmon Calcitonin Agreement”); (ii) the right for Novartis to evaluate the feasibility of using Emisphere’s Eligen® Technology with two new compounds to assess the potential for new product development opportunities; and (iii) other amendments to the Research Collaboration and Option Agreement and License Agreement. As of the date of the Novartis Agreement, the outstanding principal balance and accrued interest of the Novartis Note was approximately \$13.0 million. The Company recognized the full value of the debt released as consideration for the transfer of the rights and other intangibles to Novartis and deferred the related revenue in accordance with applicable accounting guidance for the sale of rights to future revenue until the earnings process has been completed based on achievement of certain milestones or other deliverables.

2010 MHR Promissory Notes. In connection with the Novartis Agreement, the Company and MHR entered into a letter agreement (the “MHR Letter Agreement”), and MHR, the Company and Novartis entered into a non-disturbance agreement (the “Non-Disturbance Agreement”), which was a condition to Novartis’ execution of the Novartis Agreement. Pursuant to the MHR Letter Agreement, MHR agreed to limit certain rights and courses of action that it would have available to it as a secured party under the Senior Secured Term Loan Agreement and Pledge and Security Agreement (“Loan and Security Agreement”) between MHR and the Company. MHR also consented to the Novartis Agreement, which consent was required under the Loan and Security Agreement, and MHR also agreed to enter into a comparable agreement at some point in the future in connection with another potential Company transaction (the “Future Transaction Agreement”). The MHR Letter Agreement also provided for the Company to reimburse MHR for its legal fees incurred in connection with the Non-Disturbance Agreement for up to \$500,000 and up to \$100,000 in legal expenses incurred by MHR in connection the Future Transaction Agreement. The reimbursements were to be paid in the form of non-interest bearing promissory notes issued on the effective date of the MHR Letter Agreement. As such, the Company issued to MHR non-interest promissory notes for \$500,000 and \$100,000 on June 8, 2010. The Company received documentation that MHR expended more than the \$500,000 of legal fees in connection with the Non-Disturbance Agreement and \$100,000 of legal fees in connection with the Future Transaction Agreement, and, consequently, recorded the issuance of the \$500,000 and \$100,000 promissory notes and a corresponding charge to financing expenses. The promissory notes are due June 4, 2012. The Company imputed interest at its incremental borrowing rate of 10%, and discounted the face amounts of the \$500,000 and \$100,000 promissory notes by \$21,000 and \$4,000, respectively.

July 2010 MHR Promissory Note. On July 29, 2010, we issued to MHR a promissory note in the principal amount of \$525,000 (the “July 2010 MHR Note”). The July 2010 MHR Note provides for an interest rate of

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

15% per annum, due and payable on October 27, 2010. During the quarter ended September 30, 2010, certain conditions caused the maturity date of the July 2010 MHR Note to accelerate, and the July 2010 MHR Note was paid.

9. Derivative Instruments

Derivative instruments consist of the following:

	December 31, 2011	December 31, 2010
	(in thousands)	
MHR Convertible Note	\$ 7,367	11,166
MHR 2006 Warrants	—	646
August 2007 Warrants	12	481
August 2009 Warrants	540	7,807
June 2010 MHR Warrants	351	1,495
August 2010 Warrants	735	10,550
August 2010 MHR Waiver Warrants	142	1,961
July 2011 Warrants	929	—
July 2011 MHR Waiver Warrants	123	—
	<u>\$ 10,199</u>	<u>\$ 34,106</u>

The fair value of the warrants that have exercise price reset features is estimated using an adjusted Black-Scholes model. The Company computes valuations each quarter, using Black-Scholes model calculations for such warrants to account for the various possibilities that could occur due to various circumstances that could arise in connection with the contractual terms of said instruments. The Company weights each Black-Scholes model calculation based on its estimation of the likelihood of the occurrence of each circumstance and adjusts relevant Black-Scholes model input to calculate the value of the derivative at the reporting date.

Embedded Conversion Feature of MHR Convertible Notes. The MHR Convertible Notes 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 MHR Convertible Notes 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. 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 liability has been presented as a non-current liability as of December 31, 2010 and a current liability as of December 31, 2011 to correspond with its host contract, the MHR Convertible Notes. The fair value of the embedded conversion feature is estimated, at the end of each quarterly reporting period, using Black-Scholes models. The assumptions used in computing the fair value as of December 31, 2011 are a closing stock price of \$0.22, conversion prices of \$3.78 and \$0.22, expected volatility of 213.43% over the remaining term of nine months and a risk-free rate of 0.06%. The fair value of the embedded conversion feature decreased \$3.8 million for the year ended December 31, 2011 and increased \$6.6 million and \$1.3 million for the years ended December 31, 2010 and 2009, respectively, which amounts have been recognized in the accompanying statements of operations. The embedded conversion feature will be adjusted to estimated fair value for each future period the MHR Convertible Notes remain outstanding. See Note 8 for a further discussion of the MHR Convertible Notes.

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

MHR 2006 Warrants. In connection with the exercise of the MHR Option in April 2006 discussed in Note 8, the Company issued to MHR warrants to purchase 617,211 shares for proceeds of \$0.6 million. The MHR 2006 Warrants had an original exercise price of \$4.00 and were exercisable through September 26, 2011. The MHR 2006 Warrants had the same terms as the August 2007 Warrants (see below). The anti-dilution feature of the MHR 2006 Warrants was triggered in connection with the August 2007 Financing, resulting in an adjusted exercise price of \$3.76. The MHR 2006 Warrants contained the same potential cash settlement provisions as the August 2007 Financing Warrants and, therefore, they have been accounted for as a separate liability. The fair value of the MHR 2006 Warrants was estimated at the end of each quarterly period in which they remained outstanding using Black-Scholes models. The MHR 2006 Warrants expired September 26, 2011. The fair value of the MHR 2006 Warrants decreased \$0.6 million for the year ended December 31, 2011 and increased \$0.4 million and \$0.1 million for the years ended December 31, 2010 and 2009, respectively, which has been recognized in the accompanying statement of operations.

August 2007 Warrants. In connection with an equity financing in August 2007 (the “August 2007 Financing”), Emisphere sold warrants to purchase up to 400,000 shares of common stock (the “August 2007 Warrants”). Of these 400,000 warrants, 91,073 were sold to MHR. Each of the August 2007 Warrants were issued with an exercise price of \$3.948 and expire on August 21, 2012. The August 2007 Warrants provide for certain anti-dilution protection as provided therein. Under the terms of the August 2007 Warrants, we have an obligation to make a cash payment to the holders of the August 2007 Warrants for any gain that could have been realized if the holders exercise the August 2007 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 August 2007 Warrants have been exercised. Accordingly, the 2007 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 model. The assumptions used in computing the fair value as of December 31, 2011 are a closing stock price of \$0.22, expected volatility of 226.39% over the remaining term of eight months and a risk-free rate of 0.06%. The fair value of the August 2007 Warrants decreased \$0.5 million for the year ended December 31, 2011 and increased \$0.3 million and \$0.02 million for the years ended December 31, 2010 and 2009, respectively, which has been recognized in the accompanying statements of operations. The August 2007 Warrants will be adjusted to estimated fair value for each future period they remain outstanding.

August 2009 Warrants. In connection with an equity financing in August 2009 (the “August 2009 Financing”), 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 “August 2009 Warrants”). The August 2009 Warrants were issued with an exercise price of \$0.70 and expire on August 21, 2014. Under the terms of the August 2009 Warrants, we have an obligation to make a cash payment to the holders of the August 2009 Warrants for any gain that could have been realized if the holders exercise the August 2009 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 August 2009 Warrants have been exercised. Accordingly, the August 2009 Warrants have been accounted for as a liability. The fair value of the August 2009 Warrants is estimated, at the end of each quarterly reporting period, using the Black-Scholes model. The assumptions used in computing the fair value as of December 31, 2011 are a closing stock price of \$0.22, expected volatility of 155.98% over the remaining term of two years and eight months and a risk-free rate of 0.36%. The fair value of the August 2009 Warrants decreased \$7.3 million for the year ended December 31, 2011, increased \$4.8 million for the year ended December 31, 2010 and increased \$0.85 million from the commitment date of August 19, 2009 through December 31, 2009. These fluctuations have been recognized in the accompanying statement of operations. The warrants will be adjusted to estimated fair value for each future period they remain outstanding. During the year ended December 31, 2010, the unrelated investors exercised their warrants to purchase up to 2,685,714 million shares of the Company’s common stock at an exercise price of \$0.70, using the “cashless exercise” provision. The Company issued an aggregate of 1,966,937 shares to such holders in accordance with the terms of the cashless exercise provision. The Company calculated the fair value of the 2,685,714 exercised warrants on their respective exercise dates using the Black-Scholes

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NOTES TO FINANCIAL STATEMENTS — (Continued)

model. The weighted average assumptions used in computing the fair values were a closing stock price of \$1.91, expected volatility of 101.99% over the remaining contractual life of four years, three months and a risk-free rate of 1.46%. The fair value of the 2.7 million exercised warrants increased by \$2.2 million from January 1, 2010 through the date of exercise which has been recognized in the accompanying statements of operations. The fair value of the derivative liabilities at the exercise dates of \$4.3 million was reclassified to additional paid-in-capital. After these cashless exercises, warrants to purchase up to 3,729,323 shares of common stock, in the aggregate, remain outstanding.

June 2010 MHR Warrants. As consideration for its consent and limitation of rights in connection with the Novartis Agreement, the Company granted MHR warrants to purchase 865,000 shares of its common stock under the MHR Letter Agreement. The June 2010 MHR Warrants are exercisable at \$2.90 per share and will expire on August 21, 2014. The June 2010 MHR Warrants provide for certain anti-dilution protection as provided therein. 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 June 2010 MHR 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 June 2010 MHR Warrants have been exercised. Accordingly, the June 2010 MHR Warrants have been accounted for as a liability. Their fair value is estimated, at the end of each quarterly reporting period, using the Black-Scholes model. The Company estimated the fair value of the June 2010 MHR Warrants on the date of grant using Black-Scholes models to be \$1.9 million, which triggered the recognition of extinguishment and restructuring accounting for the MHR Convertible Notes. The assumptions used in computing the fair value of the June 2010 MHR Warrants at December 31, 2011 are closing stock prices of \$0.22, \$0.15, and \$2.89, exercise prices of \$0.22, \$0.15, \$2.89, and \$2.90, expected volatility of 155.98% over the remaining two years and eight months, and a risk-free rate of 0.36%. The fair value of the June 2010 MHR Warrants decreased \$1.1 million for the year ended December 31, 2011 and decreased \$0.4 million from the commitment date of June 21, 2010 through December 31, 2010. These fluctuations have been recognized in the accompanying statements of operations. The June 2010 MHR Warrants will be adjusted to estimated fair value for each future period they remain outstanding.

August 2010 Warrants. In connection with the August 2010 Financing, Emisphere sold warrants to purchase 5.2 million shares of common stock to MHR (2.6 million) and other unrelated investors (2.6 million) (the "August 2010 Warrants"). The August 2010 Warrants were issued with an exercise price of \$1.26 and expire on August 26, 2015. Under the terms of the August 2010 Warrants, we have an obligation to make a cash payment to the holders of the August 2010 Warrants for any gain that could have been realized if the holders exercise the August 2010 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 August 2010 Warrants have been exercised. Accordingly, the August 2010 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 model. On January 12, 2011, one of the unrelated investors notified the Company of its intention to exercise 0.2 million warrants. The Company received proceeds of \$0.2 million from the exercise of these warrants. The Company calculated the fair value of the 0.2 million exercised warrants on January 12, 2011 using the Black-Scholes option pricing model. The assumptions used in computing the fair value as of January 12, 2011 are a closing stock price of \$2.25, expected volatility of 107.30% over the remaining contractual life of four years and seven months and a risk-free rate of 1.99%. The fair value of the 0.2 million exercised warrants decreased by approximately \$28,000 for the period from January 1, 2011 through January 12, 2011 which has been recognized in the accompanying statements of operations. The assumptions used in computing the fair value of the remaining August 2010 Warrants as of December 31, 2011 are a closing stock price of \$0.22, exercise price of \$1.26, expected volatility of 146.56% over the remaining term of three years and eight months, and a risk-free rate of 0.36%. The fair value of the August 2010 Warrants decreased \$9.4 million for the year ended December 31, 2011 and increased \$6.4 million from the commitment date of August 26, 2010 through December 31, 2010. These fluctuations have been recognized in the accompanying statements of operations. The August 2010 Warrants will be adjusted to estimated fair value for each future period they remain outstanding.

August 2010 MHR Waiver Warrants. In connection with the August 2010 Financing, the Company entered into a waiver agreement with MHR, pursuant to which MHR waived certain anti-dilution adjustment rights under the MHR Convertible Notes and certain warrants issued by the Company to MHR that would otherwise have

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been triggered by the August 2010 Financing. As consideration for such waiver, the Company issued to MHR warrants to purchase 975,000 shares of its common stock (the “August 2010 MHR Waiver Warrants”). The August 2010 MHR Waiver Warrants are in the same form of warrant as the August 2010 Warrants issued to MHR described above. Accordingly, the August 2010 MHR Waiver Warrants have been accounted for as a liability. The fair value of the August 2010 MHR Waiver Warrants is estimated, at the end of each quarterly reporting period, using Black-Scholes models. The Company estimated the fair value of the warrants on the date of grant using Black-Scholes models to be \$0.8 million. The assumptions used in computing the fair value of the August 2010 MHR Waiver Warrants at December 31, 2011 are a closing stock price of \$0.22, exercise price of \$1.26, expected volatility of 146.56% over the term of three years and eight months, and a risk free rate of 0.36%. The fair value of the August 2010 MHR Waiver Warrants decreased by \$1.8 million for the twelve months ended December 31, 2011, respectively, which has been recognized in the accompanying statements of operations. The August 2010 MHR Waiver Warrants will be adjusted to estimated fair value for each future period they remain outstanding.

July 2011 Warrants. In connection with the July 2011 Financing, Emisphere sold warrants to purchase 6.02 million shares of common stock to MHR (3.01 million) and other unrelated investors (3.01 million) (the “July 2011 Warrants”). The July 2011 Warrants were issued with an exercise price of \$1.09 and expire on July 6, 2016. Under the terms of the July 2011 Warrants, we have an obligation to make a cash payment to the holders of the July 2011 Warrants for any gain that could have been realized if the holders exercise the July 2011 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 July 2011 Warrants have been exercised. Accordingly, the July 2011 Warrants have been accounted for as a liability. The Company estimated the fair value of the warrants of the date of grant using Black-Scholes models to be \$4.5 million. The fair value of the warrants is estimated, at the end of each quarterly reporting period, using the Black-Scholes model. The assumptions used in computing the fair value of the July 2011 Warrants as of December 31, 2011 are a closing stock price of \$0.22, exercise price of \$1.09, expected volatility of 135.65% over the remaining term of four years and seven months, and a risk-free rate of 0.83 %. The fair value of the July 2011 Warrants decreased \$3.6 million from the commitment date of July 6, 2011 through December 31, 2011 and the fluctuation has been recorded in the statements of operations.

July 2011 MHR Waiver Warrants. In connection with the July 2011 Financing, the Company entered into a waiver agreement with MHR, pursuant to which MHR waived certain anti-dilution adjustment rights under the MHR Convertible Notes and certain warrants issued by the Company to MHR that would otherwise have been triggered by the July 2011 Financing. As consideration for such waiver, the Company issued to MHR warrants to purchase 795,000 shares of its common stock (the “July 2011 MHR Waiver Warrants”). The July 2011 MHR Waiver Warrants are in the same form of warrant as the July 2011 Warrants issued to MHR described above. Accordingly, the July 2011 MHR Waiver Warrants have been accounted for as a liability. The fair value of the July 2011 MHR Waiver Warrants is estimated, at the end of each quarterly reporting period, using Black-Scholes models. The Company estimated the fair value of the warrants on the date of grant using Black-Scholes models to be \$0.6 million. The assumptions used in computing the fair value of the July 2011 MHR Waiver Warrants at December 31, 2011 are a closing stock price of \$0.22, exercise price of \$1.09, expected volatility of 135.65% over the term of four years and seven months, and a risk free rate of 0.83%. The fair value of the July 2011 MHR Waiver Warrants decreased by \$0.5 million from the commitment date of July 6, 2011 through December 31, 2011 and the fluctuation has been recorded in the statements of operations.

10. Income Taxes

As of December 31, 2011, we have available unused federal net operating loss (NOL) carry-forwards of \$347.2 million and New York State NOL carry-forwards of \$291.6 million, of which \$4.4 million, \$1.1 million and \$15.6 million will expire in 2011, 2012 and 2013, respectively, with the remainder expiring in various years

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from 2019 to 2031. We have New Jersey State NOL carry-forwards of \$59 million, which will expire in 2014 through 2018. We have research and development tax credit carry forwards which will expire in various years from 2011 through 2031.

The effective rate differs from the statutory rate of 34% for 2011, 2010 and 2009 primarily due to the following:

	<u>2011</u>	<u>2010</u>	<u>2009</u>
Statutory rate on pre-tax book loss	(34.00)%	(34.00)%	(34.00)%
Stock option issuance	(0.36)%	0.19%	1.62%
Disallowed interest	(3.45)%	9.96%	(13.51)%
Derivatives	64.49%	14.13%	5.74%
Research and experimentation tax credit	0.00%	0.00%	0.00%
Expired net operating losses and credits	(13.35)%	1.53%	20.14%
Other	(0.00)%	0.01%	(0.01)%
True-ups and adjustments	0.81%	0.00%	0.00%
Change in federal valuation allowance	(14.14)%	8.18%	20.02%
	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>

The tax effect of temporary differences, net operating loss carry-forwards, and research and experimental tax credit carry-forwards as of December 31, 2011 and 2010 is as follows:

	<u>December 31,</u>	
	<u>2011</u>	<u>2010</u>
	(in thousands)	
Deferred tax assets and valuation allowance:		
Current deferred tax asset:		
Accrued liabilities	\$ 48	\$ 218
Valuation allowance	(48)	(218)
Net current deferred tax asset	<u>\$ —</u>	<u>\$ —</u>
Non-current deferred tax assets:		
Fixed and intangible assets	\$ 522	\$ (87)
Net operation loss carry-forwards	121,547	120,034
AMT credit carry-forwards	74	74
Capital loss and charitable carry-forwards	2,749	2,779
Research and experimental tax credits	11,468	11,986
Stock compensation	1,007	997
Deferred revenue	12,618	12,595
Interest	4,889	3,461
Valuation allowance	(154,874)	(151,839)
Net non-current deferred tax asset	<u>\$ —</u>	<u>\$ —</u>

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 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 which provides recognition criteria and a related measurement model for uncertain tax positions taken or expected to be taken in income tax

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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, 2011.

The Company's 2008, 2009 and 2010 federal, New York and New Jersey tax returns remain subject to examination by the respective taxing authorities. 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

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, 2011 and 2010, 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.

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.

12. Stock-Based Compensation Plans

Total compensation expense recorded during the years ended December 31, 2011, 2010 and 2009 for share-based payment awards was \$0.3 million, \$0.8 million and \$1.6 million, respectively, of which \$0.1 million, \$0.1 million and \$0.1 million is recorded in research and development and \$0.2 million, \$0.7 million and \$1.5 million is recorded in general and administrative expenses in the statement of operations. At December 31, 2011, total unrecognized estimated compensation expense related to non-vested stock options granted prior to that date was approximately \$0.4 million, which is expected to be recognized over a weighted-average period of 2.1 years. No tax benefit was realized due to a continued pattern of operating losses. We have a policy of issuing

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

new shares to satisfy share option exercises. Ten thousand options were exercised during the year ended December 31, 2011 and no options were exercised during the year 2010. Cash received from options exercised totaled \$6 thousand for the year ended December 31, 2011.

During the year ended December 31, 2011, the Company granted 309,000 options which included 20,000 options to Gary Riley, 30,000 options to Michael Garone and 40,000 each to Mark Rachesky, Michael Weiser, John Harkey and Timothy Rothwell.

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.

The following weighted-average assumptions were used for grants made under the stock option plans for the years ended December 31, 2011, 2010 and 2009:

	2011		
	Directors	Executives	Employees
Expected volatility	83.7%	82.7%	82.7%
Expected term	6.8 years	6.8 years	6.8 years
Risk-free interest rate	1.34%	2.10%	2.10%
Dividend yield	0%	0%	0%
Annual forfeiture rate	14.5%	14.5%	14.5%

	2010		
	Directors	Executives	Employees
Expected volatility	95.5%	85.7%	85.7%
Expected term	6.8 years	6.8 years	6.8 years
Risk-free interest rate	2.17%	3.14%	3.20%
Dividend yield	0%	0%	0%
Annual forfeiture rate	14.5%	14.5%	14.5%

	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%

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

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

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, 2011 1,246,028 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, 2011, 153,590 shares remain available for issuance under the 2002 Plan.

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 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 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 Plans described above during the years ended December 31, 2011, 2010 and 2009 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, 2008	2,032,854	\$ 8.30	6.7	
Granted	1,041,000	\$ 0.86		
Expired	(12,643)	\$ 14.63		
Forfeited	<u>(326,475)</u>	\$ 3.88		
Outstanding at December 31, 2009	2,734,736	\$ 6.29	6.8	\$ 51
Granted	662,750	\$ 1.41		
Expired	(183,500)	\$ 37.99		
Forfeited	<u>(48,120)</u>	\$ 1.31		
Outstanding at December 31, 2010	3,165,866	\$ 3.51	6.9	\$ 46
Granted	309,000	\$ 1.24		
Exercised	(10,000)	\$ 0.62		
Expired	(110,266)	\$ 13.92		
Forfeited	<u>(185,970)</u>	\$ 1.82		
Outstanding at December 31, 2011	<u>3,168,630</u>	\$ 3.03	3.4	\$ 18
Vested and exercisable at December 31, 2011	<u>2,523,669</u>	\$ 3.47	2.0	\$ 10
Vested and expected to vest at December 31, 2011	<u>3,059,678</u>	\$ 3.09	3.2	\$ 17

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

The weighted-average grant date fair value of options granted during the years ended December 31, 2011, 2010 and 2009 was \$0.91, \$1.26 and \$0.92, 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 Directors Stock 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. The Directors Stock 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 Directors Stock Plan during the years ended December 31, 2011, 2010 and 2009 are summarized as follows:

	<u>Number of Shares</u>	<u>Weighted Average Exercise Price</u>	<u>Weighted Average Remaining Contractual Term in Years</u>	<u>Aggregate Intrinsic Value (In thousands)</u>
Outstanding at December 31, 2008	156,000	\$ 13.38	4.0	
Expired	<u>(35,000)</u>	\$ 4.23		
Outstanding at December 31, 2009	121,000	\$ 15.59	2.7	
Expired	<u>(21,000)</u>	\$ 41.06		
Outstanding at December 31, 2010	100,000	\$ 10.24	2.2	
Expired	<u>(21,000)</u>	\$ 13.88		
Outstanding at December 31, 2011	<u>79,000</u>	\$ 9.27	1.7	
Vested and Exercisable at December 31, 2011	<u>79,000</u>	\$ 9.27	1.7	\$ —

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, 2011, there are 3,122 shares issuable under this plan. No grants were awarded in 2011, 2010 and 2009, and none were outstanding as of December 31, 2011.

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).

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

Transactions involving awards of Non-Plan Options during the year ended December 31, 2011, 2010 and 2009 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, 2008	20,000	\$ 14.84	3.3	
Expired	<u>(10,000)</u>	\$ 26.05		
Outstanding at December 31, 2009	10,000	\$ 3.64	2.0	
Expired	<u>—</u>	—		
Outstanding at December 31, 2010	10,000	\$ 3.64	2.0	
Expired	<u>—</u>	—		
Outstanding at December 31, 2011	<u>10,000</u>	\$ 3.64	1.0	
Vested and Exercisable at December 31, 2011	<u>10,000</u>	\$ 3.64	1.0	\$ —

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 \$0.0 million, \$7.0 million and \$0.2 million in the years ended December 31, 2011, 2010 and, 2009, respectively. Expense reimbursements received in connection with these agreements was \$0.06 million, \$0.1 million and \$0.2 million for the years ended December 31, 2011, 2010 and 2009, respectively. Expenses incurred in connection with these agreements and included in research and development were \$0.0 million, \$0.0 million and \$0.2 million in the years ended December 31, 2011, 2010 and 2009, respectively. Significant agreements are described below.

Novo Nordisk Agreements

GLP-1 License 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 (the “GLP-1 License Agreement”). Under such the GLP-1 License 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

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

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 GLP-1 License 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. In January 2010, Novo Nordisk had its first Phase I clinical trial with a long acting oral GLP-1 receptor agonist. This milestone released a \$2 million payment to Emisphere.

The GLP-1 License Agreement 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 GLP-1 License 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, 2011 total deferred revenue from the GLP-1 License Agreement was \$13.6 million, comprised of the \$10.0 million non-refundable license fee, \$2 million milestone payment and \$1.6 million in support services.

Insulins License Agreement

On December 20, 2010, we entered into an exclusive Development and License Agreement with Novo Nordisk, pursuant to which we granted to Novo Nordisk an exclusive license to develop and commercialize oral formulations of Novo Nordisk's insulins, using the Company's proprietary delivery agents (the "Insulins License Agreement"). The Insulins License Agreement includes \$57.5 million in potential product development and sales milestone payments including a \$5.0 million non-refundable, non-creditable license fee. Emisphere would also be entitled to receive royalties in the event Novo Nordisk commercializes products developed under such the Insulins License Agreement.

The Insulins License Agreement 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 \$5.0 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, 2010 total deferred revenue from the Insulins License Agreement was \$5.0 million, comprised of the non-refundable, non-creditable license fee.

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NOTES TO FINANCIAL STATEMENTS — (Continued)

Novartis Agreements

Salmon Calcitonin Agreements

We have collaborated with Novartis in connection with the development and testing of oral formulations of salmon calcitonin (“sCT”) to treat osteoarthritis and osteoporosis (the “Salmon Calcitonin Program”). We entered into a Research Collaboration and Option Agreement, dated as of December 3, 1997, as amended on October 20, 2000 (the “Salmon Calcitonin Option Agreement”) with Novartis to develop an oral form of sCT. Pursuant to the Salmon Calcitonin Option Agreement, the Company granted Novartis the option to acquire from the Company a license to develop and commercialize oral sCT utilizing Emisphere’s Eligen® Technology and the right to commence research collaboration with the Company with respect to a second compound, in exchange for certain option exercise payments. Novartis also agreed to reimburse the Company with respect to certain research and development costs incurred by the Company in connection with the sCT Program.

In February 2000, Novartis agreed to execute its option under the Salmon Calcitonin Option Agreement to acquire a license to develop and commercialize oral sCT and as a result, Novartis made a \$2 million milestone payment to us. In March 2000, we entered into a License Agreement, dated as of March 8, 2000, with Novartis for the development of an oral sCT product for the treatment of osteoarthritis and osteoporosis (the “Salmon Calcitonin License Agreement”). 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. In addition, Novartis agreed to pay the Company certain milestone and royalty payments in the event that a calcitonin product was ultimately commercialized and to reimburse the Company for certain research and development costs incurred by the Company in connection with the sCT Program.

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, which date was subsequently extended to June 2010. On June 4, 2010, the Company and Novartis entered into a Master Agreement and Amendment (the “Novartis Agreement”). Pursuant to the Novartis Agreement, the Company was released and discharged from its obligations under the Novartis Note in exchange for: (i) the reduction of future royalty and milestone payments up to an aggregate amount of \$11.0 million due the Company under the Salmon Calcitonin Option Agreement and the Salmon Calcitonin License Agreement; (ii) the right for Novartis to evaluate the feasibility of using Emisphere’s Eligen® Technology with two new compounds to assess the potential for new product development opportunities; and (iii) other amendments to the Salmon Calcitonin Option Agreement and Salmon Calcitonin License Agreement. As of the date of the Novartis Agreement, the outstanding principal balance and accrued interest of the Novartis Note was approximately \$13.0 million. The Company recognized the full value of the debt released as consideration for the transfer of the rights and other intangibles to Novartis and deferred the related revenue in accordance with applicable accounting guidance for the sale of rights to future revenue until the earnings process has been completed based on achievement of certain milestones or other deliverables. If Novartis chooses to develop oral formulations of these new compounds using the Eligen® Technology, the parties will negotiate additional agreements. In that case, Emisphere could be entitled to receive development milestone and royalty payments in connection with the development and commercialization of these potentially new products.

The potential aggregate milestones payable to the Company under the Salmon Calcitonin Program originally involved in excess of \$14 million. To date, we have received \$12.4 million in payments from Novartis under the Salmon Calcitonin Program and in light of Novartis’ decision not to pursue further clinical development or regulatory approval under the Salmon Calcitonin Program, we do not anticipate further payments. Under the terms of the Salmon Calcitonin Option Agreement and the Salmon Calcitonin License Agreement, we were entitled to receive future royalties based on sales, in the event that an sCT product would be ultimately commercialized by Novartis. In light of Novartis’s decision, we do not anticipate receiving any royalties in the future. In the likely event that Novartis determines to terminate the Salmon Calcitonin Option Agreement and the Salmon Calcitonin License Agreement, we will reacquire the rights to our technology licensed to Novartis thereunder.

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

Oral PTH-1-34 Agreements

We have collaborated with Novartis in connection with the development and testing of oral formulations of PTH-1-34 to treat osteoarthritis and osteoporosis (the “PTH 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 (the “PTH Option Agreement”). On March 7, 2006, Novartis exercised its option to the license.

The potential aggregate sales and development milestones that might have become payable to the Company under the PTH Program originally involved in excess of \$25 million. Furthermore, Emisphere would have been entitled to receive future royalties based on sales, in the event that a PTH product would be ultimately commercialized by Novartis. However, in light of Novartis’ decision not to pursue further clinical development under the PTH Program, we do not anticipate further payments in connection with the achievement of future sales royalties or sales or development milestones. In the likely event that Novartis determines to terminate the PTH Option Agreement and the PTH License Agreement, we will reacquire the rights to our technology licensed to Novartis thereunder.

Oral hGH Agreement

On August 3, 2011, the Company received notification from Novartis that Novartis will terminate the Research Collaboration and License Agreement by and among the Company and Novartis, dated September 22, 2004, as amended (the “Oral hGH Agreement”). The Oral hGH Agreement provided for collaboration between the Company and Novartis on clinical trials of an oral human growth hormone product using the Eligen[®] Technology and provided Novartis with an exclusive worldwide license to develop, make, have made, use and sell products developed under the program. The termination was effective as of October 26, 2011. In connection with the termination, Emisphere has reacquired the rights to develop and/or commercialize the product. Emisphere has requested that Novartis provide the data generated from the collaboration that would be necessary for the Company to continue to develop and commercialize an oral human growth hormone product using the Eligen[®] Technology. The Company has not incurred any penalties in connection with the termination of the Oral hGH Agreement.

Genta Agreement

In March 2006, we entered into a collaborative agreement with 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, \$0.0 million and \$0.0 million in revenue related to these reimbursements for the years ended December 31, 2011, 2010 and 2009, 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, 2011, 2010 and 2009, we made contributions to the Retirement Plan totaling approximately \$0.07 million, \$0.07 million and \$0.06 million, respectively.

EMISPHERE TECHNOLOGIES, INC.
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15. Net Income (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, 2011, 2010 and 2009:

	Year Ended December 31,		
	2011	2010	2009
	(In thousands, except per share amounts)		
Net income (loss)	\$ 15,051	\$ (56,909)	\$ (16,821)
Basic income (loss) per common share:			
Weighted average common shares outstanding, basic	56,292,511	46,206,803	34,679,321
Basic net income (loss) per share	\$ 0.27	\$ (1.23)	\$ (0.49)
Diluted income (loss) per common share:			
Weighted average common shares outstanding, basic	56,292,511	46,206,803	34,679,321
Options to purchase common shares	293,248	—	—
Outstanding warrants and options to purchase warrants	2,695,566	—	—
Weighted average common shares outstanding, diluted	59,281,325	46,206,803	34,679,321
Diluted net income (loss) per share	\$ 0.25	\$ (1.23)	\$ (0.49)

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

	Year Ended December 31,		
	2011	2010	2009
Options to purchase common shares	1,833,130	2,477,037	2,865,736
Outstanding warrants and options to purchase warrants	1,265,000	11,832,826	9,934,253
Novartis convertible note payable	—	—	14,944,980
MHR note payable	7,447,995	6,675,512	5,983,146
	<u>10,546,125</u>	<u>20,985,375</u>	<u>33,728,115</u>

16. Commitments and Contingencies

Commitments.

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

As of December 31, 2011, future minimum rental payments are as follows:

<u>Years Ending December 31,</u>	<u>(In thousands)</u>
2012	360
2013	31
Total	391

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

Rent expense for the years ended December 31, 2011, 2010 and 2009 was \$0.3 million, \$0.3 million and \$0.7 million, respectively. Additional charges under this lease for real estate taxes and common maintenance charges for the years ended December 31, 2011, 2010 and 2009, were \$0.03 million, \$0.03 million and \$0.5 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, 2011, there are no amounts outstanding under the standby letter of credit.

The Company evaluates the financial consequences of legal actions periodically or as facts present themselves and records 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, 2011.

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.

17. Summarized Quarterly Financial Data (Unaudited)

Following are summarized quarterly financial data (unaudited) for the years ended December 31, 2011 and 2010:

	2011			
	March 31	June 30	September 30	December 31
	(In thousands)			
Total revenue	\$ —	\$ —	\$ —	\$ —
Operating loss	(2,050)	(2,226)	(1,531)	(2,330)
Net income (loss)	10,999	1,842	(17,606)	19,816
Net income (loss) per share, basic	\$ 0.21	\$ 0.04	\$ (0.29)	\$ 0.33
Net income (loss) per share, diluted	\$ 0.19	\$ 0.03	\$ (0.29)	\$ 0.30

	2010			
	March 31	June 30	September 30	December 31
	(In thousands)			
Total revenue	\$ 14	\$ 57	\$ 5	\$ 24
Operating loss	(3,008)	(3,117)	(3,875)	(1,543)
Net (loss) income	(17,259)	(31,573)	10,082	(18,159)
Net (loss) income per share, basic	\$ (0.41)	\$ (0.73)	\$ 0.21	\$ (0.35)
Net (loss) income per share, diluted	\$ (0.41)	\$ (0.73)	\$ 0.20	\$ (0.35)

EMISPHERE TECHNOLOGIES, INC.
NOTES TO FINANCIAL STATEMENTS — (Continued)

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, 2011 and 2010:

<u>December 31, 2011:</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
	(in thousands)	(in thousands)	(in thousands)
Derivative instruments	\$ 2,487	\$ 7,712	\$ 10,199
<u>December 31, 2010:</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
	(in thousands)	(in thousands)	(in thousands)
Derivative instruments	\$ 20,800	\$ 13,306	\$ 34,106

Level 3 financial instruments consist of common stock warrants common stock warrants and embedded conversion features. The fair value of the warrants and embedded conversion features that have exercise reset features are estimated using an adjusted Black-Scholes model. The Company computes valuations each quarter, using Black-Scholes model calculations for such warrants to account for the various possibilities that could occur due to various circumstances that could arise in connection with the contractual terms of said instruments. The Company weights each Black-Scholes model calculation based on its estimation of the likelihood of the occurrence of each circumstance and adjusts relevant Black-Scholes model input to calculate the value of the derivative at the reporting date.

The following table summarizes the changes in fair value of the Company's Level 3 financial instruments for the years ended December 31, 2011 and 2010:

	<u>Year Ended December 31,</u>	
	<u>2011</u>	<u>2010</u>
Beginning Balance	\$ 13,306	\$ 4,804
Issuance of warrants	—	1,858
Change in fair value	(5,594)	6,644
Ending Balance	<u>\$ 7,712</u>	<u>\$ 13,306</u>

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedure

The Company's senior management is responsible for establishing and maintaining a system of disclosure controls and procedures (as defined in Rule 13a-15 and 15d-15 under the Securities Exchange Act of 1934 (the "Exchange Act")) designed to ensure that information required to be disclosed by the Company in the reports that 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.

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 its Interim Chief Executive Officer and Chief Financial Officer, as of the end of December 31, 2011. Based on that evaluation, our Interim Chief Executive Officer and Chief Financial Officer has concluded that our disclosure controls and procedures are effective.

Changes in Internal Control over Financial Reporting

There have been no changes in the Company's system of internal controls over financial reporting during the three month period ended December 31, 2011 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Our management 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.

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 has 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, 2011.

McGladrey & Pullen LLP, our independent registered public accounting firm, has issued a report on the effectiveness of internal over financial reporting as of December 31, 2011, which report is included herein at page 52.

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.

ITEM 9B. OTHER INFORMATION

None.

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, as such term is defined in Regulation S-K under the Exchange Act, all of whom 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:

<u>Name</u>	<u>Age</u>	<u>Year Joined Emisphere</u>	<u>Position with the Company</u>
Michael R. Garone (1)(2)	53	2007	Vice President, Interim Chief Executive Officer, Chief Financial Officer and Corporate Secretary
M. Gary I. Riley DVM, PhD	69	2007	Vice President of Non-Clinical Development and Applied Biology
John D. Harkey, Jr.	51	2006	Class I Director
Timothy McNerney	51	2012	Class II Director
Jacob M. Plotsker	44	2012	Class II Director
Mark H. Rachesky, M.D.	53	2005	Class III Director
Timothy G. Rothwell	61	2009	Class I Director
Michael Weiser, M.D.	49	2005	Class III Director

- (1) On February 28, 2011, Michael V. Novinski resigned as a director of the Company and from his position as President and Chief Executive Officer of the Company.
- (2) On February 28, 2011, Michael R. Garone was appointed as Interim Chief Executive Officer of the Company.

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 2008. Mr. Garone previously served as Interim Chief Executive Officer and Chief Financial Officer of Astralis, Ltd. (OTCBB: ASTR.OB). Prior to that, Mr. Garone was with AT&T (NYSE: T) for 20 years, where he held several positions, including Chief Financial Officer of AT&T Alascom. Mr. Garone received an MBA from Columbia University and a BA in Mathematics from Colgate University. On February 28, 2011, Michael R. Garone was appointed as Interim Chief Executive Officer of the Company.

John D. Harkey, Jr. has been Director of the Company since April 2006. Mr. Harkey is Chairman and Chief Executive Officer of Consolidated Restaurant Operations, Inc. Mr. Harkey currently serves on the Board of Directors and Audit Committees of Loral Space & Communications, Inc. (NASDAQ:LORL), Energy Transfer Equity, LP (NYSE:ETE), Emisphere Technologies, Inc. (OTCQB:EMIS), serves on the Board of Directors of Leap Wireless International, Inc. (NASDAQ:LEAP), serves as Chairman of the Board of Regency Energy Partners, (NYSE: RGP), and serves on the Board of Directors of the Baylor Health Care System Foundation. He 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. with honors in finance and a J.D. from the University of Texas at Austin and a M.B.A. from Stanford University School of Business. Mr. Harkey's entrepreneurial background, his 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.

Timothy McNerney has been a Director of the Company since March 2012. Mr. McNerney is a principal at Two River and a Partner of Riverbank Capital Securities, Inc. From 1992 to March 2007, Mr. McNerney was a Managing Director of Paramount BioCapital, Inc. where he oversaw the overall distribution of Paramount's private equity product. Prior to 1992, Mr. McNerney was a research analyst focusing on the biotechnology industry at Ladenburg, Thalman & Co. Prior to that, Mr. McNerney held equity sales positions at Bear Stearns & Co. and Shearson Lehman Brothers, Inc. Mr. McNerney also worked in sales and marketing for Bristol-Myers

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Squibb. Mr. McNemey is currently Chairman of the Board of Directors of Insite Vision, Inc. (OTCBB: INSV), and is a member of the Board of Directors of ZIOPHARM, Inc. (NASDAQ: ZIOP), and Edgemont Pharmaceuticals, LLC. He formerly served on the Board of Directors of Manhattan Pharmaceuticals, Inc. (OTCBB: TGTX). Mr. McNemey received his B.S. in pharmacy from St. John's University at New York. He also completed a post-graduate residency at the New York University Medical Center in drug information systems. Mr. McNemey's knowledge of the pharmaceutical industry and capital markets, and affiliations with the financial community make him an asset to our Board of Directors.

Jacob M. Plotsker has been a director of the Company since March 2012. Mr. Plotsker is currently Senior Director, Commercial Operations for Teva Pharmaceuticals Women's Health Division. Prior to joining Teva in 2009, Mr. Plotsker was Senior Director, US and Global Marketing at Schering-Plough Corp (previously Organon BioSciences prior to being acquired by Schering-Plough Corp, which was subsequently acquired by Merck & Co., Inc.) where he was responsible for commercialization of marketed brands and launch strategy for brands in development. From 1990 to 2006, Mr. Plotsker served in various Finance and Marketing roles at Pfizer, Inc. including Director/Team Leader of the company's Antifungal Franchise. From 1989 to 1990, Mr. Plotsker was an accountant at Deloitte & Touche. Mr. Plotsker holds a Bachelor of Arts degree in Accounting & Information Systems from Queens College of the City University of New York, a Master of Business Administration in Marketing and Finance from New York University—Stern School of Business, and completed the Executive Development Program in General Management at the University of Chicago—Booth School of Business. Mr. Plotsker is President of the Board of Directors of Sharsheret, a nonprofit 501(c)3 organization providing support and resources to young women living with breast cancer. Mr. Plotsker's experiences in marketing and product commercialization in the pharmaceutical industry, and his affiliations with industry and healthcare related organizations 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 investment manager of various private investment funds that invest in inefficient market sectors, including special situation equities and distressed investments. Dr. Rachesky is currently the Non-Executive Chairman of the Board of Directors of Loral Space & Communications Inc. (NASDAQ:LORL), Lions Gate Entertainment Corp. (NYSE: LGF), Leap Wireless International, Inc. (NASDAQ: LEAP), and Telesat Canada, and is a member of the Board of Directors of Nationshealth, Inc. (formerly quoted on OTCBB:NHRX). 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 of the Company since November 2009. Mr. Rothwell is the former Chairman of Sanofi-Aventis U.S. From February 2007 to October 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 that 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 January 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, as a Trustee of the Corporate Council for America's Children at the Children's Health Fund, and on the Board of Directors of Agenus (NASDAQ: AGEN). Presently, he is Chairman of the Board of

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New American Therapeutics, and he serves on 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 currently founder and co-chairman of Actin Biomed, a New York based healthcare investment firm advancing the discovery and development of novel treatments for unmet medical needs. Prior to joining Actin Biomed, Dr. Weiser was the Director of Research at Paramount BioCapital where he was responsible for the scientific, medical and financial evaluation of biomedical technologies and pharmaceutical products under consideration for development. 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. He performed his post-graduate medical training in the Department of Obstetrics and Gynecology at New York University Medical Center. Dr. Weiser also completed a Postdoctoral Fellowship in the Department of Physiology and Neuroscience at New York University School of Medicine and received his B.A. in Psychology from University of Vermont. Dr. Weiser is a member of The National Medical Honor Society, Alpha Omega Alpha, American Society of Clinical Oncology, American Society of Hematology and Association for Research in Vision and Ophthalmology. In addition, Dr. Weiser has received awards for both academic and professional excellence and is published extensively in both medical and scientific journals. Dr. Weiser currently serves on the board of directors of Chelsea Therapeutics International, (NASDAQ: CHTP), and Ziopharm Oncology, Inc. (NASDAQ: ZIOP), as well as several privately held companies. Dr. Weiser formerly served on the Board of Directors of Manhattan Pharmaceuticals, Inc., (OTCBB: TGTX), Hana Biosciences, Inc. (currently know as Talon Therapeutics, Inc., OTCBB: TLON.OB), and Vioquest Pharmaceuticals, Inc. (VOQP:OTC US). Dr. Weiser has an M.D. and a Ph.D., and his scientific, business and financial experiences, as well as his knowledge of the healthcare industry, capital markets, pharmaceutical products and biomedical technology development make him an asset to our Board of Directors.

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 Exchange Act, and the rules of 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.

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 annual report 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.

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 bylaws. 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.

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 complementary to the existing Board members' skills; 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

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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.

The Audit Committee

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 Report is intended to be an inactive textual reference only.

The Audit Committee is currently comprised of John D. Harkey, Jr., Timothy G. Rothwell (chairman), 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 Listing Rules. The Board of Directors has determined that John D. Harkey, Jr. is an "Audit Committee financial expert" within the meaning of Item 407(d)(5) of Regulation S-K.

ITEM 11. EXECUTIVE COMPENSATION

Summary Compensation Table — 2011, 2010 and 2009

The following table sets forth information regarding the aggregate compensation Emisphere paid during 2011, 2010 and 2009 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 (6), President and CEO	2011	119,872	300,000(3)	—	—	3,000(4)	422,872
	2010	550,000	—	—	312,175	18,000(4)	880,175
	2009	550,000	—	—	239,759	18,000(4)	807,759
Michael R. Garone, Interim Chief Executive Officer, Chief Financial Officer and Corporate Secretary(7)	2011	243,214	—	—	27,600	—	270,814
	2010	241,374	—	—	19,445	—	260,819
	2009	234,313	—	—	10,642	—	244,955
M. Gary I. Riley DVM, PhD, VP of Non-Clinical Development and Applied Biology(5)	2011	280,225	—	—	18,400	—	298,625
	2010	278,104	—	—	19,445	—	297,549
	2009	269,969	—	—	10,642	8,000(5)	279,011
Nicholas J. Hart, VP, Strategy and Development(8)	2011	100,961	—	—	—	—	100,961
	2010	249,657	—	—	19,445	—	269,102
	2009	242,880	—	—	10,642	—	253,522

- (1) Only one individual other than the Principal Financial Officer served as an Executive Officer at the end of fiscal year 2011. As a result, the named executive officers, as defined in Regulation S-K, Item 402(a)(3), of the Company are as follows: Mr. Garone and Mr. Riley.
- (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. For assumptions used in the valuation of these awards please see Note 12 to our Financial Statements for the fiscal year ended December 31, 2011.

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- (3) Mr. Novinski was paid a bonus in 2011 for performance in 2009 and for the successful completion of a financing during 2009 which had previously been deferred 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) All other compensation for Mr. Riley represents payments for relocation expenses.
- (6) On February 28, 2011, Michael V. Novinski resigned as a director of the Company and from his position as President and Chief Executive Officer of the Company.
- (7) On February 28, 2011, Michael R. Garone was appointed as Interim Chief Executive Officer of the Company.
- (8) On May 3, 2011, Nicholas Hart resigned from his position as VP, Strategy and Development of the Company.

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 of Directors.

Employee salaries are benchmarked against Radford survey information. Radford is part of the Aon family brands. For more than 30 years, Radford has been a 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 contribution 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.

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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 2010 ranged from \$241,374 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 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. Compensation levels for 2009 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. In addition, the board of directors and Compensation Committee of the Company considered the approval by our stockholders, on an advisory basis, of the compensation of our named executive officers at our most recent annual meeting of stockholders on May 24, 2011 in determining that our executive compensation is in line with our competitive position in the marketplace and appropriately designed to reward executives for their contributions toward overall business performance that ultimately enhances stockholder value.

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 1,600,000 for President and Chief Executive Officer as indicated in the accompanying tables. Stock option grants to named executive officers in 2011 were made in connection with the annual compensation review. With the exception of grants made to the Company's former President and Chief Executive Officer, Michael V. Novinski, (described in "**Certain Relationships, Related Transactions and Director Independence**"), 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.

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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 Plan and 2007 Plan 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 review periodically the potential impacts of Section 162(m) in structuring and administering the Company's compensation programs.

Grants of Plan-Based Awards — 2011

The following table sets forth information regarding grants of plan-based awards in 2011:

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 R. Garone, VP, Interim Chief Executive Officer, Chief Financial Officer and Corporate Secretary(1)	7/15/2011	30,000(2)	\$ 0.92	27,600
M. Gary I. Riley DVM, PhD. VP, Non-Clinical Development and Applied Biology	7/15/2011	20,000(3)	\$ 0.92	18,400

- (1) On February 28, 2011, Michael R. Garone was appointed as Interim Chief Executive Officer of the Company.
- (2) 7,500 exercisable as of 7/15/2012 and 7/15/2013, respectively and 15,000 exercisable as of 7/15/2014
- (3) 5,000 exercisable as of 7/15/2012 and 7/15/2013, respectively and 10,000 exercisable as of 7/15/2014

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Outstanding Equity Awards at Fiscal Year-End — 2011

The following table sets forth information as to the number and value of unexercised options held by the Executive Officers as of December 31, 2011. There are no outstanding stock awards with executive officers:

Name	Number of Shares Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date
Michael R. Garone, VP,	60,000	15,000(1)		\$ 4.03	8/29/2017
Interim Chief Executive Officer,	10,000	5,000(2)	—	\$ 0.62	4/12/2019
Chief Financial Officer	5,000	15,000(3)	—	\$ 1.25	1/19/2020
and Corporate Secretary	—	30,000(4)	—	\$ 0.92	7/15/2021
M. Gary I. Riley DVM,	75,000	—		\$ 4.02	11/6/2017
PhD. VP, Non-Clinical	10,000	5,000(2)	—	\$ 0.62	4/12/2019
Development and Applied Biology	5,000	15,000(3)	—	\$ 1.25	1/19/2020
	—	20,000(5)	—	\$ 0.92	7/15/2021
Michael V. Novinski(6),	500,000	—	—	\$ 3.19	4/6/2017
President and CEO	500,000	—	—	\$ 6.38	4/6/2017
	300,000	—	—	\$ 0.93	5/15/2019
	200,000	100,000(1)	—	\$ 1.34	3/10/2020

- (1) 15,000 exercisable as of 8/29/2012,
- (2) 10,000 exercisable as of 4/12/2012
- (3) 5,000 exercisable as of 1/19/2012 and; 10,000 exercisable as of 1/19/2013
- (4) 7,500 exercisable as of 7/15/2012 and 7/15/2013, respectively and 15,000 exercisable as of 7/15/2014
- (5) 5,000 exercisable as of 7/15/2012 and 7/15/2013, respectively and 10,000 exercisable as of 7/15/2014
- (6) On February 28, 2011, Michael V. Novinski resigned as a director of the Company and from his position as President and Chief Executive Officer of the Company. In accordance with the terms of the Separation Agreement entered into on February 25, 2011, Mr. Novinski may exercise his vested stock options through April 6, 2012

Option Exercises and Stock Vested — 2011

There were no stock options exercised by Executive Officers during 2011.

Employment Agreements and Potential Payments Upon Termination or Change-in-Control

Employment Agreement with Michael V. Novinski, Former 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 “Novinski Employment Agreement”). The Novinski Employment Agreement was for a term of three years, renewable annually thereafter. Effective February 25, 2011, the Company and Mr. Novinski mutually agreed not to renew the Novinski Employment Agreement, and Mr. Novinski resigned his employment with the Company. Under the Novinski Employment Agreement, Mr. Novinski received 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, 2010, options to purchase 1,000,000 shares were vested. In addition, he was eligible for an annual

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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 (the "2009 Performance Bonus"); additionally Mr. Novinski received 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 at that time, 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 (the "2009 Financing Bonus"). 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.

In accordance with the Novinski Employment Agreement and the Separation and Release Agreement by and between the Company and Mr. Novinski dated as of February 25, 2011 (the "Separation Agreement"), the Company paid to Mr. Novinski the 2009 Performance Bonus and the 2009 Financing Bonus, accrued but unpaid vacation benefits, and the Company also agreed to pay its portion of Mr. Novinski's COBRA health benefits for a certain period of time as further set forth therein. Mr. Novinski owns incentive stock options to purchase an aggregate of 1,600,000 shares of common stock, of which 1,500,000 have vested. The Separation Agreement also provides that Mr. Novinski's 100,000 unvested stock options will continue to vest in accordance with Mr. Novinski's underlying option agreements and that Mr. Novinski may exercise his vested stock options through April 6, 2012. Under the terms of the Separation Agreement, Mr. Novinski has agreed to provide consulting services to the Company for a period of 18 months and has also agreed to release the Company and certain affiliated parties from all claims and liabilities under federal and state laws arising from his relationship with the Company.

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 (the "Riley Employment Agreement") by which, in the event that there is a Change in Control (as defined in the Riley Employment Agreement) 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.

Compensation Committee Interlocks and Insider Participation.

The current members of the Compensation Committee are Dr. Weiser and Dr. Rachesky. No member of the Compensation Committee is or has ever been an executive officer or employee of our company (or any of its subsidiaries) and no "compensation committee interlocks" existed during fiscal year 2011. For further information about our processes and procedures for the consideration and determination of executive and director compensation, please see "**Executive Compensation — Compensation Discussion and Analysis.**"

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 annual report is intended to be an inactive textual reference only.

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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.

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 Listing Rules 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 Listing Rules. The Board of Directors has determined that John D. Harkey, Jr. is an "Audit Committee financial expert" within the meaning of Item 407(d)(5) of Regulation S-K.

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On January 6, 2010, with the approval of the Audit Committee of the Company, the Company engaged McGladrey and Pullen, LLP (“M&P”) to act as its independent registered public accounting firm. During the year ended December 2009, and in the subsequent interim periods through January 5, 2012, neither the Company nor 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 financial position, results of operations and cash flows of the Company 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 2011 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 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.

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In making its decision to select M&P as Emisphere's independent registered public accounting firm for 2010, the Audit Committee considered 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, 2011 and be filed with the SEC.

The Members of the Audit Committee

Timothy G. Rothwell (Chairman)
John D. Harkey, Jr.
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 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 service on the Board of Directors.
- ☒ 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 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.

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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 — 2011

The table below represents the compensation paid to our non-employee directors during the year ended December 31, 2011:

<u>Name</u>	<u>Fees Earned or Paid in Cash (\$)</u>	<u>Stock Awards \$(1)</u>	<u>Option Awards \$(1)</u>	<u>All Other Compensation (\$)</u>	<u>Total (\$)</u>
John D. Harkey, Jr.	44,755	—	45,095	—	89,850
Mark H. Rachesky, M.D.	36,500	—	45,095	—	81,595
Timothy G. Rothwell	37,745	—	45,095	—	82,840
Michael Weiser, M.D.	45,000	—	45,095	—	90,095

- (1) The value listed in the above table represents the fair value of the options recognized as expense under FASB ASC Topic 718 during 2011, including unvested options granted before 2011 and those granted in 2011. Fair value is calculated as of the grant date using the Black-Scholes 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, 2011.

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The following table summarizes the aggregate number of option awards and stock awards held by each non-employee director at December 31, 2011.

Name	Option Awards				Stock Awards		
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares of Units of Stock That Vested Have not (#)	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	—	—
	50,000	25,000(1)	—	0.93	5/15/2019	—	—
	13,333	26,667(2)	—	1.20	9/16/2020	—	—
Mark H. Rachesky, M.D.	—	40,000(3)	—	1.53	9/19/2021	—	—
	7,000	—	—	3.76	4/20/2017	—	—
	7,000	—	—	3.79	8/8/2018	—	—
	50,000	25,000(1)	—	0.93	5/15/2019	—	—
	13,333	26,667(2)	—	1.20	9/16/2020	—	—
Michael Weiser, M.D.	—	40,000(3)	—	1.53	9/19/2021	—	—
	7,000	—	—	8.97	5/26/2016	—	—
	7,000	—	—	3.76	4/20/2017	—	—
	7,000	—	—	3.79	8/8/2018	—	—
	50,000	25,000(1)	—	0.93	5/15/2019	—	—
Timothy G. Rothwell	13,333	26,667(2)	—	1.20	9/16/2020	—	—
	—	40,000(3)	—	1.53	9/19/2021	—	—
	33,333	16,667(4)	—	0.70	11/5/2019	—	—
	13,333	26,667(2)	—	1.20	9/16/2020	—	—
	—	40,000(3)	—	1.53	9/19/2021	—	—

(1) 25,000 exercisable as of 5/15/2012

(2) 13,333 exercisable as of 9/16/2012 and 13,334 exercisable as of 9/16/2013.

(3) 13,333 exercisable as of 9/19/2012 and 9/19/2013, respectively and 13,334 exercisable as of 9/19/2014.

(4) 16,667 exercisable as of 11/5/2012.

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The following table provides information as of December 31, 2011 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. For a discussion of the material features of the Plans, please see Note 12 to the financial statements included in this Report.

<u>Plan Category</u>	<u>(a) Number of Securities to be Issued Upon Exercise of Outstanding Options</u>	<u>(b) Weighted Average Exercise Price of Outstanding Options</u>	<u>(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))</u>
Equity Compensation Plans Approved by Security Holders			
The Plans	3,079,630	\$ 2.87	1,399,618
Stock Incentive Plan for Outside Directors	79,000	9.27	—
Directors Deferred Compensation Plan	—	—	—
Equity Compensation Plans not approved by Security Holders(1)	<u>10,000</u>	<u>3.64</u>	<u>—</u>
Total	<u>3,168,630</u>	<u>\$ 3.03</u>	<u>1,399,618</u>

- (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.

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Common Stock Ownership by Directors and Executive Officers and Principal Holders

Directors and Executive Officers

The following table sets forth certain information, as of March 1, 2012, 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. 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, 2012 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:

<u>Name and Address(a)</u>	<u>Common Shares Beneficially Owned (b)</u>	<u>Common Shares Underlying Options</u>	<u>Percent Of Class</u>
Michael R. Garone (e)	190,000	90,000	*
Gary Riley, DVM, Ph.D.	125,500	105,000	*
Mark H. Rachesky, M.D.	38,374,708(c)	19,891,045(d)	47.6%
Timothy Rothwell	46,666	46,666	*
Michael Weiser, M.D.	90,746	84,333	*
John D. Harkey, Jr.	90,746	84,333	*
All directors and executive officers as a group	38,918,366	20,301,377	48.1%

* 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:

18,483,663 shares of common stock held for the accounts of the following entities:

6,226,054 shares held for the account of MHR Capital Partners Master Account LP (“Master Account”)

847,125 shares held for the account of MHR Capital Partners (100) LP (“Capital Partners (100)”)

3,240,750 shares held for the account of MHR Institutional Partners II LP (“Institutional Partners II”)

8,164,436 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.

7,724,863 shares of common stock that can be obtained by the following entities upon conversion of the Convertible Notes, including 276,871 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, 2011) through the date that is 60 days after March 1, 2012:

1,555,537 shares held by Master Account

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- 212,722 shares held by Capital Partners (100)
- 1,692,551 shares held by Institutional Partners II
- 4,264,053 shares held by Institutional Partners IIA
- 12,088,849 shares of common stock that can be obtained by the following entities upon exercise of warrants:
 - 2,704,898 shares held by Master Account
 - 368,479 shares held by Capital Partners (100)
 - 2,561,720 shares held by Institutional Partners II
 - 6,453,752 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
- 50,000 shares of common stock that can be obtained by Dr. Rachesky upon the exercise of currently vested stock options at a price of \$0.93 per share.
- 13,333 shares of common stock that can be obtained by Dr. Rachesky upon the exercise of currently vested stock options at a price of \$1.20 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) 7,724,863 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) 12,088,849 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) 77,333 shares of common stock that can be obtained by Dr. Rachesky upon the exercise of currently vested stock options.
- (e) On February 28, 2011, Michael R. Garone was appointed as Interim Chief Executive Officer of the Company.

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Principal Holders of Common Stock

The following table sets forth information regarding beneficial owners of more than five (5%) percent of the outstanding shares of Common Stock as of March 1, 2012:

<u>Name and Address</u>	<u>Number of Shares Beneficially Owned</u>	<u>Percent Of Class(a)</u>
Bai Ye Feng 16A Li Dong Building No.9 Li Yuen Street East Central, Hong Kong	6,184,389(b)	9.87%
Mark H. Rachesky, M.D. and various affiliated funds 40 West 57th Street, 24th Floor New York, NY 10019	38,374,708(c)	47.6%

- (a) Applicable percentage ownership is based on 60,687,478 shares of Common Stock outstanding as of March 1, 2012. 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, 2012 are deemed outstanding, while such shares are not deemed outstanding for purposes of computing percentage ownership of any other person.
- (b) Information based on Mr. Feng's Schedule 13-G/A filed with the SEC on February 14, 2012. Mr. Feng beneficially owns an aggregate of 6,184,389 shares of common stock, consisting of 3,908,738 shares of common stock held by Mr. Feng, warrants to purchase up to 1,981,651 shares of common stock held by Mr. Feng, and 294,000 shares of common stock owned of record by Lighthouse Consulting Limited, a Hong Kong company of which Mr. Feng is a principal and therefore may be deemed to be a beneficial holder of such shares.
- (c) Please refer to footnote "c" in the table under "Directors and Executive Officers" (above).

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 policies and procedures for the review, approval or ratification of any transaction required to be reported in our filings with the SEC. 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.

Transactions with MHR

Mark H. Rachesky, M.D. is a director and member of the Company's compensation committee and its governance and nominating committee. Dr. Rachesky is also the managing member of (i) MHR Advisors LLC ("Advisors"), which is the general partner of MHR Capital Partners Master Account LP ("Master Account") and MHR Capital Partners (100) LP ("Capital Partners 100"); (ii) MHR Institutional Advisors II LLC ("Institutional Advisors II"), which is the general partner of MHR Institutional Partners II LP ("Institutional Partners II") and MHR Institutional Partners IIA LP ("Institutional Partners IIA"); and (iii) MHR Fund Management LLC, ("Fund Management" and, together with Advisors, Institutional Advisors II, Master Account, Capital Partners 100, Institutional Partners II, and Institutional Partners IIA, "MHR") which is an affiliate of and has an investment management agreement with Master Account, Capital Partners 100, Institutional Partners II, and Institutional Partners IIA. In each of the transactions below with MHR that occurred during 2009, 2010, or 2011, the Company was advised by an independent committee of the Company's Board of Directors.

August 2009 Financing

On August 19, 2009, the Company entered into a Securities Purchase Agreement with MHR to sell 6,015,037 shares of common stock and warrants to purchase 3,729,323 shares of common stock for gross proceeds of \$4,000,000. Each unit, consisting of one share of common stock and a warrant to purchase 0.62 of a share of common stock, was sold for a purchase price of \$0.665. The warrants to purchase additional shares are exercisable at an exercise price of \$0.70 per share and will expire on August 21, 2014. For a more detailed discussion, please see Notes 8 and 9 to our Financial Statements included herein.

June 2010 Notes and Warrants

In connection with the Company's agreement with Novartis entered in June 2010 (the "Novartis Agreement") the Company, Novartis and MHR entered into a non-disturbance agreement (the "Non-Disturbance Agreement"), pursuant to which MHR agreed to limit certain rights and courses of action that it would have available to it as a secured party under its Senior Secured Term Loan Agreement and Pledge and Security Agreement with the Company (collectively, the "Loan and Security Agreement"). Additionally, Novartis and MHR entered into a license agreement pursuant to which MHR agreed to grant a license to Novartis upon the occurrence of certain events and subject to satisfaction of certain conditions. MHR also consented to the Company entering into the Novartis Agreement, which consent was required under the Loan and Security Agreement, and agreed to enter into an agreement comparable to the Non-Disturbance Agreement at some point in the future in connection with another potential Company transaction (the "Future Transaction Agreement"). For a more detailed discussion, please see Notes 8 and 9 to our Financial Statements included herein.

In consideration of the agreements and consent provided by MHR described in the foregoing paragraph, the Company entered into an agreement with MHR (the "MHR Letter Agreement") pursuant to which the Company agreed to reimburse MHR for its legal expenses incurred up to \$500,000 in connection with the agreements entered into in connection with the Novartis transaction and up to \$100,000 in connection with the Future Transaction Agreement. These reimbursements were paid in the form of non-interest bearing promissory notes for \$500,000 and \$100,000 issued to MHR on June 4, 2010. Pursuant to the MHR Letter Agreement, the

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Company also granted to MHR warrants to purchase 865,000 shares of its common stock, with an exercise price of \$2.90 per share and an expiration date of August 21, 2014. For a more detailed discussion, please see Notes 8 and 9 to our Financial Statements included herein.

July 2010 Promissory Notes

On July 29, 2010, in consideration for \$500,000 in bridge financing funds provided to the Company, we issued to MHR promissory notes with an aggregate principal amount of \$525,000 (the "July 2010 MHR Notes"). The July 2010 MHR Notes provided for an interest rate of 15% per annum, and were due and payable on October 27, 2010. During the quarter ended September 30, 2010, certain conditions caused the maturity date of the July 2010 MHR Notes to accelerate, and the July 2010 MHR Notes were accordingly paid off. See Note 8 to our Financial Statements included herein for further discussion.

August 2010 Financing

On August 25, 2010, the Company entered into a securities purchase agreement with MHR (the "August 2010 MHR Financing") pursuant to which the Company agreed to sell an aggregate of 3,497,528 shares of its common stock and warrants to purchase a total of 2,623,146 additional shares of its common stock for total gross proceeds of \$3,532,503. Each unit, consisting of one share of common stock and a warrant to purchase 0.75 shares of common stock, was sold at a purchase price of \$1.01. The warrants to purchase additional shares are exercisable at a price of \$1.26 per share and will expire on August 26, 2015. On the same date, the Company also entered into a securities purchase agreement with certain institutional investors to sell common stock and warrants for total gross proceeds of \$3,532,503 (collectively, with the August 2010 MHR Financing, the "August 2010 Financing").

In connection with the August 2010 Financing, the Company entered into a waiver agreement with MHR, pursuant to which MHR waived certain anti-dilution adjustment rights under its 11% senior secured notes (the "MHR Convertible Notes") and warrants issued by the Company to MHR in September 2006 that would otherwise have been triggered by the financings described above. As consideration for such waiver, the Company issued to MHR a warrant to purchase 975,000 shares of common stock and agreed to reimburse MHR for 50% of its legal fees up to a maximum reimbursement of \$50,000. The terms of such warrant are identical to the warrants issued to MHR in the August 2010 MHR Financing transaction described above. For further discussion, see Notes 8 and 9 to our Financial Statements included herein.

July 2011 Financing

On June 30, 2011, the Company entered into a purchase agreement with MHR, pursuant to which, on July 6, 2011, it sold an aggregate of 4,300,438 shares of its common stock and warrants to purchase a total of 3,010,307 shares of its common stock for gross proceeds, before deducting fees and expenses and excluding the proceeds, if any, from the exercise of the MHR Warrants of \$3,749,981.94. As part of the July 2011 Financing, the Company entered into the a waiver agreement with MHR, pursuant to which MHR waived certain anti-dilution adjustment rights under the MHR Convertible Notes and certain warrants issued by the Company to MHR that would otherwise have been triggered by the financing with other institutional investors described above. As consideration for such waiver, the Company issued to MHR warrants to purchase 795,000 shares of common stock and agreed to reimburse MHR for up to \$25,000 of its legal fees. Each unit, consisting of one share of common stock and a warrant to purchase 0.7 shares of common stock, were sold at a purchase price of \$0.872. The warrants are exercisable at an exercise price of \$1.09 per share and will expire July 6, 2016.

Ongoing Obligations Under Convertible Notes and Warrants

The MHR Convertible Notes contain provisions related to anti-dilution and redemption rights. In addition, MHR has certain rights regarding election of directors, participation in future equity financings and other related matters, which rights are set forth in the Company's certificate of incorporation and bylaws, as amended. Additionally, the Company issued warrants to purchase common stock to MHR in 2006 and 2007, which are still outstanding. These warrants provide for anti-dilution protection, and the fair value of the warrants is estimated at the end of each quarterly reporting period using Black-Sholes models. See Notes 8 and 9 to our Financial Statements included herein for a further discussion of MHR's rights under the MHR Convertible Notes and warrants.

Transaction with Bai Ye Feng

Bai Ye Feng has been the beneficial owner of more than five (5%) percent of the outstanding shares of Common Stock since the August 2010 Financing. In the July 2011 Financing, Mr. Feng purchased 688,073 shares of Common Stock and warrants to purchase 481,651 shares of Common Stock, for an aggregate purchase price of \$600,000. The warrants are exercisable at an exercise price of \$1.09 per share and will expire July 6, 2016. The total dollar amount of the July 2011 Financing was \$3,749,982.

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 Mr. John D. Harkey, Jr., Dr. Mark H. Rachesky, Mr. Timothy G. Rothwell, and Dr. Michael Weiser are independent directors within the meaning of Rule 4200 of the NASDAQ Marketplace Rules. Until the resignation of Michael V. Novinski, the sole non-independent director, on February 28, 2011, the independent directors met 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. Novinski. 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.

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.

The Audit Committee is currently comprised of Mr. Rothwell (chairman), Mr. Harkey and Dr. Weiser. 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 Marketplace Rules. The Board of Directors has determined that Mr. Harkey is an "Audit Committee financial expert," within the meaning of Item 407(d)(5) 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. All members of the Compensation Committee are independent within the meaning of Rule 4200 of the NASDAQ Marketplace Rules, 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. All members of the Governance and Nominating Committee are independent within the meaning of Rule 4200 of the NASDAQ Marketplace Rules. The Governance and Nominating Committee's responsibilities and duties are set forth in the Governance and Nominating Committee charter on our website.

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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 2011:

<u>Name</u>	<u>Board</u>	<u>Audit</u>	<u>Compensation</u>	<u>Governance and Nominating</u>
Michael V. Novinski(1)	X			
Mark H. Rachesky, M.D.(2)	X		X	X
Michael Weiser, M.D.(2)	X	X	X*	X*
John D. Harkey, Jr.(3)	X	X*		
Timothy G. Rothwell(3)	X	X		

* Chair

- (1) On February 28, 2011, Michael V. Novinski resigned as a director of the Company and from his position as President and Chief Executive Officer of the Company.
- (2) Class III directors: Term as director is expected to expire in 2014.
- (3) Class I directors: Term as director is expected to expire in 2012.

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 its 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 2011 fiscal year, our Board of Directors held 5 meetings. With the exception of Mr. Rothwell, who attended 5 of 6 Audit Committee meetings held during 2011, each director attended 100 percent of the aggregate number of Board of Directors meetings and committee meetings of which he was a member that were held during the period of his service as a director.

The Audit Committee met 6 times during the 2011 fiscal year.

The Compensation Committee met 2 times during the 2011 fiscal year.

The Governance and Nominating Committee met 2 times during the 2011 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.

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ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table presents fees for professional audit services rendered by M&P for the audit of our annual financial statements for the years ended December 31, 2011 and December 31, 2010, respectively, and fees billed for other services rendered by M&P during the respective periods.

	2011	2010
Type of Fees		
Audit Fees(1)	\$243,400	\$231,000
Audit-Related Fees(2)	42,500	8,000
Tax Fees(3)	—	23,300
	<u>\$285,900</u>	<u>\$262,300</u>

- (1) Audit fees for 2011 and 2010 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) Audit related fees are for services related to our registration statement on Form S-1.
- (3) Tax consulting fees.

The Audit Committee has determined that the non-audit services provided by M&P during 2011 did not impair their independence. All decisions regarding selection of independent registered public accounting firm 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, 2012.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) *Financial Statements*

A list of the financial statements filed as a part of this report appears on page 50.

(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 110 thru 116.

(b) See Exhibits listed under the heading "Exhibit Index" set forth on page 110.

(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.

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 R. Garone
Michael R. Garone
Interim Chief Executive Officer and Chief Financial Officer

Date: March 21, 2012

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

<u>Name and Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Michael R. Garone</u> Michael R. Garone	(principal executive officer and principal financial and accounting officer)	March 21, 2012
<u>/s/ John D. Harkey, Jr.</u> John D. Harkey, Jr.	Director	March 21, 2012
<u>/s/ Tim McNemey</u> Tim McNemey	Director	March 21, 2012
<u>/s/ Jacob M. Plotsker</u> Jacob M. Plotsker	Director	March 21, 2012
<u>/s/ Mark H. Rachesky, M.D.</u> Mark H. Rachesky, M.D.	Director	March 21, 2012
<u>/s/ Timothy Rothwell</u> Timothy Rothwell	Director	March 21, 2012
<u>/s/ Michael Weiser, M.D.</u> Michael Weiser, M.D.	Director	March 21, 2012

EXHIBIT INDEX

<u>Exhibit</u>		<u>Incorporated by Reference (1)</u>
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 23, 2005	A, L
3.2(b)	Amendment to the Amended By-Laws of Emisphere Technologies, Inc., effective as of September 11, 2007	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)	1995 Non-Qualified Stock Option Plan, as amended	B (2)
10.4(b)	Amendment to the 1995 Non-Qualified Stock Option Plan	Q (2)
10.5(a)	Emisphere Technologies, Inc. 2000 Stock Option Plan	G (2)
10.5(b)	Amendment to Emisphere Technologies, Inc. 2000 Stock Option Plan	Q (2)
10.6(a)	Emisphere Technologies, Inc. 2002 Broadbased Stock Option Plan	H (2)
10.6(b)	Amendment to Emisphere Technologies, Inc. 2002 Broadbased Stock Option Plan	Q (2)
10.7	Emisphere Technologies, Inc. 2007 Stock Award and Incentive Plan	R (2)
10.8	Amended and Restated Employment Agreement, dated April 28, 2005, between Michael M. Goldberg and Emisphere Technologies, Inc.	N (2)
10.9	Employment Agreement dated April 6, 2007 between Michael V. Novinski and Emisphere Technologies, Inc.	S (2)
10.10	Nonqualified Stock Option Agreement dated April 6, 2007 between Michael V. Novinski and Emisphere Technologies, Inc.	R (2)
10.11	Form of Nonqualified Stock Option Agreement	R (2)
10.12	Form of Incentive Stock Option Agreement	R (2)
10.13	Form of Restricted Stock Option Agreement	R (2)
10.14	Research Collaboration and Option Agreement dated as of December 3, 1997 between Emisphere Technologies, Inc. and Novartis Pharma AG	D (3)
10.15	License Agreement dated as of September 23, 2004 between Emisphere Technologies, Inc. and Novartis Pharma AG, as amended on November 4, 2005	J (3)
10.16(a)	Research Collaboration Option and License Agreement dated December 1, 2004 by and between Emisphere Technologies, Inc. and Novartis Pharma AG	J (3)
10.16(b)	Convertible Promissory Note due December 1, 2009 issued to Novartis Pharma AG	J (3)
10.16(c)	Registration Rights Agreement dated as of December 1, 2004 between Emisphere Technologies, Inc. and Novartis Pharma AG	J
10.17	Development and License Agreement between Genta Incorporated and Emisphere Technologies, Inc., dated March 22, 2006	O
10.18(a)	Senior Secured Loan Agreement between Emisphere Technologies, Inc. and MHR, dated September 26, 2005, as amended on November 11, 2005	L

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<u>Exhibit</u>		<u>Incorporated by Reference (1)</u>
10.18(b)	Investment and Exchange Agreement between Emisphere Technologies, Inc. and MHR, dated September 26, 2005	L
10.18(c)	Pledge and Security Agreement between Emisphere Technologies, Inc. and MHR, dated September 26, 2005	L
10.18(d)	Registration Rights Agreement between Emisphere Technologies, Inc. and MHR, dated September 26, 2005	L
10.18(e)	Amendment No. 1 to the Senior Secured Term Loan Agreement, dated November 11, 2005	M
10.18(f)	Form of 11% Senior Secured Convertible Note	L
10.18(g)	Form of Amendment to 11% Senior Secured Convertible Note	R
10.19	Warrant dated as of September 21, 2006 between Emisphere Technologies, Inc. and MHR Institutional Partners IIA LP	Q
10.20	Warrant dated as of September 21, 2006 between Emisphere Technologies, Inc. and MHR Institutional Partners II LP	Q
10.21	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
10.22	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and SF Capital Partners, Ltd.	W
10.23	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and Option Opportunities Corp.	W
10.24	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and Option Opportunities Corp.	W
10.25	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and Montaur Capital/Platinum Life Montaur Life Sciences Fund I LLC	W
10.26	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and MHR Institutional Partners II LP	W
10.27	Warrant dated as of August 22, 2007 between Emisphere Technologies, Inc. and MHR Institutional Partners IIA LP	W
10.28	Emisphere Technologies, Inc.- Mankind Corporation Patent Purchase Agreement, dated February 8, 2008	X
10.29	Development and License Agreement, dated as of June 21, 2008, between Emisphere Technologies, Inc. and Novo Nordisk AS.	Y (3)
10.30(a)	Lease Termination Agreement, date April 29,2009, between Emisphere Technologies, Inc. and BMR-LANDMARK AT EASTVIEW LLC	Z
10.30(b)	First Amendment to Lease Termination Agreement, dated March 17, 2010, between Emisphere Technologies, Inc. and BMR-Landmark at Eastview LLC	NN
10.31	Form of Non-Employee Director Non-Qualified Stock Option Agreement	AA (2)
10.32	Placement Agency Agreement dated as of August 19, 2009, Between Emisphere Technologies, Inc. and Rodman & Renshaw, LLC	BB
10.33	Securities Purchase Agreement dated as of August 19, 2009, between Emisphere Technologies and the Purchasers named therein	BB
10.34	Securities Purchase Agreement dated as of August 19, 2009, between Emisphere Technologies and MHR Fund Management, LLC	BB
10.35	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and MHR Capital Partners Master Account LP	CC

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<u>Exhibit</u>		<u>Incorporated by Reference (1)</u>	
10.36	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and MHR Capital Partners (100) LP	CC	
10.37	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and MHR Institutional Partners II LP	CC	
10.38	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and MHR Institutional Partners IIA LP	CC	
10.39	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and Rodman & Renshaw, LLC	CC	
10.40	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and Benjamin Bowen	CC	
10.41	Warrant dated as of August 21, 2009 between Emisphere Technologies, Inc. and Noam Rubinstein	CC	
10.42	Warrant adjustment notice between Emisphere Technologies, Inc. and Elan International Services, Ltd. dated October 20, 2009	CC	
10.43	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	EE	
10.44	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	EE	
10.45	Form of Incentive Stock Option Agreement under the Emisphere Technologies, Inc. 2007 Stock Award and Incentive Plan	FF	
10.46	Form of Non-Qualified Stock Option Agreement under the Emisphere Technologies, Inc. 2007 Stock Award and Incentive Plan	FF	
10.47	Letter Agreement by and between Emisphere Technologies, Inc. and MHR Institutional Partners IIA LP, dated June 8, 2010	GG	
10.48	Form of Emisphere Technologies, Inc. Reimbursement Note	GG	
10.49	Form of Emisphere Technologies, Inc. Second Reimbursement Note	GG	
10.50	Research Master Agreement and Amendment by and between Emisphere Technologies, Inc. and Novartis Pharma AG, effective as of June 4, 2010	HH	(3)
10.51	Securities Purchase Agreement by and among Emisphere Technologies, Inc. and the Buyers named therein, dated August 25, 2010	II	
10.52	Securities Purchase Agreement by and among Emisphere Technologies, Inc. and the MHR Buyers named therein, dated August 25, 2010	II	
10.53	Waiver Agreement, by and among Emisphere Technologies, Inc. and MHR, dated August 25, 2010	II	
10.54	Registration Rights Agreement by and among Emisphere Technologies, Inc. and the Buyers named therein, dated August 26, 2010	JJ	
10.55	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and Bai Ye Feng	JJ	
10.56	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and Anson Investments Master Fund LP	JJ	
10.57	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and Iroquois Master Fund, Ltd.	JJ	
10.58	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and Hudson Bay Master Fund Ltd.	JJ	
10.59	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and Cranshire Capital, L.P.	JJ	

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<u>Exhibit</u>		<u>Incorporated by Reference (1)</u>	
10.60	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and Freestone Advantage Partners, LP	JJ	
10.61	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and MHR Capital Partners Master Account LP	JJ	
10.62	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and MHR Capital Partners (100) LP	JJ	
10.63	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and MHR Institutional Partners II LP	JJ	
10.64	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and MHR Institutional Partners IIA LP	JJ	
10.65	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and MHR Capital Partners Master Account LP	JJ	
10.66	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and MHR Capital Partners (100) LP	JJ	
10.67	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and MHR Institutional Partners II LP	JJ	
10.68	Warrant dated as of August 26, 2010, between Emisphere Technologies, Inc. and MHR Institutional Partners IIA LP	JJ	
10.69	Development and License Agreement, dated December 20, 2010, between Emisphere Technologies, Inc. and Novo Nordisk A/S	KK	(3)
10.70	Securities Purchase Agreement, dated June 30, 2011, by and among Emisphere Technologies, Inc. and the Buyers named therein.	LL	
10.71	Securities Purchase Agreement, dated June 30, 2011, by and among Emisphere Technologies, Inc. and the MHR Buyer.	LL	
10.72	Waiver Agreement, dated June 30, 2011, by and among Emisphere Technologies, Inc. and MHR.	LL	
10.73	Registration Rights Agreement by and among Emisphere Technologies, Inc. and the Buyers named therein, dated July 6, 2011	MM	
10.74	Warrant A-54 dated as of July 6, 2011, between Emisphere Technologies, Inc. and EOS Holdings LLC	MM	
10.75	Warrant A-55 dated as of July 6, 2011, between Emisphere Technologies, Inc. and Kingsbrook Opportunities Master Fund LP	MM	
10.76	Warrant A-56 dated as of July 6, 2011, between Emisphere Technologies, Inc. and Bai Ye Feng	MM	
10.77	Warrant A-57 dated as of July 6, 2011, between Emisphere Technologies, Inc. and Cranshire Capital, L.P.	MM	
10.78	Warrant A-58 dated as of July 6, 2011, between Emisphere Technologies, Inc. and HF H VICTOR UW VICTOR ART 7	MM	
10.79	Warrant A-59 dated as of July 6, 2011, between Emisphere Technologies, Inc. and Freestone Advantage Partners, LP	MM	
10.80	Warrant A-60 dated as of July 6, 2011, between Emisphere Technologies, Inc. and Iroquois Master Fund Ltd.	MM	
10.81	Warrant A-61 dated as of July 6, 2011, between Emisphere Technologies, Inc. and Shipman & Goodwin LLP Profit Sharing Trust FBO James T. Betts	MM	
10.82	Warrant A-62 dated as of July 6, 2011, between Emisphere Technologies, Inc. and Son Nam Nguyen	MM	

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<u>Exhibit</u>		<u>Incorporated by Reference (1)</u>
10.83	Warrant A-63 dated as of July 6, 2011, between Emisphere Technologies, Inc. and Pine Lodge Capital Company Ltd.	MM
10.84	Warrant A-64 dated as of July 6, 2011, between Emisphere Technologies, Inc. and Huaidong Wang	MM
10.85	Warrant A-65 dated as of July 6, 2011, between Emisphere Technologies, Inc. and Anson Investments Master Fund LP	MM
10.86	Warrant A-66 dated as of July 6, 2011, between Emisphere Technologies, Inc. and MHR Capital Partners Master Account LP	MM
10.87	Warrant A-67 dated as of July 6, 2011, between Emisphere Technologies, Inc. and MHR Capital Partners (100) LP	MM
10.88	Warrant A-68 dated as of July 6, 2011, between Emisphere Technologies, Inc. and MHR Institutional Partners II LP	MM
10.89	Warrant A-69 dated as of July 6, 2011, between Emisphere Technologies, Inc. and MHR Institutional Partners IIA LP	MM
10.90	Warrant A-70 dated as of July 6, 2011, between Emisphere Technologies, Inc. and MHR Capital Partners Master Account LP	MM
10.91	Warrant A-71 dated as of July 6, 2011, between Emisphere Technologies, Inc. and MHR Capital Partners (100) LP	MM
10.92	Warrant A-72 dated as of July 6, 2011, between Emisphere Technologies, Inc. and MHR Institutional Partners II LP	MM
10.93	Warrant A-73 dated as of July 6, 2011, between Emisphere Technologies, Inc. and MHR Institutional Partners IIA LP	MM
10.94	License Agreement, dated March 8, 2000, by and between Emisphere Technologies, Inc. and Novartis Pharma AG	NN (3)
10.95	Draft Offer Letter Pending Emisphere Compensation Committee of the Board of Directors Approval, dated September 27, 2007, from Emisphere Technologies, Inc. to Gary I. Riley	NN (2)
14.1	Emisphere Technologies, Inc. Code of Business Conduct and Ethics	I
23.1	Consent of Independent Registered Public Accounting Firm — McGladrey & Pullen, LLP	*
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	*
32.1	Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	**
101.INS	XBRL Instance Document.	***
101.SCH	XBRL Taxonomy Extension Schema Document.	***
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.	***
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.	***
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.	***
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.	***
*	Filed herewith	
**	Furnished herewith	
***	Submitted electronically herewith. Users of this data are advised that, pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not filed or part of a registration statement or prospectus for	

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purposes of Sections 11 or 12 of the Securities Act of 1933 or Section 18 of the Securities Exchange Act of 1934, and are otherwise not subject to liability under these sections.

- (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 (SEC File No. 000-17758)
 - B. Annual Report on Form 10-K for the fiscal year ended July 31, 1995 (SEC File No. 000-17758)
 - C. Annual Report on Form 10-K for the fiscal year ended July 31, 1997 (SEC File No. 000-17758)
 - D. Quarterly Report on Form 10-Q for the quarterly period ended October 31, 1997 (SEC File No. 000-17758)
 - E. Annual Report on Form 10-K for the fiscal year ended July 31, 1998 (SEC File No. 000-17758)
 - F. Annual Report on Form 10-K for the fiscal year ended July 31, 1999 (SEC File No. 000-17758)
 - G. Annual Report on Form 10-K for the fiscal year ended July 31, 2000 (SEC File No. 000-17758)
 - H. Registration statement on Form S-8 dated and filed on November 27, 2002 (SEC File No. 333-101525)
 - I. Annual Report on Form 10-K for the year ended December 31, 2003 (SEC File No. 000-17758)
 - J. Registration on Form S-3/A dated and filed February 1, 2005 (SEC File No. 333-117230)
 - K. Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2005 (SEC File No. 000-17758)
 - L. Current Report on Form 8-K, filed September 30, 2005 (SEC File No. 000-17758)
 - M. Current Report on Form 8-K, filed November 14, 2005 (SEC File No. 000-17758)
 - N. Current Report on Form 8-K filed May 4, 2005 (SEC File No. 000-17758)
 - O. Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2006 (SEC File No. 000-17758)
 - P. Current Report on Form 8-K, filed April 10, 2006 (SEC File No. 000-17758)
 - Q. Annual Report on Form 10-K for the fiscal year ended December 31, 2006 (SEC File No. 000-17758)
 - 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
 - EE. Annual Report on Form 10-K for the fiscal year ended December 31, 2009
 - FF. Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2010
 - GG. Current Report on Form 8-K, filed June 8, 2010
 - HH. Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2010
 - II. Current Report on Form 8-K, filed August 25, 2010
 - JJ. Registration Statement on Form S-1, filed on September 15, 2010 (SEC File No. 333-169385)
 - KK. Current Report on Form 8-K, filed on December 21, 2010
 - LL. Current Report on Form 8-K, filed on June 30, 2011 (SEC File No. 000-17758)
 - MM. Registration Statement on Form S-1, filed on July 26, 2011 (SEC File No. 333-175794).

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- NN. Amendment No. 1 on Form 10-K/A, filed January 19, 2012, to Annual Report on Form 10-K for the fiscal year ended December 31, 2010, originally filed on March 31, 2011
- (2) Management contract or compensatory plan or arrangement
 - (3) Confidential treatment has been granted for the redacted portions of this agreement. A complete copy of this agreement, including the redacted portions, has been filed separately with the Securities and Exchange Commission.
 - (4) Confidential treatment has been requested for the redacted portions of this agreement. A complete copy of this agreement, including the redacted portions, has been filed separately with the Securities and Exchange Commission.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in Registration Statements (Nos. 33-44516, 33-46026, 33-62226, 33-88598, 333-02751, 333-29981, 333-52457, 333-75065, 333-34188, 333-54200, 333-101525, 333-127582, 333-145257 and 333-145258) on Forms S-8 and (Nos. 333-117230, 333-129889, 333-129891, 333-136465, 333-145524, 333-133087, 333-125180, 333-32374, 333-30358, 333-89073, 333-52461, 333-23423, 333-19815, 333-02323, 333-146212 and 333-161425) on Forms S-3 of Emisphere Technologies, Inc. of our report dated March 21, 2012, relating to our audits of the financial statements at December 31, 2011 and 2010 and for each of the three years in the period ended December 31, 2011 and internal control over financial reporting at December 31, 2011, which appear in this Annual Report on Form 10-K of Emisphere Technologies, Inc. for the year ended December 31, 2011. Our report dated March 21, 2012, relating to the financial statements, includes an emphasis paragraph relating to an uncertainty as to the Company's ability to continue as a going concern.

/s/ McGladrey & Pullen, LLP

New York, New York
March 21, 2012

**CERTIFICATION PURSUANT TO
RULE 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Michael R. Garone, certify that:

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

Date: March 21, 2012

/s/ Michael R. Garone

Michael R. Garone
Interim Chief Executive Officer and Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Emisphere Technologies, Inc. (the "Company") on Form 10-K for the year ending December 31, 2011 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael R. Garone, as Interim Chief Executive Officer and Chief Financial Officer of the Company certify, pursuant to and for the purpose of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 21, 2012

/s/ Michael R. Garone

Michael R. Garone

Interim Chief Executive and Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to Emisphere Technologies, Inc. and will be retained by Emisphere Technologies, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

