HEMISPHERX BIOPHARMA INC
Form 10-K
March 17, 2008

FORM 10-K
SECURITIES AND EXCHANGE COMMISSION
x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2007
OR
o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____
Commission File No. 1-13441

HEMISPHERX BIOPHARMA, INC.
(Exact name of registrant as specified in its charter)

Delaware	52-0845822
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
1617 JFK Boulevard Philadelphia, Pennsylvania	19103
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (215) 988-0080

Securities registered pursuant to Section 12(b) of the Act:

Common Stock, $.001 par value

Securities registered pursuant to Section 12(g) of the Act:
(Title of Each Class)
NONE

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting

company" in Rule 12b-2 of the Exchange Act. (Check one): o Large accelerated filer o Accelerated filer x Non-accelerated filer o Smaller Reporting Company o

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

The aggregate market value of Common Stock held by non-affiliates at June 30, 2007, the last business day of the registrant's most recently completed second fiscal quarter, was $94,412,529.

The number of shares of the registrant's Common Stock outstanding as of March 3, 2008 was 73,886,081.

DOCUMENTS INCORPORATED BY REFERENCE: None.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Annual Report on Form 10-K (the "Form 10-K"), including statements under "Item 1. Business," "Item 1A. Risk Factors," "Item 3. Legal Proceedings" and "Item 7. Management's Discussion and Analysis of Financial Condition and Result of Operations," constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995 (collectively, the "Reform Act"). Certain, but not necessarily all, of such forward-looking statements can be identified by the use of forward-looking terminology such as "believes," "expects," "may," "will," "should," or "anticipates" or the negative thereof or other varia thereon or comparable terminology, or by discussions of strategy that involve risks and uncertainties. All statements other than statements of historical fact included in this Form 10-K regarding our financial position, business strategy and plans or objectives for future operations are forward-looking statements. Without limiting the broader description of forward-looking statements above, we specifically note that statements regarding potential drugs, their potential therapeutic effect, the possibility of obtaining regulatory approval, our ability to manufacture and sell any products, market acceptance or our ability to earn a profit from sales or licenses of any drugs or our ability to discover new drugs in the future are all forward-looking in nature.

Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Hemispherx Biopharma, Inc. and its subsidiaries (collectively, "Hemispherx", "we or "us") to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements and other factors referenced in this Form 10-K. We do not undertake and specifically decline any obligation to publicly release the results of any revisions which may be made to any forward-looking statement to reflect events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events.

PART I

ITEM 1. Business.

GENERAL

We are a biopharmaceutical company engaged in the clinical development, manufacture, marketing and distribution of new drug therapies based on natural immune system enhancing technologies for the treatment of viral and immune based chronic disorders. The Company was founded in the early 1970s doing contract research for the National Institutes of Health. Since that time, we have established a strong foundation of laboratory, pre-clinical, and clinical data with respect to the development of nucleic acids to enhance the natural antiviral defense system of the human body and to aid the development of therapeutic products for the treatment of certain chronic diseases. We have three domestic subsidiaries BioPro Corp., BioAegean Corp., and Core BioTech Corp., all of which are incorporated in Delaware and are dormant. Our foreign subsidiaries include Hemispherx Biopharma Europe N.V./S.A. established in Belgium in 1998 and Hemispherx Biopharma Europe S.A. incorporated in Luxembourg in 2002. Hemispherx Biopharma Europe N.V./S.A. has little or no activity. Hemispherx Biopharma Europe S. A. was dissolved as of December 2006.

Our current strategic focus is derived from four applications of our two core pharmaceutical technology platforms Ampligen® and Alferon N Injection®. The commercial focus for Ampligen includes application as a treatment for Chronic Fatigue Syndrome (CFS) and as a vaccine enhancer (adjuvant) for both therapeutic and preventative vaccine development. Alferon N Injection® is an FDA approved product with an indication for refractory or recurring genital warts. Alferon LDO (Low Dose Oral) is an application currently under early stage development targeting influenza and viral diseases both as an adjuvant as well as a single entity anti-viral.

Ampligen® is an experimental drug currently undergoing clinical development for the treatment of Myalgic Encephalomyelitis/Chronic Fatigue Syndrome ("ME/CFS" or "CFS"), and HIV. In August 2004, we completed a Phase III clinical trial ("AMP 516") treating over 230 ME/CFS patients with Ampligen® and are presently in the registration process for a new drug application ("NDA") with the Food and Drug Administration ("FDA"). Over its developmental history, Ampligen® has received various designations, including Orphan Drug Product Designation (FDA), Emergency (compassionate) Cost Recovery Sales Authorization (FDA) and "promising" clinical outcome recognition based on the evaluation of certain summary clinical reports (AHRQ, Agency Health Research Quality). An NDA for treatment of CFS was filed on October 10, 2007. On December 3, 2007 a refusal to file (RTF) letter was received because the application was deemed "not substantially complete". A written response was developed and submitted to the FDA addressing 14 pre-clinical and clinical questions. Ampligen represents the first drug in class of RNA (nucleic acid) molecules to apply for NDA review.

The Status of our initiative for Ampligen as an adjuvant for preventative vaccine development includes pre-clinical studies in seasonal and pandemic influenza for intranasal administration being conducted by Japan's National Institute for Infectious Diseases. A three year program targeting regulatory approval for pandemic flu and seasonal flu in Japan has been funded by the Japanese Ministry of Health. Parties to the research grant include Hemispherx, the NIID and BIKEN (non-profit operational arm of the Foundation for Microbial Disease of Osaka University). Our agreement with BIKEN is part of a three party agreement to develop an effective influenza vaccine for Japan and utilizes the resources of the National Institute of Infectious Disease of Japan. Our development strategy includes reproduction of preclinical studies outside Japan and completion of the three year program. We intend to conduct human studies in the US and seek approval for seasonal and pandemic indications in the US and Europe for intranasal administration. A phase II study for intramuscular administration for seasonal flu has been initiated in Australia through the St. Vincent's Hospital Clinical Trials Centre.

With regard to Ampligen as a therapeutic vaccine adjuvant, we intend to initiate pre-clinical studies in HIV and various cancers and plan to ultimately negotiate a vaccine development licensing agreement.

Based on the results of published, peer reviewed pre-clinical studies and clinical trials, we believe that Ampligen® may have broad-spectrum anti-viral and anti-cancer properties. Over 750 patients have participated in Ampligen® clinical trials authorized by the FDA at over twenty clinical trial sites across the U.S., representing the administration of more than 90,000 doses of this drug.

Alferon N Injection® is the registered trademark for our injectable formulation of natural alpha interferon, which is approved by the FDA for the treatment of genital warts. Alferon N Injection® is also in clinical development for treating West Nile Virus. Other preclinical development with respect to Multiple Sclerosis and SARS has been suspended due to the resource requirements of other projects.

We are actively engaged in broad-based ongoing experimental studies assessing the efficacy of our products Ampligen®, Alferon N Injection®, and Alferon LDO® against influenza viruses as an adjuvant and/or single agent antiviral with the Defence R&D Canada, the National Institute of Infectious Diseases in Tokyo, the St. Vincent's Hospital Clinical Trial Centre in Australia and various research affiliates of the National Institutes of Health in the United States.

We own and operate a 43,000 sq. ft. FDA approved facility in New Brunswick, NJ primarily designed to produce Alferon N. In 2006, we completed the installation of a polymer production line to produce Ampligen® raw materials on a more reliable and consistent basis.

We outsource certain components of our research and development, manufacturing, marketing and distribution while maintaining control over the entire process through our quality assurance group and our clinical monitoring group.

Our principal executive offices are located at One Penn Center, 1617 JFK Boulevard, Philadelphia, Pennsylvania 19103, and our telephone number is 215-988-0080.

AVAILABLE INFORMATION

We file our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 electronically with the Securities and Exchange Commission, or SEC. The public may read or copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is http://www.sec.gov.

You may obtain a free copy of our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports on the day of filing with the SEC on our website on the World Wide Web at http://www.hemispherx.net or by contacting the Investor Relations Department by calling (518) 398-6222 or sending an e-mail message to dwill@willstar.net.

OUR PRODUCTS

Our primary products consist of our experimental compound, Ampligen®, our FDA approved natural interferon product, Alferon N Injection® and Alferon LDO (low dose oral) our experimental liquid natural interferon for oral administration.

Ampligen®

Nucleic acid compounds represent a potential new class of pharmaceutical products that are designed to act at the molecular level for treatment of human diseases. There are two forms of nucleic acids, DNA and RNA. DNA is a group of naturally occurring molecules found in chromosomes, the cell's genetic machinery. RNA is a group of naturally occurring informational molecules which orchestrate a cell's behavior which regulates the action of groups of cells, including the cells which compromise the body's immune system. RNA directs the production of proteins and regulates certain cell activities including the activation of an otherwise dormant cellular defense against viruses and tumors. Our drug technology utilizes specifically-configured RNA. Our double-stranded RNA drug product, trademarked Ampligen®, an experimental, unapproved drug, which is administered intravenously, is in human clinical development for various therapeutically oriented studies, including treatment for Chronic Fatigue Syndrome/Myalgic Encephalomyelitis ("CFS/ME"), HIV, renal cell carcinoma and malignant melanoma.

Clinical trials already conducted by us include treatments of ME/CFS, Hepatitis B, HIV, and cancer patients with renal cell carcinoma and malignant melanoma. Certain of these will require additional clinical trials to support regulatory approval.

The FDA has approved the use of Ampligen® in treating ME/CFS on an emergency basis (i.e. those with immediate life threatening illnesses). This is known as a treatment IND, or Treatment Investigational New Drug. Furthermore, the FDA has granted Hemispherx Orphan Drug Status in the United States. Orphan drugs get seven years of market exclusivity upon FDA approval.

Alferon N Injection®

Interferons are a group of proteins produced and secreted by cells to combat diseases. Researchers have identified four major classes of human interferon: alpha, beta, gamma and omega. The Alferon N Injection® product contains a multi-species form of alpha interferon. The worldwide market for injectable alpha interferon-based products has experienced rapid growth and various alpha interferon injectable products are approved for many major medical uses worldwide. Alpha interferons are manufactured commercially in three ways: by genetic engineering, by cell culture, and from human white blood cells. All three of these types of alpha interferon are or were approved for commercial sale in the U.S. Our natural alpha interferon is produced from human white blood cells.

The potential advantages of natural alpha interferon over recombinant (synthetic) interferon produced and marketed by other pharmaceutical firms may be based upon their respective molecular compositions. Natural alpha interferon is composed of a family of proteins containing many molecular species of interferon. In contrast, recombinant alpha interferon each contain only a single species. Researchers have reported that the various species of interferons may have differing antiviral activity depending upon the type of virus. Natural alpha interferon presents a broad complement of species, which we believe may account for its higher activity in laboratory studies. Natural alpha interferon is also glycosylated (partially covered with sugar molecules). Such glycosylation is not present on the currently U.S. marketed recombinant alpha interferons. We believe that the absence of glycosylation may be, in part, responsible for the production of interferon-neutralizing antibodies seen in patients treated with recombinant alpha interferon. Although cell culture-derived interferon is also composed of multiple glycosylated alpha interferon species, the types and relative quantity of these species are different from our natural alpha interferon.

The FDA approved Alferon N Injection® in 1989 for the intralesional (within lesions) treatment of refractory (resistant to other treatment) or recurring external genital warts in patients 18 years of age or older. Certain types of human papillomaviruses ("HPV") cause genital warts, a sexually transmitted disease ("STD"). A published report estimates that approximately eight million new and recurrent causes of genital warts occur annually in the United States alone.

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Alferon N Injection® [Interferon alfa-n3 (human leukocyte derived)] is a highly purified, natural-source, glycosylated, multi-species alpha interferon product. There are essentially no antibodies observed against natural interferon to date and the product has a relatively low side-effect profile. Alferon® is the only natural-source, multi-species alpha interferon currently sold in the U.S.

The recombinant DNA derived alpha interferon are now reported to have decreased effectiveness after one year, probably due to antibody formation and other severe toxicities. These detrimental effects have not been reported with the use of Alferon N Injection® which could allow this product to assume a much larger market share.

It is our belief that the use of Alferon® N in combination with Ampligen® has the potential to increase the positive therapeutic responses in chronic life threatening viral diseases. We have suspended certain preclinical trials for various viral disorders at this time due to funding considerations and increased resource requirements of other projects.

Alferon® Low Dose Oral (LDO)

Alferon® LDO is an experimental low-dose, oral liquid formulation of Natural Alpha Interferon and like Alferon N Injection® should not cause antibody formation, which is a problem with recombinant interferon. It is an experimental immunotherapeutic believed to work by stimulating an immune cascade response in the cells of the mouth and throat, enabling it to bolster systemic immune response through the entire body by absorption through the oral mucosa. Oral interferon would be much more economically feasible for patients and logistically manageable in development programs in third-world countries primarily affected by HIV and other emerging viruses (SARS, Ebola, bird flu, etc.). Oral administration of Alferon® N, with its affordability, low toxicity, no production of antibodies, and broad range of potential bio activity, could be a breakthrough treatment for viral diseases.

We have initiated clinical trials as part of an accelerated evaluation of the experimental bio-therapeutic Alferon LDO® (Low Dose Oral Interferon Alfa-n3 (Human Leukocyte Derived)) as a potential new experimental therapy for Avian Flu and other lethal viral diseases, which have high acute death rates. Clinical trials in human volunteers (conducted in both the US at Drexel University, Philadelphia and in Hong Kong at the Princess Margaret Hospital) were designed to determine whether Alferon N, delivered in a new, experimental oral drug delivery format, can resuscitate the broad-spectrum antiviral and immunostimulatory genes. These human genes are shut down by acute lethal viral infections such as HIV, avian flu and smallpox. The results of this study are being evaluated.

Oragens

We acquired a series of patents on Oragens, potentially a set of oral broad spectrum antivirals and immunological enhancers, through a licensing agreement with Temple University in Philadelphia, PA. We were granted an exclusive worldwide license from Temple for the Oragens products. These compounds have been evaluated in various academic laboratories for application to chronic viral and immunological disorders.

The 2', 5' oligoadenylate synthetase/RNase L system is an important and widely distributed pathway for the inhibition of viral replication and tumor growth. The 2', 5' oligoadenylate synthetase, up activation by double-stranded RNA, synthesizes 2', 5' oligoadenylates (2-5A) from ATP. These bioactive 2-5As directly activate RNase L, which degrades viral and cellular RNAs resulting in the inhibition of protein synthesis.

The bioactive 2-5A molecules can be degraded by various hydrolytic enzymes, resulting in a short half life. Analogues of these bioactive 2-5As, termed Oragen RNA compounds, have been produced to increase stability and maintain or increase biological activity without demonstrable toxicity. Additional pre-clinical tests will be conducted prior to pursuing clinical trials (See "Research, Consulting, Licensing and Supply Agreements" section of Item I for more details on this license).

PATENTS

We have over 90 patents worldwide with approximately 20 additional pending patent applications pending comprising our intellectual property. In 2006, we obtained the global patent rights for a compound that enhances DNA vaccination by the efficient intracellular delivery of immunogenic DNA (i.e.- DNA that can produce antigenic proteins that simulate an acute viral infection with a resultant umoral and cell-mediated immune response). See "Research, Consulting, Licensing and Supply Agreements" section within Item I for more information on the acquisition of these patents.

We continually review our patents rights to determine whether they have continuing value. Such review includes an analysis of the patent's ultimate revenue and profitability potential. In addition, management's review addresses whether each patent continues to fit into our strategic business plans for Ampligen, Alferon N and other intellectual property.

We have been issued certain patents on the use of Ampligen® alone and Ampligen® in combination with certain other drugs including AZT, ddI, ddC, interferon and/or IL-2, for the treatment of HIV.

Our experimental compounds, which have yet to be determined "safe and effective" by regulatory authorities, are accordingly only available legally in certain authorized trials and tests; in vitro (outside the body) tests are also not necessarily indicative of any evidence of clinical benefits or advantages. But the focus of Hemispherx is on Ampligen® as a treatment for CFS/ME and HIV.

The main U.S. ME/CFS treatment patent (#6130206) expires October 10, 2017. Our main patents covering HIV treatment (#4820696, #5063209, and #5091374) expired or will expire on April 11, 2006, November 5, 2008, and February 25, 2009, respectively; Hepatitis treatment coverage is conveyed by U.S. patent #5593973 which expires on January 14, 2014. The U.S. Ampligen® Trademark (#1,515,099) expires on December 6, 2008 and can be renewed thereafter for an additional 10 years. The FDA has granted us "orphan drug status" for our nucleic acid-derived therapeutics for ME/CFS, HIV, and renal cell carcinoma and malignant melanoma. Orphan drug status grants us protection against competition for a period of seven years following FDA approval, as well as certain federal tax incentives, and other regulatory benefits. Patent coverage for the HIV indication following the expiration of patents #4820696, #5063209 and #5091374 will be covered under the marketing protection provided by the orphan drug designation for using Ampligen® to treat HIV. Patent pending application #PCT/US 0239890 was abandoned during the current period.

The U.S. Alferon® Patents expire February 10, 2012 (5,503,828 and 5,676,942) and December 22, 2017 (5,989,441).

RESEARCH AND DEVELOPMENT (“R&D”)

Our focus is on developing drugs for use in treating viral and immune based chronic disorders and diseases such as ME/CFS, HIV, HPV, SARS and West Nile Virus. Our current R&D projects target treatment therapies for ME/CFS, HIV, HPV and other viral diseases, i.e.; Avian/Seasonal Influenza.

Myalgic Encephalomyelitis/Chronic Fatigue Syndrome ("ME/CFS")

Chronic Fatigue Syndrome (“CFS”), also known as Chronic Immune Dysfunction Syndrome (“CFIDS”) and, myalgic encephalomyelitis (“ME”) is a serious and debilitating chronic illness and a major public health problem. Long misunderstood, under-recognized, and under-diagnosed, ME/CFS is now recognized by both the government and private sector as a major health problem, including the National Institutes of Health, U.S. Centers for Disease Control and Prevention (“CDC”), FDA and Social Security Administration, recognizes ME/CFS as one of the most common chronic illnesses of our time. The CDC listed ME/CFS as a priority disease, causing severe health and financial problems for the patients, their family, and the community. ME/CFS is endemic in the population, but occasionally seen in clusters suggesting an infectious basis. A variety of immunological, endocrine, autonomic nervous system, and metabolic abnormalities have been documented. A groundbreaking, community-based study of ME/CFS by Dr. Leonard Jason was published in the Archives of Internal Medicine in 1999 and showed a prevalence rate of 422 of every 100,000 Americans. As many as 1,000,000 people nationwide suffer from CFS, significantly more than previously estimated by the CDC. Furthermore, 90% of the patients with the illness are struggling without the benefit of medical diagnosis or treatment. While ME/CFS strikes people of all age, racial, ethnic, and socioeconomic groups, it is most prevalent amongst women. Research has shown that ME/CFS is about three times as common in women as men, a rate similar to that of many autoimmune diseases, such as multiple sclerosis and lupus. To put this into perspective, ME/CFS is over four times more common than HIV infection in women, and the rate of ME/CFS in women is considerably higher than a woman's lifetime risk of getting lung cancer as published by the CFIDS Association of America.

The most common symptom of ME/CFS is incapacitating fatigue, which does not subside with rest. Many severe ME/CFS patients become completely disabled or totally bedridden and are afflicted with severe pain and mental confusion even at rest. This debilitating tiredness is associated with flu-like symptoms such as chills, fever, headache, sore throat, painful lymph nodes, muscle aches, weakness and joint pain. Diagnosis of ME/CFS is a time-consuming and difficult process which is generally arrived at by excluding other illnesses with similar symptoms and comparing a patient's symptoms with the case definition. Overlapping symptoms can occur with several diseases, such as fibromyalgia, Gulf War Illnesses, and multiple chemical sensitivities. Many diseases have similar symptoms including Lupus and Lyme disease which so closely mimic ME/CFS that they need to be considered when making a diagnosis to rule them out.

The case definition for ME/CFS criteria calls for certain symptoms to be present along with fatigue that interferes with physical, mental, social, and educational activities. Both the fatigue and symptoms must have occurred for (at least) a six month period. People with ME/CFS may experience many more than the symptoms named in the case definition, so knowledgeable physicians will take this fact into consideration when making a diagnosis (after other possible reasons for symptoms have been ruled out).

The leading model of ME/CFS pathogenesis is thought to be rooted in abnormalities in the immune system and brain (central nervous system), both of which affects and alters the function of the other. Because some cases of chronic fatigue begin with a flu-like infection, several viruses have been studied as possible causes because all are relatively common in the general population, including Human Herpesvirus ("HHV") 6 and 7, Retroviruses, Epstein-Barr Virus, Enteroviruses, as well as, Mycoplasmas, etc. Whilst, the etiology is likely to be caused by a collection of factors, including viral, hormonal, stress, and other triggers for the illness in genetically, environmentally or otherwise susceptible individuals and continues to be a subject of discussion.

Most ME/CFS patients are treated symptomatically with traditional treatments geared toward treating symptoms of the disease, such as improving quality of sleep, reducing pain and treatment of depression. Clinically, a number of different therapeutic approaches have been pursued, but with no significant clinical success.

Other Viral Diseases

We are actively engaged in broad-based experimental studies assessing the efficacy of our products, Ampligen®, Alferon N Injection® and Alferon® LDO against influenza viruses as an adjuvant and/or single agent antiviral with the Defence R&D Canada, the National Institute of Infectious Disease in Tokyo, St. Vincent's Hospital Clinical Trial Centre in Australia and various research affiliates of the National Institutes of Health in the United States.

In September 2007, Japan's National Institute of Infectious Disease ("JNIID") initiated research on the co-administration of JNIID's HIV-1 vaccine with our experimental TLR3 agonist (a substance that binds to a specific receptor and triggers a host defense response in the cell) and immune enhancer, Ampligen®. This research is the result of earlier research suggesting a potential role for Ampligen® in boosting responses to certain vaccines designed to combat avian influenza (Bird Flu) as well as seasonal influenza viruses. The objective of this research is to determine if Ampligen® can overcome the historical problem which has handicapped AIDS vaccine development, namely marginal immune response which undermines the potential of long-lasting protection. Ampligen® will be combined with HIV recombinant protein and administered via an intranasal route.

In 2007, JNIID published, in two peer reviewed journals, the results of their studies to evaluate the ability of current seasonal influenza vaccine to confer cross-protection against highly pathogenic H5N1 influenza (Bird Flu) virus in mice. These studies indicate that, as a vaccine enhancer co-administered with their seasonal trivalent influenza vaccine, Ampligen® helps induce a protective effect against H5N1 influenza viruses. As such, Ampligen® as a toll-like receptor 3 agonist may aid in overcoming the problems protecting against mutated strains of the H5N1 virus and of limited supplies of H5N1 virus vaccines. Additional studies to support this conclusion are planned.

In April 2007, Japan's Ministry of Health, Labor and Welfare (MHLW) issued authorization to its National Institute of Infectious Diseases approving their budget to advance studies indicating that an H5N1 influenza vaccine co-administered intranasally with Hemispherx's experimental therapeutic, Ampligen®, protected against mutated strains of the virus and, further that, the seasonal trivalent influenza vaccine co-administered intranasally with Ampligen® maintained efficacy even when challenged with the H5N1 influenza virus.

In June 2007, we initiated a clinical trial in Australia using Ampligen® in combination with seasonal flu vaccine. This trial focuses on populations at risk for virulent cases of influenza, especially those over the age of 60 years who historically may have weakened immune systems. The Australian clinical trial was prompted by the results from the pre-clinical work conducted by the JNIID (see above). Thirty-eight subjects are anticipated to be enrolled in this study, which will utilize a two dose Ampligen® regimen of 2 mg per dose. Data on the first eight subjects is currently under review and enrollment of thirty additional subjects will recommence in March 2008. This study is being monitored by Clinical Network Services Pty. Ltd. located in Brisbane, Australia. The clinical trials center of St. Vincent's Hospital, based in DarlingHurst, Australia, is conducting the trial. Prospective subjects will be screened to be included in the clinical trial.

The Center for Disease Control and Prevention reports that in 2007 the number of mosquito-borne West Nile Virus ("WNV") infections in the United States was "up sharply" over the same period in 2006. This increased infection rate has accelerated the enrollment of patients in our Phase IIb clinical trial using Alferon N™ to treat WNV patients. In lab studies, Alferon N™, a natural cocktail of eight alpha-interferons, shows synergistic effects (up to 100 fold over recombinant interferons) against pathogens such as WNV. The Phase IIb clinical trial is a double-blinded, randomized, multi-center program under the direction of Cornell University and Weill Cornell Medical College/New York Hospital.

Our direct Research and Development cost was $10,444,000 in 2007; $10,127,000 in 2006 and $5,218,000 in 2005. Most of these expenditures relate to the development of our experimental drug, Ampligen®. The costs in 2006 and 2007 reflect the costs of producing Ampligen® raw materials (polymers) and Ampligen® doses for use in stability and validation testing. Also includes the costs of preparing the NDA for filing with the FDA.

MANUFACTURING

We have a Supply Agreement with Hollister-Stier Laboratories LLC of Spokane, Washington ("Hollister-Stier"), for the manufacturing of Ampligen® for a five year term ending in 2010. Pursuant to the agreement we supply the key raw materials and Hollister-Stier formulates and bottles Ampligen®. Hollister-Stier has completed five (5) pilot manufacturing runs of Ampligen® for stability testing with one additional manufacturing run which was completed mid-March 2007. The first three pilot runs were completed in January 2006 utilizing polymer/raw material from Ribotech (our previous supplier of raw material). The six month accelerated stability data on these three lots support a two year expiration period with additional test results forthcoming. Having successfully completed these manufacturing runs, the scale up of Ampligen® manufacturing to commercial batch size and the validation of the manufacturing at Hollister-Stier was initiated. The remaining two lots were run in January and February 2007 with the aforementioned third lot completed in mid-March 2007 utilizing polymer/raw material from our NJ facility. Based on the available information from the completion of the first two commercial size manufacturing validation lots, we are using these three process validation lots in stability studies to monitor and confirm the product quality and stability.

Alferon N Injection®, the purified drug concentrate utilized in the formulation of Alferon N Injection®, was manufactured in our New Brunswick, New Jersey facility and was formulated and packaged at a production facility formerly owned and operated by Abbott Laboratories located in Kansas. Abbott Laboratories sold the facility to Hospira. Hospira ceased the labeling and packaging of Alferon N Injection® as they sought larger production runs for cost efficiency purposes. On February 8, 2006, we executed a Manufacturing and Safety Agreement with Hyaluron, Inc. ("Hyaluron") of Burlington, Massachusetts, for the formulation, packaging and labeling of Alferon N Injection®. Pursuant to the Agreement, we will supply raw materials in sufficient quantity and provide any pertinent information to the project. Hyaluron is in the process of preparing their facility to produce Alferon N. At this time we are in the process of scheduling additional production runs in 2008.

MARKETING/DISTRIBUTION

We continue our efforts to establish an internal marketing and sales infrastructure to facilitate and refine our commercialization initiatives.

Our marketing strategy for Ampligen® reflects the differing health care systems around the world, and the different marketing and distribution systems that are used to supply pharmaceutical products to those systems. In the U.S., we expect that, subject to receipt of regulatory approval, Ampligen® may be utilized in four medical arenas: physicians' offices, clinics, hospitals and the home treatment setting. We are in the process of developing pre-launch and launch driven marketing plans focusing on those audience development, medical support and payor reimbursement initiatives which will facilitate product acceptance and utilization at the time of regulatory approval. Similarly, we are developing distribution scenarios for the Specialty Pharmacy/Infusion channel which will insure market access, offer 3PL (third party logistics) capabilities and provide the requisite risk management control mechanisms. It is our intent to utilize third party service providers to execute elements of both the marketing/sales and distribution plans. We currently plan to utilize a small group of Managed Market account managers to introduce the product to payor, employer and government account audiences. We believe that this approach will establish a market presence and facilitate the generation of revenue without incurring the substantial costs associated with a traditional sales force. Furthermore, management believes that the approach will enable us to retain many options for future marketing strategies.

For example, our commercialization strategy for Ampligen-CFS may include licensing/co-marketing agreements utilizing the resources and capacities of a strategic partner(s). We are currently seeking worldwide marketing partner(s), with the goal of having a relationship in place before approval is obtained. In parallel to partnering discussions, appropriate pre-marketing activities will be undertaken. We intend to control manufacturing of Ampligen on a worldwide basis.

In 1998, we entered into a strategic alliance with Accredo to develop certain marketing and distribution capacities for Ampligen® in the United States. Accredo, a division of MEDCO**,** is one of the nation's largest Specialty Pharmacy providers. Pursuant to the agreement, Accredo assumed certain responsibilities for distribution of Ampligen® for which they received a fee. Through this arrangement, we may mitigate the necessity of incurring certain up-front costs. Accredo has also worked with us in connection with the Amp 511 ME/CFS cost recovery treatment program, Amp 516 ME/CFS Phase III clinical trial and the Amp 719 (combining Ampligen® with other antiviral drugs in HIV-salvage therapy and Amp 720 HIV Phase IIb clinical trials now under way). There can be no assurances that this alliance will develop a significant commercial position in any of its targeted chronic disease markets. The agreement had an initial one year term from February 9, 1998 with successive additional one year terms unless either party notifies the other not less than 180 days prior to the anniversary date of its intent to terminate the agreement. Also, the agreement may be terminated for uncured defaults, or bankruptcy, or insolvency of either party and will automatically terminate upon our receiving an NDA for Ampligen® from the FDA, at which time, a new agreement will need to be negotiated with Accredo or another major drug distributor. This agreement offers the potential to provide some marketing and distribution capacity in the United States. There has been no communication or activity under this

agreement for the past few years.

We executed our marketing strategy for Alferon N Injection® by relaunching the product via a collaborative marketing initiative between Hemispherx and Armada Healthcare, a Specialty Pharmacy network encompassing specialty pharmacists, pharmacies, distributors and targeted physician specialists. This effort was intended to direct our efforts in the most appropriate and productive market fully exposing our product in the indicated market. This initiative has had a positive impact on Alferon® revenues in 2007 by focusing on direct, non-personal selling efforts to targeted physician audiences. It is our intent to promote Alferon to those dermatologists, OB GYNs and Family practice/IMs who are involved in the treatment of patients with refractory or recurring external genital warts and who currently utilize both injectable interferons as well as topical therapeutic agents.

COMPETITION

RNA based products and toll-like receptors (TLRs) have demonstrated great promise in pre-clinical and limited clinical applications resulting in active research and development by large pharmaceutical companies and emerging Biotech firms. As such, our potential competitors are among the largest pharmaceutical companies in the world, are well known to the public and the medical community, and have substantially greater financial resources, product development, and manufacturing and marketing capabilities than we have.

These companies and their competing products may be more effective and less costly than our products. In addition, conventional drug therapy, surgery and other more familiar treatments will offer competition to our products. Furthermore, our competitors have significantly greater experience than we do in pre-clinical testing and human clinical trials of pharmaceutical products and in obtaining FDA, EMEA Health Protection Branch ("HPB") and other regulatory approvals of products. Accordingly, our competitors may succeed in obtaining FDA, EMEA and HPB product approvals more rapidly than us. If any of our products receive regulatory approvals and we commence commercial sales of our products, we will also be competing with respect to manufacturing efficiency and marketing capabilities, areas in which we have no experience. Our competitors may possess or obtain patent protection or other intellectual property rights that prevent, limit or otherwise adversely affect our ability to develop or exploit our products.

The major pharmaceutical competitors with biotech capabilities/vaccine franchises include Pfizer, GSK, Wyeth, Merck, Novartis, Gilead Pharmaceutical, and Schering-Plough Corp. Biotech competitors include AVANT Immunotherapeutics, AVI Biopharma and GENTA. Alferon N Injection® currently competes with a product produced by Schering for treating genital warts. 3M Pharmaceutical also markets its immune response modifier product, Aldera, for the treatment of genital and perianal warts. We believe the approval and marketing of this product is the main reason that sales of Alferon N Injection® have not met our expectations since acquisition. In November 2006, the botanical drug, Veregen (marketed by Bradley Pharmaceuticals) was also approved for the topical treatment of genital and perianal warts.

GOVERNMENT REGULATION

Regulation by governmental authorities in the U.S. and foreign countries is and will be a significant factor in the manufacture and marketing of Alferon N products and our ongoing research and product development activities. Ampligen® and the products developed from the ongoing research and product development activities will require regulatory clearances prior to commercialization. In particular, new human drug products for humans are subject to rigorous preclinical and clinical testing as a condition for clearance by the FDA and by similar authorities in foreign countries. The lengthy process of seeking these approvals, and the ongoing process of compliance with applicable statutes and regulations, has required, and will continue to require the expenditure of substantial resources. Any failure by us or our collaborators or licensees to obtain, or any delay in obtaining, regulatory approvals could materially adversely affect the marketing of any products developed by us and our ability to receive product or royalty revenue. We have received orphan drug designation for certain therapeutic indications, which might, under certain conditions, accelerate the process of drug commercialization. Alferon N Injection® is only approved for use in intra-lesional treatment of refractory or recurring external genital warts in patients 18 years of age or older. Use of Alferon N Injection® for other applications requires regulatory approval.

We are subject to various federal, state and local laws, regulations and recommendations relating to such matters as safe working conditions, laboratory and manufacturing practices, the experimental use of animals and the use of and disposal of hazardous or potentially hazardous substances, including radioactive compounds and infectious disease agents, used in connection with our research work. The laboratory and production facility in New Brunswick, New Jersey, which we acquired from ISI, is approved for the manufacture of Alferon N Injection® and we believe it is in substantial compliance with all material regulations. However, we cannot give assurances that facilities owned and operated by third parties that are utilized in the manufacture of our products, are in substantial compliance, or if presently in substantial compliance, will remain so.

RESEARCH, CONSULTING, LICENSING AND SUPPLY AGREEMENTS

As previously discussed above, we acquired a series of patents on Oragens, potentially a set of oral broad spectrum antivirals and immunological enhancers, through a licensing agreement with Temple University in Philadelphia, PA. We were granted an exclusive worldwide license from Temple for the Oragens products. These compounds have been evaluated in various academic laboratories for application to chronic viral and immunological disorders. Pursuant to the terms of our agreement with Temple, we are obligated to pay royalties of 2% to 4% of sales depending on the amount of technical assistance required. We currently pay a royalty of $30,000 per year to Temple. This agreement is to remain in effect until the date that the last licensed patent expires unless terminated sooner by mutual consent or default due to royalties not being paid. The last Oragen™ patent expires on June 1, 2018. We recorded the payment of the royalty as research and development cost for the period incurred.

In December 1999, we entered into an agreement with Biovail Corporation International ("Biovail"). Biovail is an international full service pharmaceutical company engaged in the formulation, clinical testing, registration and manufacture of drug products utilizing advanced drug delivery systems. Biovail is headquartered in Toronto, Canada. The agreement grants Biovail the exclusive distributorship of our product in the Canadian territories subject to certain terms and conditions. In return, Biovail agrees to conduct certain pre-marketing clinical studies and market development programs, including without limitation, expansion of the Emergency Drug Release Program in Canada with respect to our products. In addition, Biovail agrees to work with us in preparing and filing a New Drug Submission with Canadian Regulatory Authorities at the appropriate time. Biovail invested $2,250,000 in Hemispherx equity at prices above the then current market price and agreed to make an additional investment of $1,750,000 based on receiving approval to market Ampligen® in Canada from the appropriate regulatory authorities in Canada. The agreement requires Biovail to buy exclusively from us and penetrate certain market segments at specific rates in order to maintain market exclusivity. The agreement terminates on December 15, 2009, subject to successive two-year extensions by the parties and subject to earlier termination by the parties for uncured defaults under the agreement, bankruptcy or insolvency of either party, or withdrawal of our product from Canada for a period of more than ninety days for serious adverse health or safety reasons.

In March 2002, our European subsidiary Hemispherx S.A. entered into a Sales and Distribution agreement with Esteve. In December 2006 Hemispherx S.A. assigned all of its rights and obligations under the Sales and Distribution agreement to us. Pursuant to the terms of the Agreement, Esteve was granted the exclusive right to market Ampligen® in Spain, Portugal and Andorra for the treatment of ME/CFS. Due to non-performance of certain contractually required clinical trials, we notified Esteve of our intention to terminate the Sales and Distribution Agreement. As is its right under the Sales and Distribution Agreement, Esteve has applied for arbitration, seeking damages. We believe Esteve's claim is without merit and intend to counterclaim seeking damages. Please see "Item 3. Legal Proceedings" below.

In October 2005, we signed a research agreement with the National Institute of Infectious Diseases, in Tokyo, Japan. The collaboration, by Hideki Hasegawa, M.D., Ph.D., Chief of the Laboratory of Infectious Disease Pathology, will assess our experimental therapeutic Ampligen® as a co-administered immunotherapeutic to the Institution's nasal flu vaccine.

In October 2005, we also engaged the Sage Group, Inc., a health care, technology oriented, strategy and transaction advisory firm, to assist us in obtaining a strategic alliance in Japan for the use of Ampligen® in treating Chronic Fatigue Syndrome or CFS. In the past year leaders in the Japanese medical community have established the Japanese Society of the Fatigue Science and the Osaka City University Hospital opened the Fatigue Clinical Center as the initial step in their Fatigue Research Project. In January 2007 we expanded our agreement with the Sage Group, Inc. to assist us in obtaining a strategic alliance in Japan for the use of Ampligen® in treating Avian Flu.

In December 2007 we concluded an agreement with BIKEN (the non-profit operational arm of the Foundation for Microbial Diseases of Osaka University) for the use of our experimental drug, Ampligen®, as an immune enhancer to influenza vaccines. Our agreement with BIKEN is part of a three party agreement to develop an effective influenza vaccine for Japan and utilizes vast resources of the National Institute of Infectious Diseases of Japan.

In November 2005, we entered into an agreement with Defence R&D Canada, Suffield ("DRDC Suffield"), an agency of the Canadian Department of National Defence, to evaluate the antiviral efficacy of our experimental therapeutic Ampligen® and Alferon® for protection against human respiratory influenza virus infection in well validated animal models. DRDC Suffield is conducting research and development of new drugs that could potentially become part of the arsenal of existing antiviral weapons to combat the bird flu. The initial study will focus on the testing of potential drugs against the respiratory influenza virus infection on a mouse-adapted strain of human influenza.

We entered into an agreement with Paul Griffin and The Asclepius Trust ("Asclepius") whereby we acquired the right, title and interest in certain awarded patents and pending patent applications ("patents'). Consideration given by us for the acquisition of these patents amounted to $150,000 paid with shares of our common stock to Paul Griffin valued at the closing price on the date of the agreement or July 3, 2006. The value of our common stock was $2.43 on this date and equated to consideration of 61,728 shares. We registered these shares on behalf of Mr. Griffin for public resale. Asclepius will receive in consideration a 2% royalty of the gross sums received from all sales utilizing or relying upon the patents.

On July 26, 2006, we executed an agreement with Stem Cell Innovations, Inc. (formerly Interferon Sciences, Inc.) whereby we acquired the royalty interest previously granted Interferon Sciences with respect to our sale of products containing alpha interferon in exchange for 250,000 shares of common stock. We registered these shares on behalf of Stem Cell Innovations for public resale. The total consideration paid to Stem Cell under the agreement amounted to $620,000 and was derived by multiplying the number of shares issued by the fair market value of our common stock on the date of the agreement or $2.48 per share.

We have entered into agreements for consulting services, which are performed at medical research institutions and by medical and clinical research individuals. Our obligation to fund these agreements can be terminated after the initial funding period, which generally ranges from one to three years or on an as-needed monthly basis. During the years ending December 31, 2005, 2006 and 2007 we incurred approximately $236,000, $477,000 and $842,000 respectively, of consulting service fees under these agreements. These costs are charged to research and development expense as incurred.

In December 2005, we executed a Supply Agreement with Hollister-Stier Laboratories LLC of Spokane, Washington ("Hollister-Stier"), for the contract manufacturing of Ampligen® for a five year term ending in 2010. Pursuant to the agreement we will supply the key raw materials and Hollister-Stier formulates and bottles the Ampligen®. Hollister-Stier has produced six lots of Ampligen through 2007, which are being used in stability studies.

As previously discussed in "Manufacturing" above, on February 8, 2006, we executed a Manufacturing and Safety Agreement with Hyaluron for the formulation, packaging and labeling of Alferon N Injection®. Pursuant to the Agreement, we will supply raw materials in sufficient quantity and provide any pertinent information to the project.

Sales to three large wholesalers (Cardinal Health, AmerisourceBergen and McKesson) represented approximately 70% and 68% of our total sales for the years ended December 31, 2006 and 2007, respectively.

HUMAN RESOURCES

As of March 3, 2008, we had 49 personnel consisting of 36 full time employees, 13 regulatory/research medical personnel on a part-time basis. Part time personnel are paid on a per diem or monthly basis. 32 personnel are engaged in our research, development, clinical, and manufacturing effort. 17 of our personnel perform regulatory, general administration, data processing, including bio-statistics, financial and investor relations functions. We have no union employees and we believe our relationship with our employees is good.

While we have been successful in attracting skilled and experienced scientific personnel, there can be no assurance that we will be able to attract or retain the necessary qualified employees and/or consultants in the future.

SCIENTIFIC ADVISORY BOARD

Our Scientific Advisory Board presently consists of two individuals who we believe have particular scientific and medical expertise in Virology, Cancer, Immunology, Biochemistry and related fields. These individuals advise us about current and long term scientific planning including research and development. This Board was originally made up of four medical scientists of which one resigned due to conflict of interest and one resigned for personal reasons. The Scientific Advisory Board conducts periodic meetings as needed by the clinical studies in progress by us. No Scientific Advisory Board meetings were held in 2007 primarily due to fewer active scientific projects. However, individual Scientific Advisory Board Members sometimes consult with, and meet informally with our employees. Members of the Scientific Advisory are employed by others and may have commitments to and/or consulting agreements with other entities, including our potential competitors.

ITEM 1A. Risk Factors.

The following cautionary statements identify important factors that could cause our actual results to differ materially from those projected in the forward-looking statements made in this Form 10-K. Among the key factors that have a direct bearing on our results of operations are:

Risks Associated With Our Business

No assurance of successful product development

Ampligen® and related products. The development of Ampligen® and our other related products is subject to a number of significant risks. Ampligen® may be found to be ineffective or to have adverse side effects, fail to receive necessary regulatory clearances, be difficult to manufacture on a commercial scale, be uneconomical to market or be precluded from commercialization by proprietary right of third parties. Our products are in various stages of clinical and pre-clinical development and, require further clinical studies and appropriate regulatory approval processes before any such products can be marketed. We do not know when, if ever, Ampligen® or our other products will be generally available for commercial sale for any indication. Generally, only a small percentage of potential therapeutic products are eventually approved by the FDA for commercial sale.

On December 3, 2007 a refusal to file (RTF) letter was received because the application was deemed “not substantially complete”. A written response was developed and submitted to the FDA addressing 14 pre-clinical and clinical questions. Ampligen represents the first drug in class of RNA (nucleic acid) molecules to apply for NDA review. We can provide no guidance as to the tentative date at which the filing of the NDA will be accepted or, if accepted, when or if the NDA will be approved. The timing of the FDA review process of the NDA is subject to the control of the FDA and could result in one of the following events; 1) approval to market Ampligen® for use in treating ME/CFS patients 2) require more research, development, and clinical work, 3) approval to market as well as conduct more testing, or 4) reject our NDA application. Given these variables, we are unable to project when material net cash inflows are expected to commence from the sale of Ampligen®.

Alferon N Injection®. Although Alferon N Injection® is approved for marketing in the United States for the intra-lesional treatment of refractory or recurring external genital warts in patients 18 years of age or older, to date it has not been approved for other indications. We face many of the risks discussed above, with regard to developing this product for use to treat other ailments.

Our drug and related technologies are investigational and subject to regulatory approval. If we are unable to obtain regulatory approval, our operations will be significantly affected.

All of our drugs and associated technologies, other than Alferon N Injection®, are investigational and must receive prior regulatory approval by appropriate regulatory authorities for general use and are currently legally available only through clinical trials with specified disorders. At present, Alferon N Injection® is only approved for the intra-lesional treatment of refractory or recurring external genital warts in patients 18 years of age or older. Use of Alferon N Injection® for other indications will require regulatory approval.

Our products, including Ampligen®, are subject to extensive regulation by numerous governmental authorities in the U.S. and other countries, including, but not limited to, the FDA in the U.S., the Health Protection Branch ("HPB") of Canada, and the Agency for the Evaluation of Medicinal Products ("EMEA") in Europe. Obtaining regulatory approvals is a rigorous and lengthy process and requires the expenditure of substantial resources. In order to obtain final regulatory approval of a new drug, we must demonstrate to the satisfaction of the regulatory agency that the product is safe and effective for its intended uses and that we are capable of manufacturing the product to the applicable regulatory standards. We require regulatory approval in order to market Ampligen® or any other proposed product and receive product revenues or royalties. We cannot assure you that Ampligen® will ultimately be demonstrated to be safe or efficacious. In addition, while Ampligen® is authorized for use in clinical trials including a cost recovery program in the United States and Europe, we cannot assure you that additional clinical trial approvals will be authorized in the United States or in other countries, in a timely fashion or at all, or that we will complete these clinical trials. If Ampligen® or one of our other products does not receive regulatory approval in the U.S. or elsewhere, our operations most likely will be materially adversely affected.

Although preliminary in vitro testing indicates that Ampligen® enhances the effectiveness of different drug combinations on avian influenza, preliminary testing in the laboratory is not necessarily predictive of successful results in clinical testing or human treatment.

Ampligen® is undergoing pre-clinical testing for possible treatment of avian flu. Although preliminary in vitro testing indicates that Ampligen® enhances the effectiveness of different drug combinations on avian flu, preliminary testing in the laboratory is not necessarily predictive of successful results in clinical testing or human treatment. No assurance can be given that similar results will be observed in clinical trials. Use of Ampligen® in the treatment of avian flu requires prior regulatory approval. Only the FDA can determine whether a drug is safe, effective or promising for treating a specific application. As discussed in the prior risk factor, obtaining regulatory approvals is a rigorous and lengthy process.

In addition, Ampligen® is being tested on two strains of avian influenza virus. There are a number of strains and strains mutate. No assurance can be given that Ampligen® will be effective on any strains that might infect humans.

We may continue to incur substantial losses and our future profitability is uncertain.

We began operations in 1966 and last reported net profit from 1985 through 1987. Since 1987, we have incurred substantial operating losses, as we pursued our clinical trial effort to get our experimental drug, Ampligen®, approved. As of December 31, 2007, our accumulated deficit was approximately $185,190,000. We have not yet generated significant revenues from our products and may incur substantial and increased losses in the future. We cannot assure that we will ever achieve significant revenues from product sales or become profitable. We require, and will continue to require, the commitment of substantial resources to develop our products. We cannot assure that our product development efforts will be successfully completed or that required regulatory approvals will be obtained or that any products will be manufactured and marketed successfully, or be profitable.

We may require additional financing which may not be available.

The development of our products will require the commitment of substantial resources to conduct the time-consuming research, preclinical development, and clinical trials that are necessary to bring pharmaceutical products to market. As of December 31, 2007, we had approximately $15,415,000 in cash and cash equivalents and short-term investments. We anticipate, but cannot assure, that these funds will be sufficient to meet our operating cash requirements for the next 18 months.

On April 12, 2006, we entered into a common stock purchase agreement with Fusion Capital pursuant to which Fusion Capital has agreed, under certain conditions and with certain limitations, to purchase on each trading day $100,000 of our common stock up to an aggregate of $50,000,000 over a 25 month period (see Part I, Item 2. “Management's Discussion and Analysis of Financial Condition and Results of Operations; Liquidity and Capital Resources”).

We only have the right to receive up to $100,000 per trading day under the agreement with Fusion Capital unless our stock price exceeds $1.90 by at least $0.10, in which case the daily amount may be increased under certain conditions as the price of our common stock increases. Fusion Capital shall not have the right nor the obligation to purchase any shares of our common stock on any trading days that the market price of our common stock is less than $1.00. We have registered an aggregate of 13,201,840 shares purchasable by Fusion Capital pursuant to the common stock purchase agreement (inclusive of up to 643,502 additional Commitment Shares) and, through March 3, 2008, we have sold to Fusion Capital an aggregate of 10,682,032 shares under the common stock purchase agreement for aggregate gross proceeds of approximately $19,379,000. Assuming a purchase price of $0.85 per share (the closing sale price of the common stock on March 3, 2008) and the purchase by Fusion Capital of the remaining 1,061,189 shares (not including the remaining 194,686 Commitment Shares), total gross proceeds to us from the remaining shares would only be $9,020,106 ($28,759,237 in the aggregate under the common stock purchase agreement).

In the event we elect to issue additional shares to Fusion Capital, we will be required to file a new registration statement and have it declared effective by the Securities and Exchange Commission. In addition, Fusion Capital cannot purchase more than 27,386,723 shares, inclusive of Commitment Shares under the common stock purchase agreement.

Accordingly, depending upon the future market price of our common stock, even if we register the balance of the shares issuable to Fusion Capital under the Purchase Agreement, we most likely will realize much less than the maximum $50,000,000 proceeds from the sale of stock under the Purchase Agreement. In this regard, our current stock price is under $1.00 and, accordingly, unless and until the market price increases to at least $1.00, no additional shares will be sold to Fusion Capital under the agreement.

The extent to which we rely on Fusion Capital as a source of funding will depend on a number of factors including, the prevailing market price of our common stock and the extent to which we are able to secure working capital from other sources.

If obtaining sufficient financing from Fusion Capital were to prove unavailable or prohibitively dilutive and if we are unable to commercialize and sell Ampligen® and/or increase sales of Alferon N Injection® or our other products, we will need to secure another source of funding in order to satisfy our working capital needs. Even if we are able to access the full $50,000,000 under the common stock purchase agreement with Fusion Capital, we may need to raise additional funds through additional equity or debt financing or from other sources in order to complete the necessary clinical trials and the regulatory approval processes including the commercializing of Ampligen® products. There can be no assurances that we will raise adequate funds which may have a material adverse effect on our ability to develop our products. Also, we have the ability to curtail discretionary spending, including some research and development activities, if required to conserve cash.

We may not be profitable unless we can protect our patents and/or receive approval for additional pending patents.

We need to preserve and acquire enforceable patents covering the use of Ampligen® for a particular disease in order to obtain exclusive rights for the commercial sale of Ampligen® for such disease. We obtained all rights to Alferon N Injection®, and we plan to preserve and acquire enforceable patents covering its use for existing and potentially new diseases. Our success depends, in large part, on our ability to preserve and obtain patent protection for our products and to obtain and preserve our trade secrets and expertise. Certain of our know-how and technology is not patentable, particularly the procedures for the manufacture of our experimental drug, Ampligen®, which is carried out according to standard operating procedure manuals. We have been issued certain patents including those on the use of Ampligen® and Ampligen® in combination with certain other drugs for the treatment of HIV. We also have been issued patents on the use of Ampligen® in combination with certain other drugs for the treatment of chronic Hepatitis B virus, chronic Hepatitis C virus, and a patent which affords protection on the use of Ampligen® in patients with Chronic Fatigue Syndrome. We have not yet been issued any patents in the United States for the use of AmpligenÒ as a sole treatment for any of the cancers, which we have sought to target. With regard to Alferon N Injection®, we have acquired from ISI its patents for natural alpha interferon produced from human peripheral blood leukocytes and its production process and we have filed a patent application for the use of Alferon® LDO in treating viral diseases including avian influenza. We cannot assure that our competitors will not seek and obtain patents regarding the use of similar products in combination with various other agents, for a particular target indication prior to our doing such. If we cannot protect our patents covering the use of our products for a particular disease, or obtain additional patents, we may not be able to successfully market our products.

The patent position of biotechnology and pharmaceutical firms is highly uncertain and involves complex legal and factual questions.

To date, no consistent policy has emerged regarding the breadth of protection afforded by pharmaceutical and biotechnology patents. There can be no assurance that new patent applications relating to our products or technology will result in patents being issued or that, if issued, such patents will afford meaningful protection against competitors with similar technology. It is generally anticipated that there may be significant litigation in the industry regarding patent and intellectual property rights. Such litigation could require substantial resources from us and we may not have the financial resources necessary to enforce the patent rights that we hold. No assurance can be made that our patents will provide competitive advantages for our products or will not be successfully challenged by competitors. No assurance can be given that patents do not exist or could not be filed which would have a materially adverse effect on our ability to develop or market our products or to obtain or maintain any competitive position that we may achieve with respect to our products. Our patents also may not prevent others from developing competitive products using related technology.

There can be no assurance that we will be able to obtain necessary licenses if we cannot enforce patent rights we may hold. In addition, the failure of third parties from whom we currently license certain proprietary information or from whom we may be required to obtain such licenses in the future, to adequately enforce their rights to such proprietary information, could adversely affect the value of such licenses to us.

If we cannot enforce the patent rights we currently hold we may be required to obtain licenses from others to develop, manufacture or market our products. There can be no assurance that we would be able to obtain any such licenses on commercially reasonable terms, if at all. We currently license certain proprietary information from third parties, some of which may have been developed with government grants under circumstances where the government maintained certain rights with respect to the proprietary information developed. No assurances can be given that such third parties will adequately enforce any rights they may have or that the rights, if any, retained by the government will not adversely affect the value of our license.

There is no guarantee that our trade secrets will not be disclosed or known by our competitors.

To protect our rights, we require certain employees and consultants to enter into confidentiality agreements with us. There can be no assurance that these agreements will not be breached, that we would have adequate and enforceable remedies for any breach, or that any trade secrets of ours will not otherwise become known or be independently developed by competitors.

We have limited marketing and sales capability. If we are unable to obtain additional distributors and our current and future distributors do not market our products successfully, we may not generate significant revenues or become profitable.

We have limited marketing and sales capability. We are dependent upon existing and, possibly future, marketing agreements and third party distribution agreements for our products in order to generate significant revenues and become profitable. As a result, any revenues received by us will be dependent in large part on the efforts of third parties, and there is no assurance that these efforts will be successful.

Our commercialization strategy for Ampligen-CFS may include licensing/co-marketing agreements utilizing the resources and capacities of a strategic partner(s). We are currently seeking worldwide marketing partner(s), with the goal of having a relationship in place before approval is obtained. In parallel to partnering discussions, appropriate pre-marketing activities will be undertaken. We intend to control manufacturing of Ampligen on a worldwide basis.

We cannot assure that our U.S. or foreign marketing strategy will be successful or that we will be able to establish future marketing or third party distribution agreements on terms acceptable to us, or that the cost of establishing these arrangements will not exceed any product revenues.

There are no long-term agreements with suppliers of required materials. If we are unable to obtain the required raw materials, we may be required to scale back our operations or stop manufacturing Alferon N Injection® and/or Ampligen®.

A number of essential materials are used in the production of Alferon N Injection®, including human white blood cells. We do not have long-term agreements for the supply of any of such materials. There can be no assurance we can enter into long-term supply agreements covering essential materials on commercially reasonable terms, if at all.

There are a limited number of manufacturers in the United States available to provide the polymers for use in manufacturing Ampligen®. At present, we do not have any agreements with third parties for the supply of any of these polymers. We have established relevant manufacturing operations within our New Brunswick, New Jersey facility for the production of Ampligen® polymers from raw materials in order to obtain polymers on a more consistent manufacturing basis.

If we are unable to obtain or manufacture the required polymers, we may be required to scale back our operations or stop manufacturing. The costs and availability of products and materials we need for the production of Ampligen® and the commercial production of Alferon N Injection® and other products which we may commercially produce are subject to fluctuation depending on a variety of factors beyond our control, including competitive factors, changes in technology, and FDA and other governmental regulations and there can be no assurance that we will be able to obtain such products and materials on terms acceptable to us or at all.

There is no assurance that successful manufacture of a drug on a limited scale basis for investigational use will lead to a successful transition to commercial, large-scale production.

Small changes in methods of manufacturing, including commercial scale-up, may affect the chemical structure of Ampligen® and other RNA drugs, as well as their safety and efficacy, and can, among other things, require new clinical studies and affect orphan drug status, particularly, market exclusivity rights, if any, under the Orphan Drug Act. The transition from limited production of pre-clinical and clinical research quantities to production of commercial quantities of our products will involve distinct management and technical challenges and will require additional management and technical personnel and capital to the extent such manufacturing is not handled by third parties. There can be no assurance that our manufacturing will be successful or that any given product will be determined to be safe and effective, capable of being manufactured economically in commercial quantities or successfully marketed.

We have limited manufacturing experience and capacity.

Ampligen® has been only produced in limited quantities for use in our clinical trials and we are dependent upon a third party supplier for substantially all of the production process. The failure to continue these arrangements or to achieve other such arrangements on satisfactory terms could have a material adverse affect on us. Also, to be successful, our products must be manufactured in commercial quantities in compliance with regulatory requirements and at acceptable costs. To the extent we are involved in the production process, our current facilities are not adequate for the production of our proposed products for large-scale commercialization, and we currently do not have adequate personnel to conduct commercial-scale manufacturing. We intend to utilize third-party facilities if and when the need arises or, if we are unable to do so, to build or acquire commercial-scale manufacturing facilities. We will need to comply with regulatory requirements for such facilities, including those of the FDA pertaining to current Good Manufacturing Practices (“cGMP”) regulations. There can be no assurance that such facilities can be used, built, or acquired on commercially acceptable terms, or that such facilities, if used, built, or acquired, will be adequate for our long-term needs.

We may not be profitable unless we can produce Ampligen® or other products in commercial quantities at costs acceptable to us.

We have never produced Ampligen® or any other products in large commercial quantities. We must manufacture our products in compliance with regulatory requirements in large commercial quantities and at acceptable costs in order for us to be profitable. We intend to utilize third-party manufacturers and/or facilities if and when the need arises or, if we are unable to do so, to build or acquire commercial-scale manufacturing facilities. If we cannot manufacture commercial quantities of Ampligen® or enter into third party agreements for its manufacture at costs acceptable to us, our operations will be significantly affected. Also, each production lot of Alferon N Injection® is subject to FDA review and approval prior to releasing the lots to be sold. This review and approval process could take considerable time, which would delay our having product in inventory to sell.

Rapid technological change may render our products obsolete or non-competitive.

The pharmaceutical and biotechnology industries are subject to rapid and substantial technological change. Technological competition from pharmaceutical and biotechnology companies, universities, governmental entities and others diversifying into the field is intense and is expected to increase. Most of these entities have significantly greater research and development capabilities than us, as well as substantial marketing, financial and managerial resources, and represent significant competition for us. There can be no assurance that developments by others will not render our products or technologies obsolete or noncompetitive or that we will be able to keep pace with technological developments.

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Our products may be subject to substantial competition.

Ampligen®. Competitors may be developing technologies that are, or in the future may be, the basis for competitive products. Some of these potential products may have an entirely different approach or means of accomplishing similar therapeutic effects to products being developed by us. These competing products may be more effective and less costly than our products. In addition, conventional drug therapy, surgery and other more familiar treatments may offer competition to our products. Furthermore, many of our competitors have significantly greater experience than us in pre-clinical testing and human clinical trials of pharmaceutical products and in obtaining FDA, HPB and other regulatory approvals of products. Accordingly, our competitors may succeed in obtaining FDA, HPB or other regulatory product approvals more rapidly than us. There are no drugs approved for commercial sale with respect to treating ME/CFS in the United States. The dominant competitors with drugs to treat disease indications in which we plan to address include Gilead Pharmaceutical, Pfizer, Bristol-Myers, Abbott Labs, Glaxo Smith Kline, Merck and Schering-Plough Corp. These potential competitors are among the largest pharmaceutical companies in the world, are well known to the public and the medical community, and have substantially greater financial resources, product development, and manufacturing and marketing capabilities than we have. Although we believe our principal advantage is the unique mechanism of action of Ampligen® on the immune system, we cannot assure that we will be able to compete.

ALFERON N Injection®. Our competitors are among the largest pharmaceutical companies in the world, are well known to the public and the medical community, and have substantially greater financial resources, product development, and manufacturing and marketing capabilities than we have. Alferon N Injection® currently competes with Schering's injectable recombinant alpha interferon product (INTRON® A) for the treatment of genital warts. 3M Pharmaceuticals also offer competition from its immune-response modifier, Aldara®, a self-administered topical cream, for the treatment of external genital and perianal warts. In addition, Medigene recently received FDA approval for a self-administered ointment, VeregenTM, which is indicated for the topical treatment of external genital and perianal warts. Alferon N Injection® also competes with surgical, chemical, and other methods of treating genital warts. We cannot assess the impact products developed by our competitors, or advances in other methods of the treatment of genital warts, will have on the commercial viability of Alferon N Injection®. If and when we obtain additional approvals of uses of this product, we expect to compete primarily on the basis of product performance. Our competitors have developed or may develop products (containing either alpha or beta interferon or other therapeutic compounds) or other treatment modalities for those uses. There can be no assurance that, if we are able to obtain regulatory approval of Alferon N Injection® for the treatment of new indications, we will be able to achieve any significant penetration into those markets. In addition, because certain competitive products are not dependent on a source of human blood cells, such products may be able to be produced in greater volume and at a lower cost than Alferon N Injection®. Currently, our wholesale price on a per unit basis of Alferon N Injection® is higher than that of the competitive recombinant alpha and beta interferon products.

General. Other companies may succeed in developing products earlier than we do, obtaining approvals for such products from the FDA more rapidly than we do, or developing products that are more effective than those we may develop. While we will attempt to expand our technological capabilities in order to remain competitive, there can be no assurance that research and development by others or other medical advances will not render our technology or products obsolete or non-competitive or result in treatments or cures superior to any therapy we develop.

Possible side effects from the use of Ampligen® or Alferon N Injection® could adversely affect potential revenues and physician/patient acceptability of our product.

Ampligen®. We believe that Ampligen® has been generally well tolerated with a low incidence of clinical toxicity, particularly given the severely debilitating or life threatening diseases that have been treated. A mild flushing reaction has been observed in approximately 15% of patients treated in our various studies. This reaction is occasionally accompanied by a rapid heart beat, a tightness of the chest, urticaria (swelling of the skin), anxiety, shortness of breath, subjective reports of "feeling hot", sweating and nausea. The reaction is usually infusion-rate related and can generally be controlled by reducing the rate of infusion. Other adverse side effects include liver enzyme level elevations, diarrhea, itching, asthma, low blood pressure, photophobia, rash, transient visual disturbances, slow or irregular heart rate, decreases in platelets and white blood cell counts, anemia, dizziness, confusion, elevation of kidney function tests, occasional temporary hair loss and various flu-like symptoms, including fever, chills, fatigue, muscular aches, joint pains, headaches, nausea and vomiting. These flu-like side effects typically subside within several months. One or more of the potential side effects might deter usage of Ampligen® in certain clinical situations and therefore, could adversely affect potential revenues and physician/patient acceptability of our product.

Alferon N Injection®. At present, Alferon N Injection® is only approved for the intra-lesional (within the lesion) treatment of refractory or recurring external genital warts in adults. In clinical trials conducted for the treatment of genital warts with Alferon N Injection®, patients did not experience serious side effects; however, there can be no assurance that unexpected or unacceptable side effects will not be found in the future for this use or other potential uses of Alferon N Injection® which could threaten or limit such product’s usefulness.

We may be subject to product liability claims from the use of Ampligen®, Alferon N Injection®, or other of our products which could negatively affect our future operations.

We face an inherent business risk of exposure to product liability claims in the event that the use of Ampligen® or other of our products results in adverse effects. This liability might result from claims made directly by patients, hospitals, clinics or other consumers, or by pharmaceutical companies or others manufacturing these products on our behalf. Our future operations may be negatively affected from the litigation costs, settlement expenses and lost product sales inherent to these claims. While we will continue to attempt to take appropriate precautions, we cannot assure that we will avoid significant product liability exposure. Although we currently maintain product liability insurance coverage, there can be no assurance that this insurance will provide adequate coverage against Ampligen® and/or Alferon N Injection® product liability claims. A successful product liability claim against us in excess of Ampligen®’s $1,000,000 in insurance coverage; $3,000,000 in aggregate, or in excess of Alferon N Injection®’s $5,000,000 in insurance coverage; $5,000,000 in aggregate; or for which coverage is not provided could have a negative effect on our business and financial condition.

The loss of services of key personnel including Dr. William A. Carter could hurt our chances for success.

Our success is dependent on the continued efforts of Dr. William A. Carter because of his position as a pioneer in the field of nucleic acid drugs, his being the co-inventor of Ampligen®, and his knowledge of our overall activities, including patents and clinical trials. The loss of Dr. Carter's services could have a material adverse effect on our operations and chances for success. We have secured key man life insurance in the amount of $2,000,000 on the life of Dr. Carter and we have an employment agreement with Dr. Carter that, as amended, runs until December 31, 2010. However, Dr. Carter has the right to terminate his employment upon not less than 30 days prior written notice. The loss of Dr. Carter or other personnel or the failure to recruit additional personnel as needed could have a materially adverse effect on our ability to achieve our objectives.

Uncertainty of health care reimbursement for our products.

Our ability to successfully commercialize our products will depend, in part, on the extent to which reimbursement for the cost of such products and related treatment will be available from government health administration authorities, private health coverage insurers and other organizations. Significant uncertainty exists as to the reimbursement status of newly approved health care products, and from time to time legislation is proposed, which, if adopted, could further restrict the prices charged by and/or amounts reimbursable to manufacturers of pharmaceutical products. We cannot predict what, if any, legislation will ultimately be adopted or the impact of such legislation on us. There can be no assurance that third party insurance companies will allow us to charge and receive payments for products sufficient to realize an appropriate return on our investment in product development.

There are risks of liabilities associated with handling and disposing of hazardous materials.

Our business involves the controlled use of hazardous materials, carcinogenic chemicals, flammable solvents and various radioactive compounds. Although we believe that our safety procedures for handling and disposing of such materials comply in all material respects with the standards prescribed by applicable regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident or the failure to comply with applicable regulations, we could be held liable for any damages that result, and any such liability could be significant. We do not maintain insurance coverage against such liabilities.

Risks Associated With an Investment in Our Common Stock

The market price of our stock may be adversely affected by market volatility.

The market price of our common stock has been and is likely to be volatile. In addition to general economic, political and market conditions, the price and trading volume of our stock could fluctuate widely in response to many factors, including:

- announcements of the results of clinical trials by us or our competitors;

- adverse reactions to products;
- governmental approvals, delays in expected governmental approvals or withdrawals of any prior governmental approvals or public or regulatory agency concerns regarding the safety or effectiveness of our products;
- changes in U.S. or foreign regulatory policy during the period of product development;
- developments in patent or other proprietary rights, including any third party challenges of our intellectual property rights;
- announcements of technological innovations by us or our competitors;
- announcements of new products or new contracts by us or our competitors;
- actual or anticipated variations in our operating results due to the level of development expenses and other factors;
- changes in financial estimates by securities analysts and whether our earnings meet or exceed the estimates;
- conditions and trends in the pharmaceutical and other industries; new accounting standards; and
- the occurrence of any of the risks described in these "Risk Factors."

Our common stock is listed for quotation on the American Stock Exchange. For the 12-month period ended December 31, 2007, the price of our common stock has ranged from $0.76 to $2.33 per share. We expect the price of our common stock to remain volatile. The average daily trading volume of our common stock varies significantly. Our relatively low average volume and low average number of transactions per day may affect the ability of our stockholders to sell their shares in the public market at prevailing prices and a more active market may never develop.

In the past, following periods of volatility in the market price of the securities of companies in our industry, securities class action litigation has often been instituted against companies in our industry. If we face securities litigation in the future, even if without merit or unsuccessful, it would result in substantial costs and a diversion of management attention and resources, which would negatively impact our business.

Our stock price may be adversely affected if a significant amount of shares are sold in the public market.

We have registered 13,201,840 for sale by Fusion Capital and 143,658 shares by others, and have stockholder authorization to register an additional 15,000,000 shares for sale by Fusion Capital under the common stock purchase agreement that expires April 30, 2008. As of December 31, 2007, approximately 175,435 shares of our common stock, constituted "restricted securities" as defined in Rule 144 under the Securities Act. Also, we have registered 6,859,534 shares issuable upon exercise of 135% of certain Warrants and upon exercise of certain other warrants. Registration of the shares permits the sale of the shares in the open market or in privately negotiated transactions without compliance with the requirements of Rule 144. To the extent the exercise price of the warrants is less than the market price of the common stock, the holders of the warrants are likely to exercise them and sell the underlying shares of common stock and to the extent that the conversion price and exercise price of these securities are adjusted pursuant to anti-dilution protection, the securities could be exercisable or convertible for even more shares of common stock. We also may issue shares to be used to meet our capital requirements or use shares to compensate employees, consultants and/or directors. We are unable to estimate the amount, timing or nature of future sales of outstanding common stock. Sales of substantial amounts of our common stock in the public market could cause the market price for our common stock to decrease. Furthermore, a decline in the price of our common stock would likely impede our ability to raise capital through the issuance of additional shares of common stock or other equity securities.

The sale of our common stock to Fusion Capital may cause dilution and the sale of the shares of common stock acquired by Fusion Capital and other shares registered for selling stockholders could cause the price of our common stock to decline.

The sale by Fusion Capital and other selling stockholders of our common stock will increase the number of our publicly traded shares, which could depress the market price of our common stock. Moreover, the mere prospect of sales by Fusion Capital and other selling stockholders could depress the market price for our common stock. The issuance of shares to Fusion Capital under the common stock purchase agreement will dilute the equity interest of existing stockholders and could have an adverse effect on the market price of our common stock.

The purchase price for the common stock to be sold to Fusion Capital pursuant to the common stock purchase agreement will fluctuate based on the price of our common stock. All shares sold to Fusion Capital are to be freely tradable. Fusion Capital may sell none, some or all of the shares of common stock purchased from us at any time. We expect that the shares offered by Fusion Capital will be sold over a period of in excess of two years. Depending upon market liquidity at the time, a sale of shares by Fusion at any given time could cause the trading price of our common stock to decline. The sale of a substantial number of shares of our common stock to Fusion Capital pursuant to the purchase agreement, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

Provisions of our Certificate of Incorporation and Delaware law could defer a change of our management which could discourage or delay offers to acquire us.

Provisions of our Certificate of Incorporation and Delaware law may make it more difficult for someone to acquire control of us or for our stockholders to remove existing management, and might discourage a third party from offering to acquire us, even if a change in control or in management would be beneficial to our stockholders. For example, our Certificate of Incorporation allows us to issue shares of preferred stock without any vote or further action by our stockholders. Our Board of Directors has the authority to fix and determine the relative rights and preferences of preferred stock. Our Board of Directors also has the authority to issue preferred stock without further stockholder approval. As a result, our Board of Directors could authorize the issuance of a series of preferred stock that would grant to holders the preferred right to our assets upon liquidation, the right to receive dividend payments before dividends are distributed to the holders of common stock and the right to the redemption of the shares, together with a premium, prior to the redemption of our common stock. In this regard, in November 2002, we adopted a stockholder rights plan and, under the Plan, our Board of Directors declared a dividend distribution of one Right for each outstanding share of Common Stock to stockholders of record at the close of business on November 29, 2002. Each Right initially entitles holders to buy one unit of preferred stock for $30.00. The Rights generally are not transferable apart from the common stock and will not be exercisable unless and until a person or group acquires or commences a tender or exchange offer to acquire, beneficial ownership of 15% or more of our common stock. However, for Dr. Carter, our chief executive officer, who already beneficially owns 7.9% of our common stock, the Plan’s threshold will be 20%, instead of 15%. The Rights will expire on November 19, 2012, and may be redeemed prior thereto at $.01 per Right under certain circumstances.

Special Note Regarding Forward Looking Statements

Because the risk factors referred to above could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us, you should not place undue reliance on any such forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made and we undertake no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. Our research in clinical efforts may continue for the next several years and we may continue to incur losses due to clinical costs incurred in the development of Ampligen® for commercial application. Possible losses may fluctuate from quarter to quarter as a result of differences in the timing of significant expenses incurred and receipt of licensing fees and/or cost recovery treatment revenues in Europe, Canada and in the United States.

ITEM 1B. Unresolved Staff Comments.

None.

ITEM 2. Properties.

We currently lease our headquarters located in Philadelphia, Pennsylvania consisting of a suite of offices of approximately 15,000 square feet. We also currently own, occupy and use our New Brunswick, New Jersey laboratory and production facility that we acquired from ISI. These facilities consist of two buildings located on 2.8 acres. One building is a two story facility consisting of a total of 31,300 square feet. This facility contains offices, laboratories, production space and shipping and receiving areas. It is also contains space designated for research and development, our pharmacy, packaging, quality assurance and quality control laboratories. Building Two has 11,670 square feet consisting of offices, laboratories and warehouse space. The property has parking space for approximately 100 vehicles.

ITEM 3. Legal Proceedings.

On September 30, 1998, we filed a multi-count complaint against Manuel P. Asensio, Asensio & Company, Inc. (“Asensio”). The action included claims of defamation, disparagement, tortuous interference with existing and prospective business relations and conspiracy, arising out of Asensio’s false and defamatory statements. The complaint further alleged that Asensio defamed and disparaged us in furtherance of a manipulative, deceptive and unlawful short-selling scheme in August and September, 1998. In 1999, Asensio filed an answer and counterclaim alleging that in response to Asensio’s strong sell recommendation and other press releases, we made defamatory statements about Asensio. We denied the material allegations of the counterclaim. In July 2000, following dismissal in federal court for lack of subject matter jurisdiction, we transferred the action to the Pennsylvania State Court. In March 2001, the defendants responded to the complaints as amended and a trial commenced on January 30, 2002. A jury verdict disallowed the claims against the defendants for defamation and disparagement and the court granted us a directed verdict on the counterclaim. On July 2, 2002 the Court entered an order granting us a new trial against Asensio for defamation and disparagement. Thereafter, Asensio appealed the granting of a new trial to the Superior Court of Pennsylvania. The Superior Court of Pennsylvania has denied Asensio’s appeal. Asensio petitioned the Supreme Court of Pennsylvania for allowance of an appeal, which was denied. We now anticipate the scheduling of a new trial against Asensio for defamation and disparagement in the Philadelphia Common Pleas Court.

In June 2002, a former ME/CFS clinical trial patient in Belgium filed a claim in Belgium against Hemispherx Biopharma Europe, NV/SA, our Belgian subsidiary, and one of its clinical trial investigators alleging that she was harmed in the Belgium ME/CFS clinical trial as a result of negligence and breach of warranties. We believe the claim is without merit and we are defending the claim against us through our product liability insurance carrier.

In December 2004, we filed a multicount complaint in federal court (Southern District of Florida) against a conspiratorial group seeking to illegally manipulate our stock for purposes of bringing about a hostile takeover of Hemispherx. The lawsuit alleges that the conspiratorial group commenced with a plan to seize control of our cash and proprietary assets by an illegal campaign to drive down our stock price and publish disparaging reports on our management and current fiduciaries. The lawsuit seeks monetary damages from each member of the conspiratorial group as well as injunctions preventing further recurrences of their misconduct. The conspiratorial group includes Bioclones, a privately held South African Biopharmaceutical company that collaborated with us, and Johannesburg Consolidated Investments, a South African corporation, Cyril Donninger, R. B. Kebble, H. C. Buitendag, Bart Goemaere, and John Doe(s). Bioclones, Johannesburg Consolidated Investments, Cyril Donninger, R. B. Kebble and H.C. Buitendag filed a motion to dismiss the complaint, which was granted by the court. The decision granting the dismissal is on appeal to the 11th federal circuit court of appeals.

In October 2006, litigation was initiated against us in the Court of Common Pleas, Philadelphia County, Pennsylvania between us and Hospira Worldwide, Inc. with regard to a dispute with respect to fees for services charged by Hospira Worldwide, Inc. to us. The dispute was promptly settled and the litigation dismissed.

In January 2007, arbitration proceedings were initiated by Bioclones (Proprietary), Ltd., (“Bioclones”) and are pending in South Africa to determine damages arising out of the termination of a marketing agreement we had with Bioclones. We had deemed the marketing agreement void due to numerous and long standing failures of performance by Bioclones and will present claims for damages against Bioclones in the arbitration. Bioclones has now confirmed that the marketing agreement has been terminated.

In January 2007, we filed an application in South Africa for the dissolution of Ribotech (PTY) Ltd. (“Ribotech”) on the grounds that the purpose for the existence of Ribotech, the marketing agreement between us and Bioclones, had been terminated. The application for termination is now pending.

Due to non-performance by Laboratorios del Dr. Esteve (“Esteve”) of certain contractually required clinical trials, we notified Esteve of our intention to terminate the Sales and Distribution Agreement entered into as of March 20, 2002, and in December 2007, as is its right under the Sales and Distribution Agreement, Esteve applied for arbitration, seeking damages. We believe the Esteve claim is without merit and have filed a counterclaim.

In March 2007, Cedric Philipp ("Philipp") initiated an arbitration proceeding in Philadelphia, Pennsylvania with the American Arbitration Association alleging that, under a 1994 agreement between us and Philipp ("1994 Agreement"), we owed him commissions on product, or services he alleges we had purchased from Hollister-Stier. The Company is defending this claim on, among other claims, the ground that the 1994 Agreement has been terminated. In April 2007, the company filed a declaratory judgment action in the Court of Common Please of Philadelphia asking the court to declare that the 1994 agreement between us and Cedric Philipp has been terminated. We have withdrawn the declaratory judgment action.

ITEM 4. Submission of Matters to a Vote of Security Holders.

No matters were submitted to a vote of the security holders during the last quarter of the year ended December 31, 2007.

PART II

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

In 2007, we issued 6,943,682 shares of common stock consisting of 1) 116,745 shares for interest payments related to the October 2003, January 2004 and July 2004 Convertible Debentures; 2) 175,435 shares in payment of services rendered and 3) 6,651,502 shares issued pursuant to the 2006 Purchase Agreement with Fusion Capital.

The foregoing issuances of securities were private transactions and exempt from registration under section 4(2) of the Securities Act and/or regulation D rule 506 promulgated under the Securities Act. These securities have been or will be registered with the SEC.

Since October 1997 our common stock has been listed and traded on the American Stock Exchange ("AMEX") under the symbol HEB. The following table sets forth the high and low list prices for our Common Stock for the last two fiscal years as reported by the AMEX. Such prices reflect inter-dealer prices, without retail markup, markdowns or commissions and may not necessarily represent actual transactions.

COMMON STOCK	High	Low
Time Period:		
January 1, 2006 through March 31, 2006	$ 4.23	$ 2.15
April 1, 2006 through June 30, 2006	3.57	2.21
July 1, 2006 through September 30, 2006	2.63	1.80
October 1, 2006 through December 31, 2006	2.47	1.87
January 1, 2007 through March 31, 2007	2.49	1.60
April 1, 2007 through June 30, 2007	1.82	1.24
July 1, 2007 through September 30, 2007	1.79	1.06
October 1, 2007 through December 31, 2007	2.08	0.53

As of March 3, 2008, there were approximately 256 holders of record of our Common Stock. This number was determined from records maintained by our transfer agent and does not include beneficial owners of our securities whose securities are held in the names of various dealers and/or clearing agencies.

On March 3, 2008, the last sale price for our common stock on the AMEX was $0.85 per share.

We have not paid any cash dividends on our Common Stock in recent years. It is management's intention not to declare or pay dividends on our Common Stock, but to retain earnings, if any, for the operation and expansion of our business.

The following table gives information about our Common Stock that may be issued upon the exercise of options, warrants and rights under all of our equity compensation plans as of December 31, 2007.

Plan Category	Number of Securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average Exercise price of Outstanding options, warrants and rights (b)	Number of Securities Remaining available for future issuance under equity compensation plans(excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders:	6,902,204	$ 2.61	1,443,524
Equity compensation plans not approved by security holders:	7,262,771	$ 1.99	-
Total	14,164,975	$ 2.99	1,443,524

Performance Graph

Total Return To Shareholders
(Includes reinvestment of dividends)

ANNUAL RETURN PERCENTAGE
Years Ending

Company Name / Index	Dec 03	Dec 04	Dec 05	Dec 06	Dec 07
Hemispherx Biopharma, Inc.	6.10	-15.93	14.21	1.38	-65.45
S&P SmallCap 600 Index	38.79	22.65	7.68	15.12	-0.30
Peer Group	46.06	-63.90	-10.29	-21.89	-54.59

INDEXED RETURNS
Years Ending

Company Name / Index	Base Period Dec 02	Dec 03	Dec 04	Dec 05	Dec 06	Dec 07
Hemispherx Biopharma, Inc.	**100**	106.10	89.20	101.88	103.29	35.68
S&P SmallCap 600 Index	**100**	138.79	170.22	183.30	211.01	210.38
Peer Group	**100**	146.06	52.72	47.29	36.94	16.78

Peer Group Companies
AVANT IMMUNOTHERAPEUTICS INC
AVI BIOPHARMA INC
GENTA INC
SCICLONE PHARMACEUTICALS INC

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ITEM 6. Selected Financial Data (in thousands except for share and per share data).

The selected consolidated financial data set forth below should be read in conjunction with our consolidated financial statements, and the related notes thereto, and "Management's Discussion and Analysis of Financial Condition and Results of Operations", included in this Annual Report. The statement of operations and balance sheet data presented below for, and as of the end of, each of the years in the five year period ended December 31, 2007 are derived from our audited consolidated financial statements. Historical results are not necessarily indicative of the results to be expected in the future.

Year Ended December 31	2003[2]	2004	2005	2006	2007
Statement of Operations Data:					
Revenues and License fee Income	$ 657	$ 1,229	$ 1,083	$ 933	$ 1,059
Total Costs and Expenses[1]	7,909	12,118	10,998	19,627	20,348
Interest Expense and Financing Costs[2]	6,723	5,674	3,121	1,259	396
Net loss	(13,895)	(16,887)	(12,446)	(19,399)	(18,139)
Deemed Dividend	(1,320)	(4,031)	-	-	-
Net loss applicable to common stockholders	(15,215)	(20,918)	(12,446)	(19,399)	(18,139)
Basic and diluted net loss per share	(0.43)	(0.46)	(0.24)	(0.31)	(0.25)
Shares used in computing basic and diluted net loss per share	35,234,526	45,177,862	51,475,192	61,815,358	71,839,782
Balance Sheet Data:					
Working Capital	$ 7,000	$ 13,934	$ 16,353	$ 16,559	$ 14,412
Total Assets	13,638	25,293	24,654	31,431	23,142
Debt, net of discount[3]	3,123	4,312	4,171	3,871	-
Stockholders' Equity	8,417	19,443	18,627	24,751	20,955
Cash Flow Data:					
Cash used in operating activities	$ (7,022)	$ (7,240)	$ (7,231)	$ (13,747)	$ (15,112)
Capital expenditures	(19)	(150)	(1,002)	(1,351)	(212)

(1) General and Administrative expenses include stock compensation expense of $237, $2,000, $391, $2,483 and $2,291 for the years ended December 31, 2003, 2004, 2005, 2006, and 2007, respectively.

(2) For information concerning our financing see Note 7 to our consolidated financial statements for the year ended December 31, 2007 contained herein.

(3) In accounting for the March 12, 2003, July 10, 2003, October 29, 2003, January 26, 2004 and July 13, 2004 issuances of 6% Senior Convertible Debentures in the principal amounts of $5,426, $5,426, $4,142, $4,000, and $2,000, respectively, and related embedded conversion features and warrant issuances, we recorded debt discounts which, in effect, reduced the carrying value of the debt.

ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis is related to our financial condition and results of operations for the three years ended December 31, 2007. This information should be read in conjunction with Item 6 - “Selected Financial Data” and our consolidated financial statements and related notes thereto beginning on F-1 of this Form 10-K.

Statement of Forward-Looking Information

Certain statements in the section are “forward-looking statements.” You should read the information before Item 1B above, “Special Note” Regarding Forward-Looking Statements” for more information about our presentation of information.

Background

We are a biopharmaceutical company engaged in the manufacture and clinical development of new drug entities for treatment of seriously debilitating disorders. Our flagship products include Alferon N Injection® and the experimental therapeutics Ampligen® and Oragens®. Alferon N Injection® is approved for a category of STD infection, and Ampligen® and Oragens® represent experimental RNA nucleic acids being developed for globally important viral diseases and disorders of the immune system. Hemispherx's platform technology includes large and small agent components for potential treatment of various severely debilitating and life threatening diseases. We have in excess of 90 patents comprising our core intellectual property estate, a fully commercialized product (Alferon N Injection®) and GMP certified manufacturing facilities for our novel pharma products.

We have reported net income only from 1985 through 1987. Since 1987, we have incurred, as expected, substantial operating losses due to our conducting research and development programs.

RESULTS OF OPERATIONS

Year ended December 31, 2006 versus December 31, 2007

Net loss

Our net loss of approximately $18,139,000 for the year ended December 31, 2007 was 6.5% lower when compared to the same period in 2006. This $1,260,000 reduction in loss was primarily due to:

1) Higher Interest and Other Income of approximately $646,000 mainly due to higher interest earned upon the maturity of our marketable securities as compared to the same period a year ago;

2) Lower interest expense and financing costs of $863,000 in 2007 relating to the amortization of debt discounts on our convertible debentures and the incurring of liquidated damages in 2006 payable to our debenture holders resulting from us failing to timely file our 2005 Annual Report on Form 10-K; and

3) An increase of $346,000 in other income due to a reversal of accrued liquidated damages in 2006 with respect to our debentures holders as a result of our failure to timely file our 2005 Annual Report on Form 10-K. These damages related to certain debenture covenants settled without charge in the maturation and pay down of the debenture holder’s outstanding loan balances in 2007.

Net loss per share was $(0.25) for the current period versus $(0.31) for the same period in 2006.

Revenues

Revenues for the year ended December 31, 2007 were $1,059,000 as compared to revenues of $933,000 for the same period in 2006. Ampligen® sold under the cost recovery clinical program was down $49,000 or 27% and Alferon N Injection® sales were up $175,000 or 23% as compared to the prior period. Ampligen® sold under the cost recovery clinical program is a product of physicians and ME/CFS patients applying to us to enroll in the program. This program has been in effect for several years and is offered as a treatment option to patients severely affected by CFS. As the name “cost recovery” implies, we have no gain or profit on these sales. The benefits to us include 1) physicians and patients becoming familiar with Ampligen® and 2) collection of clinical data relating to the patients’ treatment and results.

We altered our marketing strategy for Alferon N Injection® by relaunching the product via a collaborative marketing initiative between Hemispherx and a national Specialty Pharmacy network encompassing specialty pharmacists, pharmacies and targeted physician specialists. This effort was intended to focus our efforts in the most appropriate and productive market segment for the product. While Alferon N dollar sales are up from 2006, unit sales are down which reflects the effect of the price increase put into place in February 2007.

Production costs/cost of goods sold

Production/cost of goods sold was approximately $930,000 during the current period representing a decrease of approximately $345,000 or 27% as compared to the same period in 2006. This decrease was primarily due to lower production costs of $199,000 relating to excess production capacity during the prior period as more effort was directed toward Ampligen® research and development and the NDA; and a decrease in costs of goods sold of $146,000. Costs of goods sold for the year ended December 31, 2006 and 2007 was $527,000 and $381,000, respectively.

The primary reason for the decrease can be attributed to a decrease in unit sales in the current year versus the prior year. We outsourced certain components of our overall research and development, manufacturing, marketing and distribution while maintaining control over the entire process through our quality assurance group and our clinical monitoring group.

Research and Development costs

Overall research and development costs for the year ended December 31, 2007 were $10,444,000 as compared to $10,127,000 for the same period a year ago representing an increase of $317,000 or 3%. These costs are primarily related to the collection and processing of clinical data, including the costs of establishing our in-house polymer production facility and the costs of preparing and completing our NDA for the use of Ampligen® in treating CFS. The year to year increase can be basically attributed to an increase in the use of consultants related to the preparation of our Ampligen® NDA.

Our primary focus in 2007 was on the preparation of the NDA for using Ampligen® to treat patients affected with CFS. In addition, we documented our polymer production process in anticipation of an FDA inspection. Three lots of liquid Ampligen® were produced for use in testing and stability studies. We finalized the filing of our Ampligen® NDA on October 7, 2007.

On December 3, 2007 a refusal to file (RTF) letter was received because the application was deemed “not substantially complete”. A written response was developed and submitted to the FDA on January 8, 2008 addressing fourteen pre-clinical and clinical questions. At our scheduled Guidance Meeting with the FDA on February 8, 2008, the number of items necessary to accomplish a complete filing for review purposes was reduced from the original fourteen to five. Nine of the original fourteen incomplete items are no longer considered as filing related issues. The five remaining open items are being addressed by our clinical staff with the expectation of filing five additional Amendments to the original NDA that was filed on October 7, 2007.

Much of our R&D cost is related to production of raw materials at our new production line installed at our New Brunswick facility. This facility produces Poly I and Poly $C_{12}U$ for use by Hollister-Stier (our contract manufacturer) in the manufacture of Ampligen®. The first pilot production runs are being used for stability testing. Later commercial sized runs are being used for process validation and clinical use.

In addition, we are engaged in broad based, ongoing, experimental studies assessing the efficacy of Ampligen®, Alferon N Injection®, and Alferon LDO against influenza viruses as an adjuvant single agent antiviral with Defence R&D Canada, Japan’s National Institute of Infectious disease, Biken (the non-profit operational arm of the Foundation for Microbial Diseases of Osaka University) and St. Vincent’s Hospital in Darlinghurst, Australia.

The Biken arrangement was concluded in December 2007 and basically consists of Biken purchasing Ampligen® from us for use in conducting further animal studies of intranasal prototype vaccines containing antigens from influenza sub-types H1N1, H3N2 and B progressing to human studies with all programs supported by the Japanese Health Ministry. Under the terms of the non–exclusive licensing arrangement, we will receive royalties as well as income for all Ampligen® used in the ongoing experimental work and any subsequent marketing of Ampligen® as an immuno-enhancer for flu vaccines delivered intranasally in Japan. To date, only 2 or 3 pharma companies worldwide have achieved regulatory authorizations to sell intranasally (IN) administered influenza vaccines versus many companies receiving approval for intramuscular vaccine delivery routes. Safety has been paramount in developing effective treatments. However, animal studies to date indicate Ampligen®, an experimental drug, may be safely administered intranasally. Clinical studies (in other disorders) have built a database of more than 90,000 injections of Ampligen® when given parenterally (intravenous, or “IV”).

In September 2007, Japan’s National Institute of Infectious Disease (“JNIID”) initiated research on the co-administration of JNIID’s HIV-1 vaccine with our experimental TLR3 agonist a substance that binds to a specific receptor and triggers a host defense response in the cell) and immune enhancer, Ampligen®. This research is the result of earlier research suggesting a potential role for Ampligen® in boosting responses to certain vaccines designed to combat avian influenza (Bird Flu) as well as seasonal influenza viruses. The objective of this research is to determine if Ampligen® can overcome the historical problem which has handicapped AIDS vaccine development, namely marginal immune response which undermines the potential of long-lasting protection. Ampligen® will be combined with HIV recombinant protein and administered via an intranasal route.

In October 2007, JNIID published, in two peer reviewed journals, the results of their studies to evaluate the ability of current seasonal influenza vaccine to confer cross-protection against highly pathogenic H5N1 influenza (Bird Flu) virus in mice. These studies indicate that, as a vaccine enhancer co-administered with their seasonal trivalent influenza vaccine, Ampligen® helps induce a protective effect against H5N1 influenza viruses. As such, Ampligen® as a toll-like receptor 3 agonist may aid in overcoming the problems protecting against mutated strains of the H5N1 virus and of limited supplies of H5N1 virus vaccines. Additional studies to support this conclusion are planned.

In June 2007, we initiated a clinical trial in Australia using Ampligen® in combination with seasonal flu vaccine. This trial, expected to continue for several months, is being conducted in Australia's winter season and focuses on populations at risk for virulent cases of influenza, especially those over the age of 60 years who historically may have weakened immune systems. The Australian clinical trial was prompted by the results from the pre-clinical work conducted by the JNIID (see above). Thirty patients are anticipated to be enrolled in this study, which will utilize a two dose Ampligen® regimen of 2 mg per dose. This study is being monitored by Clinical Network Services Pty. Ltd. located in Brisbane, Australia. The clinical trials center of St. Vincent's Hospital based in DarlingHurst, Australia is conducting the trial. Prospective patients are being screened to be included in the clinical trial.

The Center for Disease Control and Prevention reports that the number of mosquito-borne West Nile Virus ("WNV") infections in the United States is "up sharply" over the same period in 2006. This increased infection rate has accelerated the enrollment of patients in our Phase IIb clinical trial using Alferon N™ to treat WNV patients. In lab studies, Alferon N™, a natural cocktail of eight alpha-interferons, shows synergistic effects (up to 100 fold over recombinant interferons) against pathogens such as WNV. The Phase IIb clinical trial is a double-blinded, randomized, multi-center program under the direction of Cornell University and Weill Cornell Medical College/New York Hospital.

General and Administrative Expenses

General and Administrative ("G&A") expenses for the year ended December 31, 2006 and 2007 were approximately $8,225,000 and $8,974,000, respectively, reflecting an increase of $749,000 or 9%. This increase related primarily to an increase in legal and professional fees of $325,000 primarily due to on-going litigation involving Bioclones, increase in travel related expenses of $87,000 and increases in salaries and wages of $398,000 mainly resulting from the hire of our chief operating officer during the 4th quarter 2006. These increases in general and administrative costs were offset by lower accounting fees of $545,000 in 2007. The decrease in accounting fees was primarily due to charges incurred by us in 2006 related to the restatements to our financial statements in 2005. Lastly, we incurred impairment losses in 2007 amounting to $526,000 as compared to no such charges in the prior year. The primary reason for these charges stemmed from the $228,000 write-down of a water purification system that was determined to be unnecessary at our New Jersey facility due to a change in manufacturing plans. In addition, we wrote down the value of our intangible asset associated with the repurchase of a 6% Royalty on Alferon N Injection sales by $298,000. We determined that we did not have sufficient inventory on hand to realize the full economic benefit of this asset; therefore, it was written down to its net realizable value.

Our operating funds should be sufficient to meet our operating cash requirements for the next 18 months as we have taken steps to curtail discretionary spending to conserve cash and reduce our monthly burn rate.

Reversal of Previously Accrued Interest Expense

Reversal of previously accrued interest expense was $346,000 for the year ended December 31, 2007. This item, classified as other income, resulted from the reversal of accrued liquidated damages in 2006 related to a certain covenant in our debenture agreements. These charges were incurred as a result of our failure to timely file our 2005 Annual Report on Form 10-K and our report on Form 10-Q for the quarterly period ended March 31, 2006 with the SEC pursuant to the 1934 Act. These liquidated damages were not included as part of the maturation and pay down of the debenture holder's outstanding loan balances.

Interest and Other Income

Interest and other income for the year ended December 31, 2006 and 2007 increased approximately $646,000 as compared to the same period a year earlier. The increase in interest and other income during the current period was mainly due to higher interest earned upon the maturity of our marketable securities as compared to the same period a year ago.

Interest Expense and Financing Costs

Interest expense and non-cash financing costs were approximately $396,000 for the year ended December 31, 2007 versus $1,259,000 for the same period a year ago. The main reason for the decrease in interest expense and financing costs of $863,000 or 69% can be attributed to decreased amortization charges on debt discounts and the incurring of liquidated damages in 2006 payable to our debenture holders resulting from our failure to timely file our 2005 Annual Report on Form 10-K as we were in violation of provisions within our debenture agreements. These debentures matured in June 2007 and all outstanding loan balances were paid off.

Years Ended December 31, 2005 vs. 2006

Net loss

Our net loss of $19,399,000 for the year ended December 31, 2006 was up $6,953,000 or 56% compared to the same period in 2005. This increase in loss was primarily due to: 1) higher General and Administrative ("G&A") expense of $2,836,000 related primarily to the adoption of FAS 123R amounting to higher stock compensation expense of $2,092,000 and higher accounting fees of $747,000 mainly related to the restatement of our financial statements, 2) higher research and development costs of $4,909,000 due to an increase in direct costs associated with developing Ampligen® and Alferon N Injection® for new and existing indications and costs associated with stability studies for Ampligen® and Alferon N Injection® related to manufacturing at our new contract manufacturer's sites, Hollister-Stier and Hyaluron, and 3) higher production costs of approximately $884,000 primarily due to excess manufacturing capacity. Offsetting these increased expenditures, was a net decrease in our interest expense and financing costs of approximately $1,862,000 as the amortization of the discounts on our convertible Debentures has been decreasing as they near maturity. Net losses per share were $.31 for current period versus $.24 for the same period 2005.

Revenues

Revenues for the years ended December 31, 2006 were $933,000 as compared to revenues of $1,083,000 for the same period in 2005. Ampligen® sold under the cost recovery clinical program was up $10,000 or 6% and Alferon N Injection® sales were down $160,000 or 18%. The decline in Alferon N Injection® sales can be attributed to increased competition from rival products. Ampligen® sold under the cost recovery clinical program is a product of physicians and ME/CFS patients applying to us to enroll in the program. This program has been in effect for several years and is offered as a treatment option to patients severely affected by CFS. As the name "cost recovery" implies, we have no gain or profit on these sales. The benefits to us include 1) physicians and patients becoming familiar with Ampligen® and 2) collection of clinical data relating to the patients' treatment and results. We are altering our marketing strategy for Alferon N Injection®. We plan to establish an internal marketing and sales department to facilitate and refine our commercialization initiatives.

Production costs/cost of goods sold

Our costs for production/cost of goods sold increased $884,000 for the year ended December 31, 2006 compared to the same period in 2005. This increase was primarily due to higher production costs representing excess production capacity during the current period amounting to $748,000. Cost of goods sold for the year ended December 31, 2005 and 2006 were $391,000 and $527,000, respectively.

We executed a Manufacturing and Safety Agreement with Hyaluron, Inc. ("Hyaluron") of Burlington, Massachusetts, for the formulation, packaging and labeling of Alferon N Injection®. During 2006, Hyaluron conducted three production runs for stability testing of Alferon N Injection®'s new vial material. The stability test results at the six month check point met the required specifications. The stability and validation testing of the new vials was successfully completed by year end 2006.

We purchased the royalty interest related to the sales of our natural alpha interferon products from Stem Cell Innovations, Inc. (previously known as Interferon Sciences, Inc.) for $620,000. In March 2004, we acquired the FDA approved manufacturing facility in New Brunswick, N.J. and the worldwide license for the production, manufacture, use, marketing and sale of Alferon N Injection®. The royalty interest on the interferon products was a residual of this transaction.

We outsource certain components of our overall research and development, manufacturing, marketing and distribution while maintaining control over the entire process through our quality assurance group and our clinical monitoring group.

Research and Development costs

Overall research and development costs for the year ended December 31, 2006 were $10,127,000 as compared to $5,218,000 for the same period a year ago representing an increase of $4,909,000 or 94%. The higher costs reflect an increase in the direct costs associated with our effort to develop our lead product, Ampligen®, as a therapy in treating acute and chronic diseases, cancers and on-going clinical trials involving patients with HIV and pre-clinical and clinical testing for possible treatment for avian and seasonal influenza viruses. Also, incremental costs were incurred for development of alternative delivery routes for Alferon N more suitable for various biodefense treatment indications.

Much of this increase in R&D cost is related to the production of raw materials at our new production line recently installed at our New Brunswick facility. The New Brunswick facility successfully produced three lots of Poly I and three lots of Poly $C_{12}U$, which have been shipped to Hollister-Stier (our contract manufacturer) for use in producing Ampligen® doses.

For current status on Research & Development activities see Part I, Item 1. Business and Management's Discussion and Analysis for the period December 31, 2007 vs. December 31, 2006.

General and Administrative Expenses

General and Administrative ("G&A") expenses for the years ended December 31, 2005 and 2006 were approximately $5,389,000 and $8,225,000, respectively, representing an increase of a $2,836,000 or 53%. The increase in G&A expenses relates primarily to the adoption of FAS 123R which has increased stock compensation expense approximately $2,092,000 during 2006 versus a year ago. In addition, we have incurred higher accounting fees related to the restatement of our financial statements which has increased these fees by approximately $747,000 from the same period a year earlier.

Interest and Other Income and Expense

Interest and other income for the years ended December 31, 2005 and 2006 totaled $590,000 and $554,000, respectively. The decrease in interest and other income during 2006 can primarily be attributed to the timing of the maturities of our marketable securities during the 2006 period versus the same period a year earlier. All funds in excess of our immediate need are invested in short-term high quality securities.

Interest Expense and Financing Costs

Interest expense and non-cash financing costs were approximately $1,259,000 for the year ended December 31, 2006 versus $3,121,000 for the same period a year ago. The main reason for the decrease in interest expense and financing costs of $1,862,000 can be attributed to decreased amortization charges on debt discounts during 2006 versus the same period a year earlier as our convertible debentures have come closer to maturity (Please see Note 7 in the consolidated financial statements contained herein for more details on these transactions).

Liquidity and Capital Resources

Cash used in operating activities for the year ended December 31, 2007 was $15,112,000 reflecting mainly expenditures for the preparation and filing of the Ampligen® NDA. Cash provided by investing activities for the year ending December 31, 2007, amounted to $13,955,000, primarily from the maturity of short-term investments. Cash provided by financing activities for the year ended December 31, 2007 amounted to $8,892,000, basically from the sale of common stock for proceeds totaling $11,620,000 partially offset by our net payment to our debenture holders of $2,638,000 upon the maturity of our debt instruments. As of February 29, 2008 we had approximately $13,400,000 in cash and cash equivalents and short-term investments, or a decrease of approximately 13% from December 31, 2007. These funds should be sufficient to meet our operating cash requirements for the next 18 months as we have taken steps to curtail discretionary spending to conserve cash and reduce our monthly burn rate.

In June 2007, we retired all remaining debt related to our convertible debentures issued in October 2003, January 2004 and July 2004. Of the outstanding debt of approximately $4,102,000, only $2,638,000 was required to be paid in new funds to retire the debentures, with the balance being covered by other cash and securities already held as collateral for the debentures.

Over the long term, we may need to raise additional funds through additional equity or debt financing or from other sources in order to complete the necessary clinical trials and the regulatory approval processes including the commercializing of Ampligen® products. There can be no assurances that we will raise adequate funds from these or other sources, which may have a material adverse effect on our ability to develop our products. Any additional funding may result in significant dilution and could involve the issuance of securities with rights, which are senior to those of existing stockholders. We may also need additional funding earlier than anticipated, and our cash requirements, in general, may vary materially from those now planned, for reasons including, but not limited to, changes in our research and development programs, clinical trials, competitive and technological advances, the regulatory process, and higher than anticipated expenses and lower than anticipated revenues from certain of our clinical trials for which cost recovery from participants has been approved.

Equity Financing

On April 12, 2006, we entered into a common stock purchase agreement (the “2006 Purchase Agreement”) with Fusion Capital Fund II, LLC (“Fusion Capital”), pursuant to which Fusion Capital has agreed, under certain conditions, to purchase on each trading day $100,000 of our common stock up to an aggregate of $50.0 million over a period of approximately 25 months. Pursuant to the terms of the Registration Rights Agreement, dated as of April 12, 2006, we registered 12,386,723 shares issuable to or issued to Fusion Capital under the Purchase Agreement. Through February 29, 2008, we have sold to Fusion Capital an aggregate of 10,682,032 shares under the common stock purchase agreement for aggregate gross proceeds of approximately $19,739,000 and issued 448,816 Commitment Shares. Pursuant to the 2006, Fusion Capital cannot purchase shares if our stock price is under $1.00. Our current stock price is below $1.00. Accordingly, unless and until the market price increases to at least $1.00, no additional shares will be sold to Fusion Capital under the agreement.

Under the rules of the American Stock Exchange, in the event that we elect to sell more than 12,386,723 shares to Fusion Capital, we were required to seek stockholder approval. This approval was obtained on September 20, 2006. We also will be required to file a new registration statement and have it declared effective by the SEC in the event we elect to sell to Fusion Capital more than the 12,386,723 shares previously registered.

We are using the proceeds from this financing for general corporate purposes.

There can be no assurances that we will raise adequate funds from these or other sources, which may have a material adverse effect on our ability to develop our products. Also, we have the ability to curtail further discretionary spending, including some research and development activities, if required to conserve additional cash.

	(dollars in thousands) Obligations Expiring by Period			
Contractual Cash Obligations	**Total**	**2008**	**2009**	**2010**
Operating Leases	$ 487	$ 205	$ 211	$ 71
Total	$ 487	$ 205	$ 211	$ 71

New Accounting Pronouncements

We adopted the provisions of FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes" ("FIN 48") effective January 1, 2007. The purpose of FIN 48 is to clarify and set forth consistent rules for accounting for uncertain tax positions in accordance with Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes". The cumulative effect of applying the provisions of this interpretation are required to be reported separately as an adjustment to the opening balance of retained earnings in the year of adoption. The adoption of this standard did not have an impact on our financial condition or the results of our operations.

On February 15, 2007, the FASB issued FASB Statement No. 159, “The Fair Value Option for Financial Assets and Financial Liabilities - Including an Amendment of FASB Statement No. 115”. This standard permits an entity to choose to measure many financial instruments and certain other items at fair value. Most of the provisions in Statement 159 are elective; however, the amendment to FASB Statement No. 115, “Accounting for Certain Investments in Debt and Equity Securities”, applies to all entities with available-for-sale and trading securities. Some requirements apply differently to entities that do not report net income. The FASB's stated objective in issuing this standard is as follows: "to improve financial reporting by providing entities with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities differently without having to apply complex hedge accounting provisions".

The fair value option established by Statement 159 permits all entities to choose to measure eligible items at fair value at specified election dates. A business entity will report unrealized gains and losses on items for which the fair value option has been elected in earnings (or another performance indicator if the business entity does not report earnings) at each subsequent reporting date. The fair value option: (a) may be applied instrument by instrument, with a few exceptions, such as investments otherwise accounted for by the equity method; (b) is irrevocable (unless a new election date occurs); and (c) is applied only to entire instruments and not to portions of instruments.

Statement 159 is effective as of the beginning of an entity's first fiscal year that begins after November 15, 2007. The impact of this statement has not been determined.

On December 4, 2007, the FASB issued FASB Statement No. 160, *"Noncontrolling Interests in Consolidated Financial Statements - An Amendment of ARB No. 51."* Statement 160 establishes new accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. Specifically, this statement requires the recognition of a noncontrolling interest (minority interest) as equity in the consolidated financial statements and separate from the parent's equity. The amount of net income attributable to the noncontrolling interest will be included in consolidated net income on the face of the income statement. Statement 160 clarifies that changes in a parent's ownership interest in a subsidiary that do not result in deconsolidation are equity transactions if the parent retains its controlling financial interest. In addition, this statement requires that a parent recognize a gain or loss in net income when a subsidiary is deconsolidated. Such gain or loss will be measured using the fair value of the noncontrolling equity investment on the deconsolidation date. Statement 160 also includes expanded disclosure requirements regarding the interests of the parent and its noncontrolling interest.

Statement 160 is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. Earlier adoption is prohibited. The impact of this statement has not been determined.

Disclosure About Off-Balance Sheet Arrangements

None

Critical Accounting Policies

Financial Reporting Release No. 60 requires all companies to include a discussion of critical accounting policies or methods used in the preparation of financial statements. Our significant accounting policies are described in the Notes to the Consolidated Financial Statements. The significant accounting policies that we believe are most critical to aid in fully understanding our reported financial results are the following:

Revenue

Revenue from the sale of Ampligen® under cost recovery clinical treatment protocols approved by the FDA is recognized when the treatment is provided to the patient.

Revenues from the sale of product are recognized when the product is shipped, as title is transferred to the customer. We have no other obligation associated with our products once shipment has occurred.

Short-term Investments

Investments with original maturities of more than three months and less than 12 months and marketable equity securities are considered available for sale. The investments classified as available for sale include debt securities and equity securities carried at estimated fair value. The unrealized gains and losses are recorded as a component of stockholders' equity.

Inventories

We use the lower of first-in, first-out ("FIFO") cost or market method of accounting for inventory.

Patents and Trademarks

Patents and trademarks are stated at cost (primarily legal fees) and are amortized using the straight-line method over the estimated useful life of 17 years. We review our patents and trademark rights periodically to determine whether they have continuing value. Such review includes an analysis of the patent and trademark's ultimate revenue and profitability potential. In addition, management's review addresses whether each patent continues to fit into our strategic business plans.

Stock Based Compensation

Under FAS 123R, share-based compensation cost is measured at the grant date, based on the estimated fair value of the award, and is recognized as expense over the requisite service period. We adopted the provisions of FAS 123R, effective January 1, 2006, using a modified prospective application. Under this method, compensation cost is recognized for all share-based payments granted, modified or settled after the date of adoption, as well as for any unvested awards that were granted prior to the date of adoption. Prior periods are not revised for comparative purposes. Because we previously adopted only the pro forma disclosure provisions of FAS 123, we recognize compensation cost relating to the unvested portion of awards granted prior to the date of adoption, using the same estimate of the grant-date fair value and the same attribution method used to determine the pro forma disclosures under FAS 123, except that forfeiture rates are estimated for all options, as required by FAS 123R. The cumulative effect of applying the forfeiture rates is not material.

The fair value of each option award is estimated on the date of grant using a Black-Scholes option valuation model. Expected volatility is based on the historical volatility of the price of our common stock. The risk-free interest rate is based on U.S. Treasury issues with a term equal to the expected life of the option. We use uses historical data to estimate expected dividend yield, expected life and forfeiture rates.

Concentration of Credit Risk

Our policy is to limit the amount of credit exposure to any one financial institution and place investments with financial institutions evaluated as being credit worthy, or in short-term money markets, which are exposed to minimal interest rate and credit risks. At and since December 31, 2007, we have had bank deposits and overnight repurchase agreements that exceed federally insured limits.

Concentration of credit risk, with respect to receivables, is limited through our credit evaluation process. We do not require collateral on our receivables. Our receivables consist principally of amounts due from wholesale drug companies as of December 31, 2007.

Sales to three large wholesalers represented approximately 70% and 68% of our total sales for the years ended December 31, 2006 and 2007, respectively.

Item 7A. Quantitative And Qualitative Disclosures About Market Risk

We had approximately $15,415,000 in cash and cash equivalents and short-term investments at December 31, 2007. To the extent that our cash and cash equivalents exceed our near term funding needs, we invest the excess cash in three to twelve month interest bearing financial instruments. We employ established conservative policies and procedures to manage any risks with respect to investment exposure.

We have not entered into, and do not expect to enter into, financial instruments for trading or hedging purposes.

ITEM 8. Financial Statements and Supplementary Data.

The consolidated balance sheets as of December 31, 2006 and 2007, and our consolidated statements of operations, changes in stockholders' equity and comprehensive loss and cash flows for each of the years in the three year period ended December 31, 2007, together with the reports of BDO Seidman, LLP and McGladrey & Pullen, LLP, independent registered public accountants, are included at the end of this report. Reference is made to the "Index to Financial Statements and Financial Statement Schedule" on page F-1.

ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosures.

As previously reported in our current Report on Form 8-K filed on November 9, 2006, on November 7, 2006, the Audit Committee of our Board of Directors approved the appointment of McGladrey & Pullen, LLP ("McGladrey") as our independent registered public accounting firm, effective immediately. McGladrey replaces BDO Seidman, LLP (“BDO”) as our independent registered public accounting firm.

As noted in our Current Report on Form 8-K/A filed with the Commission on September 22, 2006, BDO informed us that it would resign from the client-auditor relationship with us no later than the date of our filing of our Form 10-Q report for the period ending September 30, 2006. BDO's decision to resign was not recommended or approved by our Audit Committee. On November 7, 2006, we filed our Form 10-Q report for the period ended September 30, 2006 and BDO resigned from the client-auditor relationship with us.

BDO's report on our financial statements for the fiscal year ended December 31, 2005 did not contain any adverse opinion or any disclaimer of opinion and was not qualified or modified as to uncertainty, audit scope or accounting principles.

During the fiscal year ended December 31, 2005, and the subsequent interim period preceding the date of BDO's resignation, there were no disagreements between us and BDO on any matter of accounting principles or practice, financial statement disclosure or auditing scope of procedure which, if not resolved to the satisfaction of BDO, would have caused BDO to make a reference to the subject matter thereof in connection with its reports and, during the same period, there were no reportable events as defined in item 304(a)(1)(v) of the Commission Regulation S-K, except as previously reported in Item 9A of our 2005 Form 10-K/A.

ITEM 9A. Controls and Procedures.

Effectiveness of Control Procedures

As of December 31, 2007, the end of the period covered by this report, we carried out an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e)promulgated under the Securities Act of 1934, as amended, as of December 31, 2007. Our disclosure controls and procedures are intended to ensure that the information we are required to disclose in the reports that we file or submit under the Securities Exchange Act of 1934 is (i) recorded, processed, summarized and reported within the time periods specified in the Securities Exchange Commission's rules and forms and (ii) accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as the principal executive and financial officers, respectively, to allow final decisions regarding required disclosures. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that the controls and procedures were effective as of December 31, 2007 to ensure that material information was accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Our management has concluded that the financial statements included in this Form 10-K present fairly, in all material respects our financial position, results of operations and cash flows for the periods presented in conformity with accounting principles generally accepted in the United States of America.

Changes in Internal Control over Financial Reporting

We made no changes in our internal control over financial reporting during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act).

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) or 15d-15(f), under the Exchange Act. Internal control over financial reporting is a process designed by, or under the supervision of, our principal executive and principal financial officers and affected by our Board of Directors, management and other personnel, and 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii)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 (iii) 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 its 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 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 has assessed the effectiveness of our internal control over financial reporting as of December 31, 2007. In making this assessment, management used the criteria set forth in the framework established by the Committee of Sponsoring Organizations of the Treadway Commission *Internal Control—Integrated Framework*, (COSO). Based on this assessment, management has not identified any material weaknesses as of December 31, 2007. A material weakness is a control deficiency, or combination of control deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected.

Management has concluded that we did maintain effective internal control over financial reporting as of December 31, 2007, based on the criteria set forth in "*Internal Control—Integrated Framework"* issued by the COSO.

Our internal control over financial reporting as of December 31, 2007 has been audited by McGladrey and Pullen, an independent registered public accounting firm, as stated in their report which appears herein.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Hemispherx Biopharma, Inc.
Philadelphia, Pennsylvania

We have audited Hemispherx Biopharma, Inc's internal control over financial reporting as of December 31, 2007, based on criteria established in "*Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)*". Hemispherx Biopharma, 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. 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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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, Hemispherx Biopharma, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2007 based on criteria established in "*Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)*".

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the December 31, 2007 consolidated financial statements of Hemispherx Biopharma, Inc. and our report dated March 17, 2008 expressed an unqualified opinion.

Blue Bell, Pennsylvania
March 17, 2008

/s/ McGladrey& Pullen, LLP

ITEM 9B. Other Information.

None.

PART III

Item 10. Directors and Executive Officers and Corporate Governance.

The following sets forth biographical information about each of our directors and executive officers as of the date of this report:

Name	Age	Position
William A. Carter, M.D.	70	Chairman, Chief Executive Officer
Anthony A. Bonelli	56	President, Chief Operating Officer
Robert E. Peterson	70	Chief Financial Officer
David R. Strayer, M.D.	62	Medical Director, Regulatory Affairs
Carol A. Smith, Ph.D.	56	VP of Manufacturing
Richard C. Piani	79	Director
Katalin Ferencz-Biro	61	Senior Vice President of Regulatory Affairs
William M. Mitchell, M.D.	72	Director
Ransom W. Etheridge	68	Director, Secretary and General Counsel
Iraj Eqhbal Kiani, Ph.D.	60	Director
Wayne Springate	37	Vice President of Operations
Russel Lander	57	Vice President of Quality Assurance

Each director has been elected to serve until the next annual meeting of stockholders, or until his earlier resignation, removal from office, death or incapacity. Each executive officer serves at the discretion of the Board of Directors, subject to rights, if any, under contracts of employment.

WILLIAM A. CARTER, M.D., the coinventor of Ampligen®, joined us in 1978, and has served as: (a) our Chief Scientific Officer since May 1989; (b) the Chairman of our Board of Directors since January 1992; (c) our Chief Executive Officer since July 1993; (d) our President since April, 1995; and (e) a director since 1987. From 1987 to 1988, Dr. Carter served as our Chairman. Dr. Carter was a leading innovator in the development of human interferon for a variety of treatment indications including various viral diseases and cancer. Dr. Carter received the first FDA approval to initiate clinical trials on a beta interferon product manufactured in the U.S. under his supervision. From 1985 to October 1988, Dr. Carter served as our Chief Executive Officer and Chief Scientist. He received his M.D. degree from Duke University and underwent his postdoctoral training at the National Institutes of Health and Johns Hopkins University. Dr. Carter also served as Professor of Neoplastic Diseases at Hahnemann Medical University, a position he held from 1980 to 1998. Dr. Carter served as Director of Clinical Research for Hahnemann Medical University's Institute for Cancer and Blood Diseases, and as a professor at Johns Hopkins School of Medicine and the State University of New York at Buffalo. Dr. Carter is a Board certified physician and author of more than 200 scientific articles, including the editing of various textbooks on anti-viral and immune therapy.

ANTHONY A. BONELLI was appointed as President and Chief Operating Officer in November 2006. Mr. Bonelli is a graduate of Harvard University with a degree in Biological Sciences as well as an MBA from Rutgers University Graduate School of Business and JD from the University of San Francisco. Mr. Bonelli has over twenty-five years of diversified healthcare industry experience. Most recently, he served as President and CEO of Optigenex, an applied DNA sciences company, since October 2005, having joined that company in September 2004 as President and Chief Operating Officer. As principal of Anthony Bonelli Associates between 1999 and 2004, some of the firms he has advised include Parke-Davis, Schering-Plough Company, Aventis, Pharmacia and Pfizer. From 1998 to 1999, he was President and COO of Vitaquest International, a custom developer and manufacturer of vitamins and nutritional supplements.

ROBERT E. PETERSON has served as our Chief Financial Officer since April, 1993 and served as an Independent Financial Advisor to us from 1989 to April, 1993. Also, Mr. Peterson has served as Vice President of the Omni Group, Inc., a business consulting group based in Tulsa, Oklahoma since 1985. From 1971 to 1984, Mr. Peterson worked for PepsiCo, Inc. and served in various financial management positions including Vice President and Chief Financial Officer of PepsiCo Foods International and PepsiCo Transportation, Inc. Mr. Peterson is a graduate of Eastern New Mexico University.

DAVID R. STRAYER, M.D. who served as Professor of Medicine at the Medical College of Pennsylvania and Hahnemann University, has acted as our Medical Director since 1986. He is Board Certified in Medical Oncology and Internal Medicine with research interests in the fields of cancer and immune system disorders. Dr. Strayer has served as principal investigator in studies funded by the Leukemia Society of America, the American Cancer Society, and the National Institutes of Health. Dr. Strayer attended the School of Medicine at the University of California at Los Angeles where he received his M.D. in 1972.

CAROL A. SMITH, Ph.D. is VP of Manufacturing and has served as our Director of Manufacturing and Process Development from 1995 to 2003, as Director of Operations from 1993 to 1995 and as the Manager of Quality Control from 1991 to 1993, with responsibility for the manufacture, quality control, process development, technology transfer to contract manufacturers and the chemistry of Ampligen®. Dr. Smith was Scientist/Quality Assurance Officer for Virotech International, Inc. from 1989 to 1991 and Director of the Reverse Transcriptase and Interferon Laboratories and a Clinical Monitor for Life Sciences, Inc. from 1983 to 1989. She received her Ph.D. in Medical Sciences with a concentration on Virology from the University of South Florida, College of Medicine in 1980 and was an NIH post-doctoral fellow in the Department of Microbiology and Virology at the Pennsylvania State University College of Medicine from 1980 to 1983.

RICHARD C. PIANI has been a director since 1995. Mr. Piani has been employed as a principal delegate for Industry to the City of Science and Industry, Paris, France, a billion dollar scientific and educational complex. Mr. Piani provided consulting to us in 1993, with respect to general business strategies for our European operations and markets. Mr. Piani served as Chairman of Industrielle du Batiment-Morin, a building materials corporation, from 1986 to 1993. Previously Mr. Piani was a Professor of International Strategy at Paris Dauphine University from 1984 to 1993. From 1979 to 1985, Mr. Piani served as Group Director in Charge of International and Commercial Affairs for Rhone-Poulenc and from 1973 to 1979 he was Chairman and Chief Executive Officer of Societe "La Cellophane", the French company which invented cellophane and several other worldwide products. Mr. Piani has a Law degree from Faculte de Droit, Paris Sorbonne and a Business Administration degree from Ecole des Hautes Etudes Commerciales, Paris.

WILLIAM M. MITCHELL, M.D., Ph.D. has been a director since July 1998. Dr. Mitchell is a Professor of Pathology at Vanderbilt University School of Medicine. Dr. Mitchell earned a M.D. from Vanderbilt and a Ph.D. from Johns Hopkins University, where he served as an Intern in Internal Medicine, followed by a Fellowship at its School of Medicine. Dr. Mitchell has published over 200 papers, reviews and abstracts dealing with viruses, anti-viral drugs and immune responses to HIV infection. Dr. Mitchell has worked for and with many professional societies, including the International Society for Interferon Research, and committees, among them the National Institutes of Health, AIDS and Related Research Review Group. Dr. Mitchell previously served as one of our directors from 1987 to 1989.

RANSOM W. ETHERIDGE has been a director since October 1997, and presently serves as our secretary and general counsel. Mr. Etheridge first became associated with us in 1980 when he provided consulting services to us and participated in negotiations with respect to our initial private placement through Oppenheimer & Co., Inc. Mr. Etheridge has been practicing law since 1967, specializing in transactional law. Mr. Etheridge is a member of the Virginia State Bar, a Judicial Remedies Award Scholar, and has served as President of the Tidewater Arthritis Foundation. He is a graduate of Duke University, and received his Law degree from the University of Richmond School of Law.

IRAJ EQHBAL KIANI, M.B.A., Ph.D., was appointed to the Board of Directors on May 1, 2002. Dr. Kiani is a citizen of England and resides in Newport, California. Dr. Kiani served in various local government positions including the Governor of Yasoi, Capital of Boyerahmand, Iran. In 1980, Dr. Kiani moved to England, where he established and managed several trading companies over a period of some 20 years. Dr. Kiani is a planning and logistic specialist who is now applying his knowledge and experience to build a worldwide immunology network, which will use our proprietary technology. Dr. Kiani received his Ph.D. degree from the University of Warwick in England.

WAYNE S. SPRINGATE is Vice President of Operations; Mr. Springate joined Hemispherx in 2002 as Vice President of Business Development. Mr. Springate came on board when Hemispherx acquired Alferon N Injection and its New Brunswick manufacturing facilities. He led the consolidation of our Rockville facility to our New Brunswick location as well as coordinated the relocation of manufacturing polymers from South Africa to our production facility in New Brunswick. He is responsible for preparing our Manufacturing plant for a Pre Approval Inspection by the FDA in connection with the filing of our Ampligen NDA. Previously, Mr. Springate acted as President for World Fashion Concepts. He oversaw operations at several locations in the United States and overseas. Mr. Springate assisted the CEO in details of operations on a daily basis and was involved in all aspects of manufacturing, warehouse management, distribution and logistics.

KATALIN FERENCZ-BIRO, Ph.D. has served as the Company's Senior Vice President of Regulatory Affairs and Quality Assurance Departments since January 2007. She served as the Director of Regulatory Affairs and Quality Assurance from 2006 to 2007. Previously from 1987 to 2003, she served Interferon Sciences Inc, in various positions including Senior Director of Regulatory Affairs, Quality Control and Quality Assurance Departments, and FDA official for our FDA approved product, Alferon N Injection. Dr. Ferencz-Biro received her Ph.D. in Chemistry/ Biochemistry in 1972 from the University of Eötvös Lóránd, Budapest, Hungary, and her M.S., in Chemistry and Biology in 1971 from University of Eötvös Lóránd, Budapest, Hungary. She was a postdoctoral fellow from 1981-1984 in Rutgers University, Center for Alcohol Studies, Piscataway, New Jersey. She is an author and coauthor of several scientific publications, patents and presentations on the field of biochemistry. Currently she is a member of Regulatory Affairs Professionals Society.

RUSSEL J. LANDER, Ph.D. is Vice President Quality Assurance. Dr. Lander joined Hemispherx in 2005, assuming responsibility for CMC writing for the NDA filing of Ampligen®. He has subsequently served at the New Brunswick site as Director of Quality Control and has provided guidance to the efforts to improve and validate the manufacturing process for the synthesis of Ampligen® polynucleotide raw materials, Poly I and Poly $C_{12}U$. Dr. Lander was formerly employed at Merck and Co., Inc. in the process development groups for drug development (1977-1991) and vaccines (1991-2005). Dr. Lander received his Ph.D. in Chemical/Biochemical Engineering from the University of Pennsylvania. He has authored numerous scientific publications and invention disclosures.

On November 20, 2007, Steven Spence, Director, submitted his resignation from the Board of Directors. Mr. Spence was a member of the following Board Committees: The Audit Committee, the Corporate Governance and Nomination Committee, and the Executive Committee. Mr. Spence was the financial expert on the Audit Committee.

Compliance with Section 16(a) of the Exchange Act

Section 16(a) of the Exchange Act requires our officers and directors, and persons who own more than ten percent of a registered class of equity securities, to file reports with the Securities and Exchange Commission reflecting their initial position of ownership on Form 3 and changes in ownership on Form 4 or Form 5. Based solely on a review of the copies of such Forms received by us, we found that, during the fiscal year ended December 31, 2007, certain of our officers and directors had not complied with all applicable Section 16(a) filing requirements on a timely basis with regard to transactions occurring in 2007. Specifically, Dr. Carter filed three forms 4 late concerning five transactions; Mr. Peterson filed one form 5 late concerning two late transactions; Mr. Etheridge filed three forms 4 late concerning five transactions; Mr. Bonelli filed one form 4 late concerning one transaction; Mr. Kiani filed two forms 4 late concerning four transactions; Mr. Piani filed three forms 4 late concerning five transactions; Dr. Mitchell filed three forms 4 late concerning five transactions; Dr. Strayer filed two forms 4 late concerning two transactions; and Mr. Spence filed one form 4 late concerning one transaction.

Audit Committee and Audit Committee Expert

The Audit Committee of our Board of Directors consists of Richard Piani, Committee Chairman, William Mitchell, M.D. and Iraj Eqbal Kiani. Mr. Piani, Dr. Mitchell, and Mr. Kiani are all determined by the Board of Directors to be independent directors as required under Section 121B(2)(a) of the AMEX Company Guide. We do not have a financial expert as defined in the SEC rules on the committee in the true sense of the description. However, Mr. Piani has 40 years experience in business and has served in senior level and leadership positions for international businesses. His working experience includes reviewing and analyzing financial statements and dealing with financial institutions. We believe Mr. Piani, Dr. Mitchell, and Mr. Kiani to be independent of management and free of any relationship that would interfere with their exercise of independent judgment as members of this committee. The principal functions of the Audit Committee are to (i) assist the Board in fulfilling its oversight responsibility relating to the annual independent audit of our consolidated financial statements and internal control over financial reporting, the engagement of the independent registered public accounting firm and the evaluation of the independent registered public accounting firm's qualifications, independence and performance, (ii) prepare the reports or statements as may be required by AMEX or the securities laws, (iii) assist the Board in fulfilling its oversight responsibility relating to the integrity of our financial statements and financial reporting process and our system of internal accounting and financial controls, (iv) discuss the financial statements and reports with management, including any significant adjustments, management judgments and estimates, new accounting policies and disagreements with management, and (v) review disclosures by our independent registered public accounting firm concerning relationships with us and the performance of our independent accountants.

Code of Ethics

Our Board of Directors adopted a code of ethics and business conduct for officers, directors and employees that went into effect on May 19, 2003. This code has been presented, reviewed and signed by each officer, director and employee. You may obtain a copy of this code by visiting our web site at www.hemispherx.net (Corporate Info) or by written request to our office at 1617 JFK Boulevard, Suite 660, Philadelphia, PA 19103.

Item 11. Executive Compensation.

Compensation Discussion and Analysis

Objectives and Philosophy of Executive Compensation

The primary objectives of the compensation committee of our board of directors with respect to executive compensation are to attract and retain the most talented and dedicated executives possible, to tie annual and long-term cash and stock incentives to achievement of measurable performance objectives, and to align executives' incentives with stockholder value creation. To achieve these objectives, the compensation committee expects to implement and maintain compensation plans that tie a substantial portion of executives' overall compensation to key strategic financial and operational goals such as the establishment and maintenance of key strategic relationships, the development of our products, the identification and advancement of additional product and the performance of our common stock price. The compensation committee evaluates individual executive performance with the goal of setting compensation at levels the committee believes are comparable with executives in other companies of similar size and stage of development operating in the biotechnology industry while taking into account our relative performance and our own strategic goals.

Our compensation plans are developed by utilizing publicly available compensation data and subscription compensation survey data for national and regional companies in the biopharmaceutical industry. We believe that the practices of this group of companies provide us with appropriate compensation benchmarks, because these companies have similar organizational structures and tend to compete with us for executives and other employees. For benchmarking executive compensation, we typically review the compensation data we have collected from the complete group of companies, as well as a subset of the data from those companies that have a similar number of employees as our company. We have also engaged independent outside consultants to help us analyze this data and to compare our compensation programs with the practices of the companies represented in the compensation data we review.

Elements of Executive Compensation

Executive compensation consists of the following elements:

Base Salary

Base salaries for our executives are established based on the scope of their responsibilities, taking into account competitive market compensation paid by other companies for similar positions. Generally, we believe that executive base salaries should be targeted near the median of the range of salaries for executives in similar positions with similar responsibilities at comparable companies, in line with our compensation philosophy. Base salaries are reviewed annually, and adjusted from time to time to realign salaries with market levels after taking into account individual responsibilities, performance and experience. This review normally occurs in the fourth quarter of each year.

On November 6, 2006, the Board of Directors, at the recommendation of the compensation committee and based upon an independent valuation of Executive Compensation by the compensation committee determined that: (1) Dr. Carter’s annual compensation under his Employment and Engagement Agreements be increased by $90,000 and $60,000, respectively; and (2) Robert E. Peterson’s annual compensation under his Engagement Agreement be increased by $50,000. These annual compensation adjustments were retroactive to January 1, 2006.

Annual Bonus

Our compensation program includes eligibility for an annual performance-based cash bonus in the case of all executives and certain senior, non-executive employees. The amount of the cash bonus depends on the level of achievement of the stated corporate, department, and individual performance goals, with a target bonus generally set as a percentage of base salary. As provided in their employment agreements, our Chief Executive Officer and Chief Financial Officer are eligible for an annual performance-based bonus up to 25% of their salaries, the amount of which, if any, is determined by the board of directors in its sole discretion based on the recommendation of the compensation committee.

The compensation committee utilizes annual incentive bonuses to compensate officers for achieving financial and operational goals and for achieving individual annual performance objectives. These objectives will vary depending on the individual executive, but will relate generally to strategic factors such as establishment and maintenance of key strategic relationships, development of our product, identification and research and development of additional products, and to financial factors such as raising capital and improving our results of operations.

In December 2007, the Compensation Committee recommended and the Board of Directors awarded bonuses to certain executives of 25% of base salaries for performance in relation to accomplishing certain 2007 corporate goals. Bonuses were awarded to William a. Carter, M.D., CEO and Chairman of the Board; Anthony Bonelli, President and COO; Robert E. Peterson, CFO; David Strayer, M.D., Chief Medical Officer and Wayne Springate, VP of Operations. The Compensation Committee and Board of Directors reviewed corporate goals established in February 2007 and determined that significant progress had been made with respect to 1) preparing and filing the Ampligen NDA; 2) contacting and establishing strategic partners; 3) developing and implementing a global marketing strategy; 4) finalizing an agreement with a vaccine manufacturer and 5) developing Alferon LDO potential.

Long-Term Incentive Program

We believe that long-term performance is achieved through an ownership culture that encourages such performance by our executive officers through the use of stock and stock-based awards. Our stock plans have been established to provide our employees, including our executive officers, with incentives to help align those employees' interests with the interests of stockholders. The compensation committee believes that the use of stock and stock-based awards offers the best approach to achieving our compensation goals. We have historically elected to use stock options as the primary long-term equity incentive vehicle. We have adopted stock ownership guidelines and our stock compensation plans have provided the principal method, other than through direct investment for our executive officers to acquire equity in our company. We believe that the annual aggregate value of these awards should be set near competitive median levels for comparable companies. However, in the early stage of our business, we provided a greater portion of total compensation to our executives through our stock compensation plans than through cash-based compensation.

Stock Options

Our stock plans authorize us to grant options to purchase shares of common stock to our employees, directors and consultants. Our compensation committee oversees the administration of our stock option plan. The compensation committee reviews and recommends approval by our Board of Directors of stock option awards to executive officers based upon a review of competitive compensation data, its assessment of individual performance, a review of each executive's existing long-term incentives, and retention considerations. Periodic stock option grants are made at the discretion of the Board of Directors upon recommendation of the compensation committee to eligible employees and, in appropriate circumstances, the compensation committee considers the recommendations of members of management. In 2007, the Compensation Committee and the Board authorized the renewal of expiring options for certain named executives in the amounts indicated in the section entitled "Stock Option Grants to Executive Officers." Grants were made to certain of our employees based on past performance, particularly, those who worked hard and diligently on the preparation of our NDA. Stock options granted by us have an exercise price equal to the fair market value of our common stock on the day of grant and typically vest over a period of years based upon continued employment, and generally expire ten years after the date of grant. Incentive stock options also include certain other terms necessary to assure compliance with the Internal Revenue Code of 1986, as amended, or Internal Revenue Code.

We expect to continue to use stock options as a long-term incentive vehicle because; (1) Stock options align the interests of executives with those of the shareholders, support a pay-for-performance culture, foster employee stock ownership, and focus the management team on increasing value for the shareholders, (2) Stock options are performance based. All the value received by the recipient of a stock option is based on the growth of the stock price, (3) Stock options help to provide a balance to the overall executive compensation program as base salary and our discretionary annual bonus program focus on short-term compensation, while the vesting of stock options increases shareholder value over the longer term, and (4) The vesting period of stock options encourages executive retention and the preservation of shareholder value.

In determining the number of stock options to be granted to executives, we take into account the individual's position, scope of responsibility, ability to affect profits and shareholder value and the individual's historic and recent performance and the value of stock options in relation to other elements of the individual executive's total compensation.

As of December 31, 2007, 1,433,524 shares were available for future grants under the 2004 Plan. Options granted include 1,351,680 in 2005, 1,345,742 in 2006 and 3,232,870 in 2007 including 2,970,000 issued for expiring options. Unless sooner terminated, the Equity Incentive Plan will continue in effect for a period of 10 years from its effective date.

On June 30, 2007 the stockholders adopted the 2007 Equity Incentive Plan which authorizes the issuance of up to 8,000,000 stock options to acquire common stock pursuant to the terms of the pan. No options have been issued under this plan.

Restricted Stock and Restricted Stock Units

Our 2004 Equity Compensation Plan authorizes us to grant restricted stock and restricted stock units. To date, we have not granted any restricted stock or restricted stock units under our 2004 equity compensation plan. We anticipate that in order to implement the long-term incentive goals of the compensation committee we may grant restricted stock units in the future.

Other Compensation

Our Chief Executive Officer, Chief Operating Officer, Chief Financial Officer and General Counsel have employment, and/or engagement contracts that will remain in effect until they are terminated, expire, or are renegotiated. Each contract is different with respect to specific benefits or other compensation. We maintain a broad-based benefits program that is provided to all employees including vacation, sick leave and health insurance. Details of these agreements are as follows:

Dr. Carter's employment as our Chief Executive Officer and Chief Scientific Officer expires December 31, 2010 unless sooner terminated for cause or disability. The agreement automatically renews for successive one year periods after the initial termination date unless the Company or Dr. Carter give written notice otherwise at least ninety days prior to the termination date or any renewal period. Dr. Carter has the right to terminate the agreement on 30 days' prior written notice. The base salary is subject to adjustments and the average increase or decrease in the Consumer Price Index for the prior year. In addition, Dr. Carter could receive an annual performance bonus of up to 25% of his base salary, at the sole discretion of the Compensation Committee of the board of directors, based on his performance or our operating results. Dr. Carter will not participate in any discussions concerning the determination of his annual bonus. Dr. Carter is also entitled to an incentive bonus of 0.5% of the gross proceeds received by us from any joint venture or corporate partnering arrangement. Dr. Carter's agreement also provides that he be paid a base salary and benefits through the last day of the then term of the agreement if he is terminated without "cause", as that term is defined in agreement. In addition, should Dr. Carter terminate the agreement or the agreement be terminated due to his death or disability, the agreement provides that Dr. Carter be paid a base salary and benefits through the last day of the month in which the termination occurred and for an additional twelve month period.

Our engagement of Dr. Carter as a consultant related to patent development, as one of our directors and as chairman of the Executive Committee of our board of directors expires December 31, 2010 unless sooner terminated for cause or disability. The agreement automatically renews for successive one year periods after the initial termination date or any renewal period. Dr. Carter has the right to terminate the agreement on 30 days' prior written notice. The base fee is subject to annual adjustments equal to the percentage increase or decrease of annual dollar value of directors' fees provided to our directors during the prior year. The annual fee is further subject to adjustment based on the average increase or decrease in the Consumer Price Index for the prior year. In addition, Dr. Carter could receive an annual performance bonus of up to 25% of his base fee, at the sole direction of the Compensation Committee of the board of directors, based on his performance. Dr. Carter will not participate in any discussions concerning the determination of this annual bonus. Dr. Carter's agreement also provides that he be paid his base fee through the last day of the then term of the agreement if he is terminated without "cause", as that term is defined in the agreement. In addition, should Dr. Carter terminate the agreement or the agreement be terminated due to his death or disability, the agreement provides that Dr. Carter be paid fees due him through the last day of the month in which the termination occurred and for an additional twelve month period.

Our agreement with Ransom W. Etheridge provides for Mr. Etheridge's engagement as our General Counsel until December 31, 2009 unless sooner terminated for cause or disability. The agreement automatically renews for successive one year periods after the initial termination date unless we or Mr. Etheridge give written notice otherwise at least ninety days prior to the termination date or any renewal period. Mr. Etheridge has the right to terminate the agreement on 30 days' prior written notice. The initial annual fee for services is $96,000 and is annually subject to adjustment based on the average increase or decrease in the Consumer Price Index for the prior year. Mr. Etheridge's agreement also provides that he be paid all fees through the last day of then current term of the agreement if he is terminated without "cause" as that term is defined in the agreement. In addition, should Mr. Etheridge terminate the agreement or the agreement be terminated due to his death or disability, the agreement provides that Mr. Etheridge be paid the fees due him through the last day of the month in which the termination occurred and for an additional twelve month period. Mr. Etheridge will devote approximately 85% of his business time to our business.

Our engagement agreement, with Robert E. Peterson provides for Mr. Peterson's engagement as our Chief Financial Officer until December 31, 2010 unless sooner terminated for cause or disability. Mr. Peterson has the right to terminate the agreement on 30 days' prior written notice. The annual fee for services is subject to increases based on the average increase in the cost of inflation index for the prior year. Mr. Peterson shall receive an annual bonus in each year that our Chief Executive Officer is granted a bonus. The bonus shall equal a percentage of Mr. Peterson's base annual compensation comparable to the percentage bonus received by the Chief Executive Officer. In addition, Mr. Peterson shall receive bonus compensation upon Federal Drug Administration approval of commercial application of Ampligen®. Mr. Peterson's agreement also provides that he be paid all fees through the last day of then current term of the agreement if he is terminated without "cause" as that term is defined in the agreement. In addition, should Mr. Peterson terminate the agreement or the agreement be terminated due to his death or disability, the agreement provides that Mr. Peterson be paid the fees due him through the last day of the month in which the termination occurred and for an additional twelve month period. Mr. Peterson will devote approximately 85% of his business time to our business.

We engaged Anthony A. Bonelli to serve as our full time President and Chief Operating Officer on November 27, 2006. Pursuant to this agreement, the President and Chief Operating Officer is employed for an initial term of two years. The employment automatically renews thereafter for successive one year periods unless either party gives written notice not to renew within 90 days of the termination date.

Mr. Bonelli receives an annual salary at the rate of $350,000 per year through December 31, 2007 and, thereafter, at the annual rate of $400,000. His salary is subject to cost of living increases. He is entitled to annual bonuses in the discretion of our Chairman and Board of Directors. A $50,000 cash bonus and 100,000 options were given upon the execution of the employment agreement and the minimum cash bonus for the year ended December 31, 2007 was $75,000. He was entitled and received an additional 50,000 options upon his successful completion of three months of employment and an aggregate of up to an additional 950,000 options upon the happening of specific business milestones. We have the right, at our discretion, to modify the time periods within which the milestones must be met. Each option vests upon award, expires in ten years and has an exercise price equal to 110% of the closing price of our common stock on the American Stock Exchange on the date of the award. Upon the happening of certain events, such as our merger with and in to another entity or our sale or transfer of assets or earning power aggregating 50% or more of our assets or earning capacity, provided he is still employed by us, any of the foregoing options not granted to him will be granted. He is also entitled to receive fringe benefits generally available to our executive officers and we have agreed, during his employment period, to pay premiums on a term life insurance policy in the face amount of $1,500,000 with a beneficiary of his choosing.

The employment agreement terminates upon his death or disability and is terminable by us for "cause" as defined in the agreement, or without cause. He has the right to terminate the agreement upon not less than 60 day's prior notice. In the event that the agreement terminates due to his death or disability, or by him, he will be entitled to fees due and payable through the last day of the month in which the termination occurs. If it is terminated by us for cause, he will be entitled to fees due and payable to him through the date of termination. If we terminate the agreement without cause, he is entitled to fees depending upon the amount of time he has been employed by us ranging from 12 months' of fees if he is terminated within the first 12 months of employment to three months' of fees if he is terminated in the 21st month of employment. He is subject to confidentiality and non-compete covenants.

The Board of Directors, deeming it essential to the best interests of our shareholders to foster the continuous engagement of key management personnel and recognizing that, as is the case with many publicly held corporations, a change of control might occur and that such possibility, and the uncertainty and questions which it might raise among management, might result in the departure or distraction of management personnel to the detriment of us and our shareholders, determined to reinforce and encourage the continued attention and dedication of members of our management to their engagement without distraction in the face of potentially disturbing circumstances arising from the possibility of a change in control of the Company and entered into identical agreements regarding change in control with William A. Carter, our Chief Executive Officer and Chief Scientific Officer, Robert E. Peterson, our Chief Financial Officer and Ransom W. Etheridge, our General Counsel. Each of the agreements regarding change in control became effective March 11, 2005 and continue through December 31, 2007 and shall extend automatically to the third anniversary thereof unless we give notice to the other party prior to the date of such extension that the agreement term will not be extended. Notwithstanding the foregoing, if a change in control occurs during the term of the agreements, the term of the agreements will continue through the second anniversary of the date on which the change in control occurred. Each of the agreements entitles William A. Carter, Robert E. Peterson and Ransom W. Etheridge, respectively, to change of control benefits, as defined in the agreements and summarized below, upon their respective termination of employment/engagement with us during a potential change in control, as defined in the agreements or after a change in control, as defined in the agreements, when their respective terminations are caused (1) by us for any reason other than permanent disability or cause, as defined in the agreement (2) by William A. Carter, Robert E. Peterson and/or Ransom W. Etheridge, respectively, for good reason as defined in the agreement or, (3) by William A. Carter, Robert E. Peterson and/or Ransom W. Etheridge, respectively for any reason during the 30 day period commencing on the first date which is six months after the date of the change in control.

The benefits for each of the foregoing executives would be as follows:

- A lump sum cash payment of three times his base salary and annual bonus amounts; and
- Outplacement benefits.

Each agreement also provides that the executive is entitled to a “gross-up” payment to make him whole for any federal excise tax imposed on change of control or severance payments received by him.

Dr. Carter’s agreement also provides for the following benefits:

- Continued insurance coverage through the third anniversary of his termination; and
- Retirement benefits computed as if he had continued to work for the above period.

401(K) Plan

In December 1995, we established a defined contribution plan, effective January 1, 1995, entitled the Hemispherx Biopharma employees 401(K) Plan and Trust Agreement. All of our full time employees are eligible to participate in the 401(K) plan following one year of employment. Subject to certain limitations imposed by federal tax laws, participants are eligible to contribute up to 15% of their salary (including bonuses and/or commissions) per annum. Participants' contributions to the 401(K) plan may be matched by Hemispherx at a rate determined annually by the board of directors. Each participant immediately vests in his or her deferred salary contributions, while our contributions will vest over one year. See Note 11 to the consolidated financial statements contained herein.

Severance

Upon termination of employment, most executive officers are entitled to receive severance payments under their employment and/or engagement agreements. In determining whether to approve and setting the terms of such severance arrangements, the compensation committee recognizes that executives, especially highly ranked executives, often face challenges securing new employment following termination. The employment agreement with our CEO, which expires on December 31, 2010, provides that we pay him an annual salary through the terms of the agreement if terminated without cause. The engagement agreement with our CFO, which expires on December 31, 2010, provides that we pay him one year’s salary. The employment agreement of our COO, which expires in November 2008, provides that he is entitled to severance pay up to 12 months depending on the time employed, if terminated without cause.

We believe that our Executive Officers’ severance packages are generally in line with severance packages offered to chief executive officers of the companies of similar size to us represented in the compensation data we reviewed.

Compensation of Directors

Non-employee Board member compensation consists of an annual retainer of $150,000 to be paid two thirds in cash and one third in our common stock. On September 9, 2003, the Directors approved a 10 year plan which authorizes up to 1,000,000 shares for use in supporting this compensation plan. The number of shares paid shall have a value of $12,500 with the value of the shares being determined by the closing price of our common stock on the American Stock Exchange on the last day of the calendar quarter. All directors have been granted options to purchase common stock under our Stock Option Plans and/or Warrants to purchase common stock. We believe such compensation and payments are necessary in order for us to attract and retain qualified outside directors.

Conclusion

Our compensation policies are designed to retain and motivate our senior executive officers and to ultimately reward them for outstanding individual and corporate performance.

Summary Compensation Table - 2006

Name and Principal Position	Salary	Bonus	Stock Award	Option Award (1)	Non-Equity Incentive Plan Compensation	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
W. A. Carter, CEO	$ 655,686	$ 166,624	-	$ 1,236,367	-	-	$ 118,087(2)	$ 2,186,764
A. Bonelli, COO	35,000(4)	50,000	-	122,601	-	-	3,000(2)	210,601
R. E. Peterson, CFO	259,164	64,791	-	373,043	-	-	-	696,998
D. Strayer, Medical Director	225,144	-	-	19,200	-	-	-	244,344
M. J. Liao, Director - QC	158,381	-	-	9,600	-	-	18,246(3)	186,406
C. Smith, VP of MFG	143,136	-	-	9,600	-	-	17,227(3)	169,963
R. Hansen, VP of Manufact.	140,311	-	-	9,600	-	-	17,006(3)	166,917
R. D. Hulse	105,000	-	-	-	-	-	-	105,000

Notes:

(1) Based on Black Scholes Pricing Model of valuing options. Total Fair Value of Option Awards granted to officers in 2006 was $1,780,011.

(2) Consists of Healthcare premiums, life insurance premiums, 401-K matching funds, qualifying insurance premium, company car and parking cost.

(3) Consists of healthcare premiums and 401-K matching funds.

(4) Mr. Bonelli joined the Company on November 27, 2006. His annual salary is $350,000.

Summary Compensation Table - 2007

Name and Principal Position	Salary	Bonus	Stock Award	Option Award (1)	Non-Equity Incentive Plan Compensation	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
W. A. Carter, CEO	$ 637,496	$ 166,156	-	$ 1,688,079	-	-	$ 123,063(2)	$ 2,664,794
A. Bonelli, COO	350,000(4)	87,500	-	59,684	-	-	33,375(3)	530,504
R. E. Peterson, CFO	259,164	64,791	-	153,055	-	-	-	477,010
D. Strayer, Medical Director	240,348	50,347	-	79,810	-	-	-	370,505
C. Smith, VP of MFG.	147,695	-	-	34,235	-	-	30,088(4)	212,018
K. Ferencz-Biro, VP of Reg. Affairs	145,000	-	-	11,744	-	-	13,999(5)	170,743
W. Springate, VP of Operations	150,000	37,500	-	36,253	-	-	13,429(5)	237,182
R. Lander, VP of Qual. Assurance	178,000	-	-	11,744	-	-	9,649(6)	199,393

Notes:

(1) Based on Black Scholes pricing model of valuing options. Total fair of options granted to Officers in 2007 was $2,241,028.

(2) Consists of a) Life Insurance premiums totaling $63,627; b) 401-K matching funds of $18,833; c) Healthcare premiums of $28,586; and d) Company car expenses of $12,017.

(3) Healthcare premiums of $9,649, car allowance expense of $9,276, and life insurance premiums totaling $14,400.

(4) Consists of Healthcare premiums of $21,266, and 401-K matching funds of $8,862.

(5) Healthcare premiums and 401-K matching funds

(6) Healthcare premiums

2007 Stock Option Grants to Executive Officers

The following table provides additional information about option awards granted to our Named Executive Officers during the year ended December 31, 2007. The compensation plan under which the grants in the following tables were made are described in the Compensation Discussion and Analysis section headed “Long-Term Equity Incentive Awards”.

Name	Grant Date	No. of Options	Exercise Price per Share	Expiration Date	Closing Price on Grant	Grant Date Fair Value of Option (2)
W.A. Carter, CEO	9/10/07	1,000,000(1)	$ 2.00	9/9/17	1.24	674,063
	10/1/07	1,400,000(1)	3.50	9/30/17	1.60	1,014,016
A. Bonelli, COO	2/22/07	50,000	2.07	2/27/17	1.88	59,684
R.E. Peterson, CFO	1/23/07	13,750(1)	2.37	1/23/17	2.10	18,242
	9/10/07	200,000(1)	2.00	9/9/17	1.24	134,813
D. Strayer, Medical Director	1/23/07	20,000(1)	2.37	1/23/17	2.10	26,534
	9/10/07	50,000(1)	2.00	9/9/17	1.24	33,703
	12/6/07	25,000	1.30	12/6/17	1.30	19,573
C. Smith, VP of MFG.	1/23/07	6,791(1)	2.37	1/23/17	2.10	9,010
	9/10/07	20,000(1)	2.00	9/9/17	1.24	13,481
	12/6/07	15,000	1.30	12/6/17	1.30	11,744
W. Springate, VP of Operations	5/1/07	20,000	1.78	4/30/17	1.63	20,595
	12/6/07	20,000	1.30	12/6/17	1.30	15,658
K. Ferencz-Biro, VP of Reg. Affairs	12/6/07	15,000	1.30	12/6/17	1.30	11,744
R. Lander, VP of Qual. Assurance	12/6/07	15,000	1.30	12/6/17	1.30	11,744

1) Renewal of previously issued options that expired unexercised.

2) These amounts shown represent the approximate amount we recognize for financial statement reporting purposes in fiscal year 2007 for the fair value of equity awards granted to the named executive officers. As a result, these amounts do not reflect the amount of compensation actually received by the named executive officer during the fiscal year. For a description of the assumptions used in calculating the fair value of equity awards under SFAS No. 123(R), see Note 2(m) of our financial statements.

Outstanding Equity Awards at Year End - 2007

	Option/Warrants Awards					Stock Awards			
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Unit That Have Not Vested	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested
W.A. Carter, CEO	1,450,000	0	0	$ 2.20	9/8/08	-	-	-	-
	1,000,000	0	0	2.00	9/9/17	-	-	-	-
	190,000	0	0	4.00	1/1/08	-	-	-	-
	73,728	0	0	2.71	12/31/10	-	-	-	-
	10,000	0	0	4.03	1/3/11	-	-	-	-
	167,000	0	0	2.60	9/7/14	-	-	-	-
	153,000	0	0	2.60	12/7/14	-	-	-	-
	100,000	0	0	1.75	4/26/15	-	-	-	-
	465,000	0	0	1.86	6/30/15	-	-	-	-
	70,000	0	0	2.87	12/9/15	-	-	-	-
	300,000	0	0	2.38	1/1/16	-	-	-	-
	10,000	0	0	2.61	12/9/15	-	-	-	-
	376,650	0	0	3.78	2/22/16	-	-	-	-
	1,400,000	0	0	3.50	9/30/17	-	-	-	-
A. Bonelli, COO	100,000	0	0	2.11	11/26/16	-	-	-	-
	50,000	0	0	2.07	2/27/17	-	-	-	-
R. Peterson, CFO	200,000	0	0	2.00	9/9/17	-	-	-	-
	50,000	0	0	3.44	6/22/14	-	-	-	-
	13,824	0	0	2.60	9/7/14	-	-	-	-
	55,000	0	0	1.75	4/26/15	-	-	-	-
	10,000	0	0	2.61	12/8/15	-	-	-	-

	50,000	0	0	3.85	2/28/16	-	-	-	-
	100,000	0	0	3.48	4/14/16	-	-	-	-
	30,000	0	0	3.55	4/30/16	-	-	-	-
	13,750	0	0	2.37	1/22/17	-	-	-	-
	10,000	0	0	4.03	1/3/11	-	-	-	-
D. Strayer, Medical Director	50,000	0	0	2.00	9/9/17	-	-	-	-
	50,000	0	0	4.00	2/28/08	-	-	-	-
	10,000	0	0	4.03	1/3/11	-	-	-	-
	20,000	0	0	3.50	2/23/07	-	-	-	-
	10,000	0	0	1.90	12/14/14	-	-	-	-
	10,000	0	0	2.61	12/8/15	-	-	-	-
	10,000	5,000	0	2.20	11/20/16	-	-	-	-
	25,000	0	0	1.30	12/6/17	-	-	-	-
C. Smith, VP of MFG	20,000	0	0	2.00	9/9/17	-	-	-	-
	5,000	0	0	4.00	6/7/08	-	-	-	-
	10,000	0	0	4.03	1/3/11	-	-	-	-
	10,000	0	0	2.61	12/8/15	-	-	-	-
	6,791	0	0	2.37	1/23/17	-	-	-	-
	10,000	0	0	1.90	12/7/14	-	-	-	-
	5,000	2,500	0	2.20	11/20/16	-	-	-	-
W. Springate, VP of Operations	1,812	0	0	1.90	12/7/14	-	-	-	-
	2,088	0	0	2.61	12/8/05	-	-	-	-
	5,000	0	0	2.20	11/20/16	-	-	-	-
	20,200	0	0	1.78	4/30/17	-	-	-	-
	6,067	13,333	0	1.30	12/6/17	-	-	-	-
R. Lander, VP of Quality Assurance	5,000	10,000	0	1.30	12/6/17	-	-	-	-
K. Ferencz-Biro, VP of Reg. Affairs	5,000	10,000	0	1.30	12/6/17	-	-	-	-

Options Exercised / Stock Vested - 2007

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)	Number of Shares Acquired on Vesting (#)	Value of Realized on Vesting ($)
(a)	(b)	(c)	(d)	(e)
W.A. Carter, CEO	none			
A. Bonelli, COO	none			
R. Peterson, CFO	none			
D. Strayer, Medical Director	none			
C. Smith, VP MFG.	none			
W. Springate, VP of Operations	none			
R. Lander, VP of Qual. Assurance	none			
K. Ferencz-Biro, VP of Reg. Affairs	none			

Compensation Committee Interlocks and Insider Participation

Our Compensation Committee of the Board of Directors, consisting of Richard Piani, the Committee Chairman, William Mitchell, M.D. and Dr. Iraj E. Kiani, are all independent directors. There are no interlocking relationships.

COMPENSATION COMMITTEE REPORT

Our Committee has reviewed and discussed the Compensation Discussion and Analysis contained in this Annual Report with management. Based on our Committee's review of and the discussions with management with respect to the Compensation Discussion and Analysis, our Committee recommended to the board of directors that the Compensation Discussion and Analysis be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007 for filing with the SEC.

COMPENSATION
COMMITTEE
Richard Piani,
Committee
Chairman
William Mitchell,
M.D.
Dr. Iraj E. Kiani

The foregoing Compensation Committee report shall not be deemed incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, and shall not otherwise be deemed filed under these acts, except to the extent we incorporate by reference into such filings.

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Director Compensation - 2007

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)	Option Awards ($) (2)	Non-Equity Incentive Plan Compensation ($)	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation ($)	Total ($)
R. Etheridge, Director, General Counsel	100,000	50,000	67,406	0	0	117,179(1)	334,585
W. Mitchell, Director	100,000	50,000	67,406	0	0	0	217,406
R. Piani, Director	100,000	50,000	67,406	0	0	0	217,406
I. Kiani, Director	100,000	50,000	0	0	0	0	150,000

(1) General Counsel fees as per Engagement Agreement.

(2) The total Fair Value of Stock Options granted in 2007 to Directors was $202,218. The options were the renewal of previously issued options that expired unexercised.

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

The following table sets forth as of March 3, 2008, the number and percentage of outstanding shares of common stock beneficially owned by:

- Each person, individually or as a group, known to us to be deemed the beneficial owners of five percent or more of our issued and outstanding common stock;
- each of our directors and the Named Executives; and
- all of our officers and directors as a group.

As of March 3, 2008, there were no other persons, individually or as a group, known to us to be deemed the beneficial owners of five percent or more of our issued and outstanding common stock.

Name and Address of Beneficial Owner	Shares Beneficially Owned	% Of Shares Beneficially Owned
William A. Carter, M.D.	6,241,868(1)	7.9%
Ransom W. Etheridge 2610 Potters Rd. Virginia Beach, VA 23452	704,171(2)	*
Robert E. Peterson	540,574(3)	*
Richard C. Piani 97 Rue Jeans-Jaures Levaillois-Perret France 92300	532,223(4)	*
Anthony Bonelli 783 Jersey Avenue New Brunswick, NJ 08901	152,500(5)	*
William M. Mitchell, M.D.	459,495(6)	*

Vanderbilt University Department of Pathology Medical Center North 21st and Garland Nashville, TN 37232		
David R. Strayer, M.D.	200,746(7)	*
Carol A. Smith, Ph.D.	69,291(8)	*
Iraj-Eqhbal Kiani, Ph.D. Orange County Immune Institute 18800 Delaware Street Huntingdon Beach, CA 92648	166,751(9)	*
W. Springate	48,900(10)	*
R. Lander, Ph.D.	15,000(11)	*
K. Ferencz-Biro, Ph.D.	15,000(11)	*
All directors and executive officers as a group (11 persons)	9,146,519	11.2%

* Less than 1%

(1) Includes shares issuable upon the exercise of (i) replacement options issued in 2006 to purchase 376,650 shares of common stock exercisable at $3.78 per share expiring on February 22, 2016; (ii) stock options issued in 2001 to purchase 10,000 shares of common stock at $4.03 per share expiring January 3, 2011; (iii) options issued in 2007 to purchase 1,000,000 shares of common stock exercisable at $2.00 per share expiring on September 9, 2017, these options replaced previously issued options that expired unexercised on August 13, 2007; (iv) warrants issued in 2003 to purchase 1,450,000 shares of common stock exercisable at $2.20 per share expiring on September 8, 2008; (v) stock options issued in 2004 to purchase 320,000 shares of common stock at $2.60 per share expiring on September 7, 2014; (vi) Stock Options issued in 2005 to purchase 100,000 shares of common stock at $1.75 per share expiring on April 26, 2015; (vii) Stock options issued in 2005 to purchase 465,000 shares of common stock at $1.86 per share expiring June 30, 2015; and (viii) stock options issued in 2005 to purchase 70,000 shares of Common Stock at $2.87 per share expiring December 9, 2015; (ix) stock options issued in 2005 to purchase 10,000 shares of Common Stock at $2.61 per share expiring December 8, 2015; (x) 300,000 options issued in 2006 to purchase common stock at $2.38 per share and expiring on January 1, 2016; and (xi) 476,490 shares of Common Stock. Also includes 1,663,728 warrants and options originally issued to William A. Carter and subsequently transferred to Carter Investments of which Dr. Carter is the beneficial owner. These securities consist of (a) warrants issued in 2008 to purchase 190,000 shares of common stock at $4.00 per share expiring on February 17, 2018, these options replace previously issued warrants that expired unexercised on February 18, 2007, (b) stock options granted in 1991 and extended in 1998 to purchase 73,728 shares of common stock exercisable at $2.71 per share expiring on August 8, 2008 and (c)options issued in 2007 to purchase 1,400,000 shares of common stock at $3.50 per share expiring on September 30, 2017. These options replaced previously issued options that expired unexercised on September 30, 2007.

(2) Includes shares issuable upon exercise of (i) 20,000 options issued in to purchase common stock at $4.00 per share expiring on February 17, 2018, these options replace previously issued warrants that expired unexercised on February 18, 2007; (ii) 100,000 warrants issued in 2002 exercisable $2.00 per share expiring on August 17, 2017, these options replaced previously issued options that expired unexercised on August 13, 2007; (iii) stock options issued in 2005 to purchase 100,000 shares of common stock exercisable at $1.75 per share expiring on April 26, 2015; and(iv) stock options issued in 2004 to purchase 50,000 shares of common stock exercisable at $2.60 per share expiring on September 7, 2014; (and (vi) 184,171 shares of common stock of which 40,900 are subject to security interest. Also includes 200,000 stock options originally granted to Ransom Etheridge in 2003 and 50,000 stock options originally granted to Ransom Etheridge in 2006, all of which were subsequently transferred to relatives and family trusts. 200,000 of these stock options are exercisable at $2.75 per share and expire on December 4, 2013. 37,500 of these options were transferred to Julianne Inglima; 37,500 of these options were transferred to Thomas Inglima; 37,500 of these options were transferred to R. Etheridge-BMI Trust; 37,500 options were transferred to R. Etheridge-TCI Trust and 50,000 of these options were transferred to the Etheridge Family Trust. 50,000 of these stock options are exercisable at $3.86 per share and expire on February 24, 2016. 12,500 of these shares were transferred to Julianne Inglima; 12,500 of these options were transferred to Thomas Inglima; 12,500 of these options were transferred to R. Etheridge - BMI Trust; and 12,500 of these options were transferred to R. Etheridge-TCI Trust. Julianne and Thomas are Mr. Etheridge’s daughter and son-in-law.

(3) Includes shares issuable upon exercise of (i) replacement options issued in 2007 to purchase 13,750 shares of common stock at $2.37 per share and expiring on January 22, 2017; (ii) options issued in 2001 to purchase 10,000 shares of common stock at $4.03 per share and expiring on January 3, 2011; (iii) options issued in 2005 to purchase 10,000 shares of Common Stock at $2.61 per share expiring December 8, 2015; and (iv) 8,000 shares of Common Stock. Also includes 498,824 warrants/options originally issued to Robert E. Peterson and subsequently transferred to the Robert E. Peterson Trust of which Robert E. Peterson is owner and Trustee and to Mr. Peterson’s spouse, Leslie Peterson. The trust securities include options issued in 2007 to purchase 200,000 shares at $2.00 per share expiring September 17, 2017, these options replaced previously issued options that expired unexercised on August 13, 2007; options issued in 2006 to purchase 50,000 shares of common stock exercisable at $3.85 per share expiring on February 28, 2016; replacement options issued in 2006 to purchase 100,000 shares of common stock at $3.48 per share expiring on April 14, 2016; replacement options issued in 2006 to purchase 30,000 shares of common stock exercisable at $3.55 per share expiring on April 30, 2016 and 63,824 stock options issued in 2004 consisting of 50,000 options to acquire common stock at $3.44 per share expiring on June 22, 2014 and 13,824 options to acquire common stock at $2.60 per share expiring on September 7, 2014. 55,000 options to purchase common stock at $1.75 per share expiring on April 16, 2015 were transferred to Mrs. Peterson of which Mr. Peterson is still considered the beneficial owner.

(4) Includes shares issuable upon exercise of (i) 20,000 warrants issued in 1998 to purchase common stock at $4.00 per share expiring on February 17, 2018, these options replace previously issued warrants that expired unexercised on February 18, 2007; (ii) 100,000 warrants issued in 2007 exercisable at $2.00 per share expiring on September 17, 2017, these options replaced previously issued options that expired unexercised on August 13, 2007; (iii)options granted in 2004 to purchase 54,608 shares of common stock exercisable at $2.60 per share expiring on September 17, 2014; (iv) options granted in 2005 to purchase 100,000 shares of common stock exercisable at $1.75 per share expiring on April 26, 2015; (v) stock options issued in 2006 to purchase 50,000 shares of common stock exercisable at $3.86 per share expiring February 24, 2006; (vi) 161,715 shares of common stock owned by Mr. Piani; vii) 40,900 shares of common stock owned jointly by Mr. and Mrs. Piani; and (viii) and 5,000 shares of common stock owned by Mrs. Piani.

(5) Consists of (i) 100,000 options exercisable at $2.11 per share expiring November 27, 2016 (ii) 50,000 options exercisable at $2.08 per share expiring February 26, 2017 and (iii) 2,500 shares of common stock.

(6) Includes shares issuable upon exercise of (i) options issued in to purchase 12,000 shares of common stock at $6.00 per share; (ii) 100,000 warrants issued in 2002 exercisable at $2.00 per share expiring on August 13, 2007; (iii) 50,000 stock options issued in 2004 exercisable at $2.60 per share expiring on September 7, 2014; (iv) 100,000 stock options issued in 2005 exercisable at $1.75 per share expiring on April 26, 2015; (v) stock options issued in 2006 to purchase 50,000 shares of common stock exercisable at $3.86 per share expiring February 24, 2006; and (vi) 147,495 shares of common stock.

(7) (i) stock options issued in 2007 to purchase 20,000 shares of common stock at $2.37 per share expiring on February 22, 2017; (ii) warrants issued in 1998 to purchase 50,000 shares of common stock exercisable at $4.00 per share expiring on February 17, 2018. These options replace previously issued warrants that expired unexercised on February 18, 2007; (iii) stock options granted in 2001 to purchase 10,000 shares of common stock exercisable at $4.03 per share expiring on January 3, 2011; (iv) warrants issued in 2007 to purchase 50,000 shares of common stock exercisable at $2.00 per share expiring on September 17, 2017, these options replaced previously issued options that expired unexercised on August 13, 2007; (v) stock options issued in 2004 to purchase 10,000 shares of common stock exercisable at $1.90 per share expiring on December 7, 2014; (vi) stock options issued in 2005 to purchase 10,000 shares of Common Stock at $2.61 per share expiring December 8, 2015; (vii) stock options to purchase 15,000 shares of common stock at $2.20 per share expiring November 20, 2016; (viii)stock options issued in 2007 to purchase 25,000 shares of common stock at $1.30 per share expiring December 6, 2017 and (ix) 10,746 shares of common stock.

(8) Consists of shares issuable upon exercise of(i) 5,000 warrants issued in 1998 to purchase common stock at $4.00 per share expiring June 7, 2008; (ii) 20,000 options issued in 2007 exercisable at $2.00 per share expiring in September 17, 2017, these options replaced previously issued options that expired unexercised on August 13, 2007; (iii) 6,791 stock options issued in 1997 exercisable at $2.37 expiring January 22, 2017; (iv) 10,000 stock options issued in 2001 exercisable at $4.03 per share expiring January 3, 2011; (v) 10,000 stock options issued in 2004 exercisable at $1.90 expiring on December 7, 2014; (vi) 10,000 stock options issued in 2005 to purchase Common Stock at $2.61 per share expiring December 8, 2015 and (vii) 7,500 stock options issued in 1996 to purchase common stock at $2.20 per share expiring November 20, 2016.

(9) Consists of shares issuable upon exercise of (i) 12,000 options issued in 2005 exercisable at $1.63 per share expiring on June 2, 2015; (ii) 15,000 options issued in 2005 exercisable at $1.75 per share expiring on April 26, 2015; (iii) stock options issued in 2006 to purchase 50,000 shares of common stock exercisable at $3.86 per share expiring February 24, 2006; and (iv) 89,751 shares of common stock.

(10) Consists of (i) stock options to acquire 1,812 shares of common stock at $1.90 per share expiring December 7, 2014; (ii) stock options to acquire 2,088 shares of common stock at $2.61 per share expiring December 8, 2015; (iii) 5,000 stock options at $2.20 per share expiring November 20, 2016; (iv) stock options to acquire 20,000 shares of common stock at $1.78 per share expiring April 30, 2017 and (v) stock options to acquire 20,000 shares at $1.30 per share expiring December 6, 2017.

(11) Consists of stock options to purchase 15,000 shares of common stock at $1.30 per share expiring on December 6, 2017.

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

We have employment agreements with certain of our executive officers and have granted such officers and directors options and warrants to purchase our common stock, as discussed under the headings, “Item 11. Executive Compensation,” and “Item 12. Security Ownership of Certain Beneficial Owners and Management,” above.

Ransom W. Etheridge, our Secretary, General Counsel and one of our directors, is an attorney in private practice, who renders corporate legal services to us from time to time, for which he has received fees totaling approximately $91,000 and $117,000 in 2006 and 2007, respectively. In addition, Mr. Etheridge serves on the Board of Directors for which he received Director’s Fees of cash and stock valued at $150,000 in 2006 and 2007. We loaned $60,000 to Ransom W. Etheridge in November, 2001 for the purpose of exercising 15,000 class A redeemable warrants. This loan bore interest at 6% per annum. This loan was granted prior to the enactment of the Sarbanes Oxley Act of 2002 prohibiting such transactions. In lieu of granting Mr. Etheridge a bonus for outstanding legal work performed on behalf of the Company, the Board of Directors forgave the loan and accrued interest on February 24, 2006.

We used the property acquired in late 2004 by Retreat House, LLC an entity in which the children of William A. Carter have a beneficial interest. We paid Retreat House, LLC $102,000 and $153,000 in 2006 and 2007, respectively, for the use of the property at various times.

Antoni Esteve, one of our former directors, was a Member of the Executive Committee and Director of Scientific and Commercial Operations of Laboratorios Del Dr. Esteve S.A. In March 2002, our European subsidiary Hemispherx S.A. entered into a Sales and Distribution Agreement with Laboratorios Del Dr. Esteve S.A. In addition, in March 2003, we issued 347,445 shares of our common stock to Provesan SA, an affiliate of Laboratorios Del Dr. Esteve S.A., in exchange for 1,000,000 Euros of convertible preferred equity certificates of Hemispherx S.A., owned by Laboratorios Del Dr. Esteve S.A.

We have engaged the Sage Group, Inc., a health care, technology oriented, strategy and transaction advisory firm, to assist us in obtaining a strategic alliance in Japan for the use of Ampligen® in treating Chronic Fatigue Syndrome (CFS) and Avian Flu. R. Douglas Hulse, our former President and Chief Operating Officer, is a member and an executive director of The Sage Group, Inc.

Kati Kovari, M.D. was paid $13,000 in 2006 and 2007 for her part-time services to the Company as Assistant Medical Director. Dr. Kovari is the spouse of W. A. Carter, our CEO.

ITEM 14. Principal Accountant Fees and Services.

All audit and professional services are approved in advance by the Audit Committee to assure such services do not impair the auditor's independence from us. BDO Seidman, LLP ("BDO") resigned as our auditor on November 7, 2006 and, on November 9, 2006, we engaged McGladrey & Pullen, LLP ("McGladrey") as our certified public accountants. The total fees by McGladrey for 2006 and 2007 were $205,000 and $280,000, respectively. The following table shows the aggregate fees for professional services rendered during the year ended December 31, 2007.

	Amount ($)	
Description of Fees	**2006**	**2007**
Audit Fees	$ 205,000	$ 220,000
Audit-Related Fees	-	60,000
Tax Fees	-	-
All Other Fees	-	-
Total	$ 205,000	$ 280,000

Audit Fees

Represents fees for professional services provided for the audit of our annual financial statements, audit of the effectiveness of internal control over financial reporting, services that are performed to comply with generally accepted auditing standards, and review of our financial statements included in our quarterly reports and services in connection with statutory and regulatory filings.

Audit-Related Fees

Represents the fees for assurance and related services that were reasonably related to the performance of the audit or review of our financial statements.

The Audit Committee has determined that McGladrey's rendering of these audit-related services was compatible with maintaining auditor's independence. The Board of Directors considered McGladrey to be well qualified to serve as our independent public accountants. The committee also pre-approved the charges for services performed in 2006 and 2007.

The Audit Committee pre-approves all auditing services and the terms thereof (which may include providing comfort letters in connection with securities underwriting) and non-audit services (other than non-audit services prohibited under Section 10A(g) of the Exchange Act or the applicable rules of the SEC or the Public Company Accounting Oversight Board) to be provided to us by the independent auditor; provided, however, the pre-approval requirement is waived with respect to the provisions of non-audit services for us if the "de minimus" provisions of Section 10A (i)(1)(B) of the Exchange Act are satisfied. This authority to pre-approve non-audit services may be delegated to one or more members of the Audit Committee, who shall present all decisions to pre-approve an activity to the full Audit Committee at its first meeting following such decision.

PART IV

ITEM 15. Exhibits and Financial Statement Schedules

(a) Financial Statements and Schedules – See index to financial statements on page F-1 of this Annual Report.

All other schedules called for under regulation S-X are not submitted because they are not applicable or not required, or because the required information is included in the financial statements or notes thereto.

(b) Exhibits – See exhibit index below.

Except as disclosed in the footnotes, the following exhibits were filed with the Securities and Exchange Commission as exhibits to our Form S-1 Registration Statement (No. 33-93314) or amendments thereto and are hereby incorporated by reference:

Exhibit No.	Description
2.1	First Asset Purchase Agreement dated March 11, 2003, by and between the Company and ISI.(1)
2.2	Second Asset Purchase Agreement dated March 11, 2003, by and between the Company and ISI.(1)
3.1	Amended and Restated Certificate of Incorporation of the Company, as amended, along with Certificates of Designations.
3.1.1	Series E Preferred Stock.
3.2	By–laws of Registrant, as amended.
4.1	Specimen certificate representing our Common Stock.
4.2	Rights Agreement, dated as of November 19, 2002, between the Company and Continental Stock Transfer & Trust Company. The Right Agreement includes the Form of Certificate of Designation, Preferences and Rights of the Series A Junior Participating Preferred Stock, the Form of Rights Certificate and the Summary of the Right to Purchase Preferred Stock.(2)
4.3	Form of 6% Convertible Debenture of the Company issued in March 2003.(1)
4.4	Form of Warrant for Common Stock of the Company issued in March 2003.(1)
4.5	Form of Warrant for Common Stock of the Company issued in June 2003.(3)
4.6	Form of 6% Convertible Debenture of the Company issued in July 2003.(4)
4.7	Form of Warrant for Common Stock of the Company issued in July 2003.(4)
4.8	Form of 6% Convertible Debenture of the Company issued in October 2003.(5)
4.9	Form of Warrant for Common Stock of the Company issued in October 2003.(5)
4.10	Form of 6% Convertible Debenture of the Company issued in January 2004.(6)
4.11	Form of Warrant for Common Stock of the Company issued in January 2004.(6)
4.12	Form of Warrant for Common Stock of the Company. (9)
4.13	Amendment Agreement, effective October 6, 2005, by and among the Company and debenture holders.(11)
4.14	Form of Series A amended 7% Convertible Debenture of the Company (amending Debenture due October 31, 2005).(11)
4.15	Form of Series B amended 7% Convertible Debenture of the Company (amending Debenture issued on January 26, 2004 and due January 31, 2006). (11)

4.16 Form of Series C amended 7% Convertible Debenture of the Company (amending Debenture issued on July 13, 2004 and due January 31, 2006).(11)
4.17 Form of Warrant issued effective October 6, 2005 for Common Stock of the Company.(11)
10.1 1990 Stock Option Plan.
10.2 1992 Stock Option Plan.
10.3 1993 Employee Stock Purchase Plan.
10.4 Form of Confidentiality, Invention and Non–Compete Agreement.
10.5 Form of Clinical Research Agreement.
10.6 Form of Collaboration Agreement.
10.7 Amended and Restated Employment Agreement by and between the Company and Dr. William A. Carter, dated as of July 1, 1993. (7)
10.8 Employment Agreement by and between the Registrant and Robert E. Peterson, dated April 1, 2001.
10.9 License Agreement by and between the Company and The Johns Hopkins University, dated December 31, 1980.
10.10 Technology Transfer, Patent License and Supply Agreement by and between the Company, Pharmacia LKB Biotechnology Inc., Pharmacia P–L Biochemicals Inc.
and E.I. du Pont de Nemours and Company, dated November 24, 1987.
10.11 Pharmaceutical Use Agreement, by and between the Company and Temple University, dated August 3, 1988.
10.12 Assignment and Research Support Agreement by and between the Company, Hahnemann University and Dr. David Strayer, Dr. lsadore Brodsky and Dr. David Gillespie, dated June 30, 1989.
10.13 Lease Agreement between the Company and Red Gate Limited Partnership, dated November 1, 1989, relating to the Company's Rockville, Maryland facility.
10.14 Agreement between the Company and Bioclones (Proprietary) Limited.
10.15 Amendment, dated August 3, 1995, to Agreement between the Company and Bioclones (Proprietary) Limited (contained in Exhibit 10.14).
10.16 Licensing Agreement with Core BioTech Corp.
10.17 Licensing Agreement with BioPro Corp.
10.18 Licensing Agreement with BioAegean Corp.
10.19 Agreement with Esteve.
10.20 Agreement with Accredo (formerly Gentiva) Health Services.
10.21 Agreement with Biovail Corporation International.
10.22 Forbearance Agreement dated March 11, 2003, by and between ISI, the American National Red Cross and the Company.(1)
10.23 Forbearance Agreement dated March 11, 2003, by and between ISI, GP Strategies Corporation and the Company.(1)
10.24 Securities Purchase Agreement, dated March 12, 2003, by and among the Company and the Buyers named therein.(1)
10.25 Registration Rights Agreement, dated March 12, 2003, by and among the Company and the Buyers named therein.(1)
10.26 Securities Purchase Agreement, dated July 10, 2003, by and among the Company and the Buyers named therein.(4)
10.27 Registration Rights Agreement, dated July 10, 2003, by and among the Company and the Buyers named therein.(4)
10.28 Securities Purchase Agreement, dated October 29, 2003, by and among the Company and the Buyers named therein.(5)
10.29 Registration Rights Agreement, dated October 29, 2003, by and among the Company and the Buyers named therein.(5)
10.30 Securities Purchase Agreement, dated January 26, 2004, by and among the Company and the Buyers named therein.(6)

10.31 Registration Rights Agreement, dated January 26, 2004, by and among the Company and the Buyers named therein.(6)

10.32 Memorandum of Understanding with Fujisawa. (8)

10.33	Securities Purchase Agreement, dated July 30, 2004, by and among the Company and the Purchasers named therein.(9)
10.34	Registration Rights Agreement, dated July 30, 2004, by and among the Company and the Purchasers named therein. (9)
10.35	Agreement for services of R. Douglas Hulse, (12)
10.36	Amended and Restated Employment Agreement of Dr. William A. Carter. (10)
10.37	Engagement Agreement with Dr. William A. Carter. (10)
10.38	Amended and restated employment agreement of Dr. William A. Carter (12)
10.39	Amended and restated engagement agreement with Dr. William A. Carter (12)
10.40	Amended and restated engagement agreement with Robert E. Peterson (12)
10.41	Engagement Agreement with Ransom W. Etheridge (12)
10.42	Change in control agreement with Dr. William A. Carter (12)
10.43	Change in control agreement with Dr. William A. Carter (12)
10.44	Change in control agreement with Robert E. Peterson (12)
10.45	Change in control agreement with Ransom Etheridge (12)
10.46	Supply Agreement with Hollister-Stier Laboratories LLC
10.47	Manufacturing and Safety Agreement with Hyaluron, Inc.
10.48	Common Stock Purchase Agreement, dated July 8, 2005, by and among the Company and Fusion Capital.(13)
10.49	Registration Rights Agreement, dated July 8, 2005, by and among the Company and Fusion Capital.(13)
10.48	Common Stock Purchase Agreement, dated April 12, 2006, by and among the Company and Fusion Capital.(14)
10.49	Registration Rights Agreement, dated April 12, 2006, by and among the Company and Fusion Capital.(14)
10.50	Supply Agreement with Hollister-Stier Laboratories LLC. (15)
10.51	Manufacturing and Safety Agreement with Hyaluron, Inc. (15)
10.52	April 19, 2006 Amendment to Common Stock Purchase Agreement by and among the Company and Fusion Capital.(15)
10.53	July 21, 2006 Letter Amendment to Common Stock Purchase Agreement by and among the Company and Fusion Capital.(15)
10.54	Royalty Purchase Agreement with Stem Cell Innovations, Inc. (15)
10.55	Biken Activating Agreement. (16)
10.56	Biken Material Evaluation Agreement. (16)
21	Subsidiaries of the Registrant.
23.1	McGladrey & Pullen, LLP consent.(17)
23.2	BDO Seidman, LLP consent.(17)
31.1	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 from the Company's Chief Executive Officer.(17)
31.2	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 from the Company's Chief Financial Officer.(17)
32.1	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 from the Company's Chief Executive Officer.(17)
32.2	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 from the Company's Chief Financial Officer.(17)

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(1) Filed with the Securities and Exchange Commission as an exhibit to the Company’s Current Report on Form 8-K (No. 1-13441) dated March 12, 2003 and is hereby incorporated by reference.

(2)

Filed with the Securities and Exchange Commission on November 20, 2002 as an exhibit to the Company's Registration Statement on Form 8-A (No. 027072) and is hereby incorporated by reference.

(3) Filed with the Securities and Exchange Commission as an exhibit to the Company's Current Report on Form 8-K (No. 1-13441) dated June 27, 2003 and is hereby incorporated by reference.

(4) Filed with the Securities and Exchange Commission as an exhibit to the Company's Current Report on Form 8-K (No. 1-13441) dated July 14, 2003 and is hereby incorporated by reference.

(5) Filed with the Securities and Exchange Commission as an exhibit to the Company's Current Report on Form 8-K (No. 1-13441) dated October 30, 2003 and is hereby incorporated by reference.

(6) Filed with the Securities and Exchange Commission as an exhibit to the Company's Current Report on Form 8-K (No. 1-13441) dated January 27, 2004 and is hereby incorporated by reference.

(7) Filed with the Securities and Exchange Commission as an exhibit to the Company's quarterly report on Form 10-Q (No. 1-13441) for the period ended September 30, 2001 and is hereby incorporated by reference.

(8) Filed with the Securities and Exchange Commission as an exhibit to the Company's Form S-1 Registration Statement (No. 333-113796) and is hereby incorporated by reference.

(9) Filed with the Securities and Exchange Commission as an exhibit to the Company's Current Report on Form 8-K (No. 1-13441) dated August 6, 2004 and is hereby incorporated by reference.

(10) Filed with the Securities and Exchange Commission as an exhibit to the Company's Current Report on Form 8-K (No. 1-13441) dated September 15, 2004 and is hereby incorporated by reference.

(11) Filed with the Securities and Exchange Commission as an exhibit to the Company's Current Report on Form 8-K/A-1 (No. 1-13441) filed on October 28, 2005 and is hereby incorporated by reference.

(12) Filed with the Securities and Exchange Commission as an exhibit to the Company's annual report on Form 10-K (No. 1-13441) for the year ended December 31, 2004 and is hereby incorporated by reference.

(13) Filed with the Securities and Exchange Commission as an exhibit to the Company's Current Report on Form 8-K (No. 1-13441) dated September 15, 2005 and is hereby incorporated by reference.

(14) Filed with the Securities and Exchange Commission as an exhibit to the Company's Current Report on Form 8-K (No. 1-13441) dated April 12, 2006 and is hereby incorporated by reference.

(15) Filed with the Securities and Exchange Commission on July 31, 2006 as an exhibit to the Company's Form S-1 Registration Statement (No. 333-136187) and is hereby incorporated by reference.

(16) Filed with the Securities and Exchange Commission as an exhibit to the Company's Current Report on Form 8-K (No. 1-13441) dated December 13, 2007 and is hereby incorporated by reference.

(17) Filed herewith.

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.

HEMISPHERx
BIOPHARMA, INC.

By: /s/ William A. Carter
William A. Carter, M.D.
Chief Executive Officer

March 17, 2008

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange of 1934, as amended, this report has been signed below by the following persons on behalf of this Registrant and in the capacities and on the dates indicated.

/s/ William A. Carter William A. Carter, M.D.	Chairman of the Board, Chief Executive Officer and Director	March 17, 2008
/s/ Richard Piani Richard Piani	Director	March 17, 2008
/s/ Robert E. Peterson Robert E. Peterson	Chief Financial Officer	March 17, 2008
/s/ Ransom Etheridge Ransom Etheridge	Secretary And Director	March 17, 2008
/s/ William Mitchell William Mitchell, M.D., Ph.D.	Director	March 17, 2008
/s/ Iraj E. Kiani Iraj E. Kiani, Ph.D.	Director	March 17, 2008

HEMISPHERx BIOPHARMA, INC AND SUBSIDIARIES
Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders
Hemispherx Biopharma, Inc.
Philadelphia, PA

We have audited the consolidated balance sheets of Hemispherx Biopharma, Inc. and Subsidiaries as of December 31, 2006 and 2007 and the related consolidated statements of operations, stockholders' equity and comprehensive loss and cash flows for each of the two years in the period ended December 31, 2007. Our audits also included the financial statement schedule of Hemispherx Biopharma, Inc. listed in Item 15(a) for each of the two years in the period ended December 31, 2007. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of Hemispherx Biopharma, Inc. and Subsidiaries as of December 31, 2006 and 2007, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2007, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the related financial statement schedule for each of the two years in the period ended December 31, 2007, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Hemispherx Biopharma, Inc. and Subsidiaries' internal control over financial reporting as of December 31, 2007, based on criteria established in *"Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)"* and our report dated March 17, 2008, expressed an unqualified opinion on the effectiveness of Hemispherx Biopharma, Inc.'s internal control over financial reporting.

/s/ McGladrey & Pullen, LLP

Blue Bell, Pennsylvania
March 17, 2008

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Hemispherx Biopharma, Inc.

We have audited the accompanying consolidated statement of operations, changes in stockholders' equity and comprehensive loss and cash flows of Hemispherx Biopharma, Inc. and subsidiaries for the year ended December 31, 2005. We have also audited the financial statement schedule listed under Item 15(a) for the year ended December 31, 2005. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with auditing 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 and financial statement schedule are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the results of operations and cash flows of Hemispherx Biopharma, Inc. and subsidiaries for the year ended December 31, 2005 in conformity with accounting principles generally accepted in the United States. Also, in our opinion, the financial statement schedule presents fairly, in all material respects, the information set forth therein for the year ended December 31, 2005.

/s/ BDO Seidman, LLP
BDO Seidman, LLP

Philadelphia, Pennsylvania
June 1, 2006

HEMISPHERx BIOPHARMA, INC. AND SUBSIDIARIES
Consolidated Balance Sheets
December 31, 2006 and 2007

(in thousands, except for share and per share amounts)

	2006	2007
ASSETS		
Current assets:		
Cash and cash equivalents (Notes 2 & 17)	$ 3,646	$ 11,471
Short term investments (Notes 2 & 4)	18,375	3,944
Inventories (Note 3)	957	511
Accounts and other receivables (Note 2)	93	77
Prepaid expenses and other current assets	168	146
Assets held for sale (Note 2)	-	450
Total current assets	23,239	16,599
Property and equipment, net (Note 2)	4,720	4,821
Patent and trademark rights, net (Notes 2 & 5)	857	958
Investment	35	35
Royalty interest, net (Note 5)	601	243
Construction in progress (Note 2)	624	469
Deferred financing costs, net	38	-
Advance receivable (Note 7)	1,300	-
Other assets	17	17
Total assets	$ 31,431	$ 23,142
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,548	$ 1,118
Accrued expenses (Notes 2 & 6)	1,261	1,069
Current portion of long-term debt (Notes 2 & 7)	3,871	-
Total current liabilities	6,680	2,187
Commitments and contingencies (Notes 10, 12, 13, 15)		
Stockholders' equity (Note 8):		
Preferred stock, par value $0.01 per share, authorized 5,000,000; issued and outstanding; none	-	-
Common stock, par value $0.001 per share, authorized 200,000,000 shares; issued and outstanding 66,816,764 and 73,760,446, respectively	67	74
Additional paid-in capital	191,689	206,078
Accumulated other comprehensive income (loss)	46	(7)
Accumulated deficit	(167,051)	(185,190)
Total stockholders' equity	24,751	20,955
Total liabilities and stockholders' equity	$ 31,431	$ 23,142

See accompanying notes to consolidated financial statements.

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HEMISPHERX BIOPHARMA, INC. AND SUBSIDIARIES
Consolidated Statements of Operations
(in thousands, except share and per share data)

	Years ended December 31,		
	2005	2006	2007
Revenues:			
Sales of product, net	$ 910	$ 750	$ 925
Clinical treatment programs	173	183	134
Total Revenues	1,083	933	1,059
Costs and Expenses:			
Production/cost of goods sold	391	1,275	930
Research and development	5,218	10,127	10,444
General and administrative	5,389	8,225	8,974
Total Costs and Expenses:	10,998	19,627	20,348
Operating loss	(9,915)	(18,694)	(19,289)
Reversal of previously accrued interest expense	-	-	346
Interest and other income	590	554	1,200
Interest expense	(388)	(646)	(116)
Financing costs (Note 7)	(2,733)	(613)	(280)
Net loss	$ (12,446)	$ (19,399)	$ (18,139)
Basic and diluted loss per share	$ (.24)	$ (.31)	$ (.25)
Weighted average shares outstanding Basic and Diluted	51,475,192	61,815,358	71,839,782

See accompanying notes to consolidated financial statements.

HEMISPHERx BIOPHARMA, INC. AND SUBSIDIARIES
Consolidated Statements of Changes in Stockholders' Equity and Comprehensive Loss
(in thousands except share data)

	Common Stock Shares	Common Stock .001 Par Value	Additional paid-in capital	Accumulated other Comprehensive Income (loss)	Accumulated deficit	Total stockholders equity
Balance December 31, 2004	49,631,766	$ 50	$ 154,609	$ (10)	$ (135,206)	$ 19,443
Shares issued for:						
Payment of accounts payable	338,995	-	413	-	-	413
Conversion of debt	1,358,887	1	2,219	-	-	2,220
Warrants exercised	5,000	-	9	-	-	9
Interest on convertible debt	255,741	-	409	-	-	409
Private placement, net of issuance costs	4,673,766	5	8,015	-	-	8,020
Options and warrants issued for services	-	-	391	-	-	391
Conversion price adjustment	-	-	140	-	-	140
Discount resulting from debt refinance	-	-	189	-	-	189
Net comprehensive loss	-	-	-	(161)	(12,446)	(12,607)
Balance December 31, 2005	56,264,155	56	166,394	(171)	(147,652)	18,627
Shares issued for:						
Payment of accounts payable	111,085	-	272	-	-	272
Conversion of debt	400,642	1	832	-	-	833
Warrants exercised	255,416	1	671	-	-	672
Interest on convertible debt	80,724	-	177	-	-	177
Private placement, net of issuance costs	9,393,014	9	20,090	-	-	20,099
Purchase patents	61,728	-	150	-	-	150
Purchase royalty interest	250,000	-	620	-	-	620
Stock-based compensation	-		2,483	-	-	2,483
Net comprehensive loss	-	-	-	217	(19,399)	(19,182)
Balance December 31, 2006	66,816,764	67	191,689	46	(167,051)	24,751
Shares issued for:						
Interest on convertible debt	116,745	-	193			193
Private placement, net of issuance costs	6,651,502	7	11,613			11,620
Stock issued for settlement of accounts payable	175,435	-	292			292
Stock based compensation			2,291			2,291
Net comprehensive loss	-	-	-	(53)	(18,139)	(18,192)
Balance December 31, 2007	73,760,446	$ 74	$ 206,078	$ (7)	$ (185,190)	$ 20,955

See accompanying notes to consolidated financial statements

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HEMISPHERx BIOPHARMA, INC. AND SUBSIDIARIES
Consolidated Statements of Cash Flows
(in thousands)

	Years ended December 31,		
	2005	2006	2007
Cash flows from operating activities:			
Net loss	$ (12,446)	$ (19,399)	$ (18,139)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation of property and equipment	114	192	266
Amortization of patent, trademark rights, and royalty interest	281	180	170
Amortization of deferred financing costs	2,733	608	281
Stock option and warrant compensation and service expense	391	2,483	2,291
Impairment losses	-	-	526
Inventory reserve	(125)	141	109
Interest on convertible debt	409	177	181
Changes in assets and liabilities:			
Inventory	505	669	