HOLLIS EDEN PHARMACEUTICALS INC /DE/
Form 10-K
March 16, 2007

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2006

OR

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

For the transition period from to

Commission File Number 000-24672

HOLLIS-EDEN PHARMACEUTICALS, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**13-3697002**
(State or other jurisdiction	**(I.R.S. Employer**

of incorporation or organization)	**Identification No.)**
4435 Eastgate Mall, Suite 400	
San Diego, CA	**92121**
(Address of principal executive offices)	**(Zip Code)**

Registrant s telephone number, including area code: (858) 587-9333

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

Common stock, $.01 par value per share

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

None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES ¨ 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 ¨ NO x

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities 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 requirement for the past 90 days. YES x NO ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the Registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ¨ NO x

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer (as defined in Exchange Act Rule 12b-2).

Large accelerated filer ¨	Accelerated filer x	Non-accelerated filer ¨

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES ¨ NO x

The aggregate market value of the voting stock held by nonaffiliates of the Registrant as of June 30, 2006, the end of Hollis-Eden Pharmaceuticals most recently completed second fiscal quarter, was approximately $106,854,156 based on the closing stock price of $4.79 for the Registrant s Common Stock as reported by the Nasdaq National Market*.

As of March 1, 2007, there were outstanding 28,918,901 shares of the Registrant s Common Stock, $.01 par value per share.

DOCUMENTS INCORPORATED BY REFERENCE

Certain portions of Registrant's definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after Registrant s fiscal year end December 31, 2006, are incorporated by reference into Part III of this Report.

*Excludes the common stock held by executive officers, directors and stockholders whose ownership exceeded 10% of the Registrant s common stock outstanding at June 30, 2006. This calculation does not reflect a determination that such persons are affiliates for any other purposes.

Hollis-Eden Pharmaceuticals, Inc.

Form 10-K

For the Fiscal Year Ended December 31, 2006

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements that involve risks and uncertainties. In particular, statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are contained or incorporated by reference in this report. We have based these forward-looking statements on our current expectations about future events. While we believe these expectations are reasonable, such forward-looking statements are inherently subject to risks and uncertainties, many of which are beyond our control. The actual future results for Hollis-Eden Pharmaceuticals, Inc. may differ materially from those discussed here for various reasons, including those discussed in this report under the heading Risk Factors, Part II, Item 7 entitled Management s Discussion and Analysis of Financial Condition and Results of Operations and elsewhere throughout this Annual Report. Given these risks and uncertainties, you are cautioned not to place undue reliance on such forward-looking statements. The forward-looking statements included in this report are made only as of the date hereof. We do not undertake and specifically decline any obligation to update any such statements or to publicly announce the results of any revisions to any of such statements to reflect future events or developments. When used in the report, unless otherwise indicated, we, our and us refers to Hollis-Eden Pharmaceuticals, Inc. and its subsidiaries.

PART I

Item 1. Business

GENERAL OVERVIEW

Hollis-Eden Pharmaceuticals, Inc., a development-stage pharmaceutical company, is engaged in the discovery, development and commercialization of products for the treatment of diseases and disorders in which the body is unable to mount an appropriate immune or metabolic response. Our initial technology development efforts are primarily focused on a series of adrenal hormones and hormone analogs that we have labeled immune regulating hormones, or IRHs, that are derived from our hormonal signaling technology platform. We believe these IRHs are key components of the body s natural regulatory system that potentially can be useful in treating a wide variety of medical conditions.

Preclinical and early clinical studies with these compounds indicate that they have the ability to reverse bone marrow suppression, reduce non-productive inflammation and stimulate innate and adaptive immunity. These compounds have also been shown in these studies to play an important role in metabolism and, more recently, in preclinical studies of hormonally driven cancers. In addition, these IRHs have a very attractive safety profile to date and are cost-effective to manufacture.

We have generated a substantial amount of data regarding the safety and activity of NEUMUNE® (HE2100) in the setting of acute radiation syndrome (ARS). This data indicates that NEUMUNE mitigates neutropenia (loss of white blood cells known as neutrophils), thrombocytopenia (loss of key clotting elements known as platelets) and anemia (loss of red blood cells). NEUMUNE has also been shown to increase survival versus placebo in rhesus monkeys after exposure to high levels of radiation. In 2005 we filed an Investigational New Drug application, or IND, with the U.S. Food and Drug Administration, or FDA, and we have conducted four Phase I human clinical trials with NEUMUNE in the U.S. and The Netherlands. These studies indicate that NEUMUNE has an attractive safety profile and that the compound can increase both neutrophils and platelets in young and elderly healthy humans.

Because of the potential to use such an agent as a medical countermeasure to a weapon of mass destruction, there are a number of unique features applicable to the development and commercialization process of NEUMUNE for ARS. Specifically, unlike drug candidates for traditional medical indications, NEUMUNE may be reviewed for regulatory approval in ARS by the FDA, on the basis of efficacy in animals and safety in humans. This potentially avoids the need to conduct large and expensive studies typically required by the FDA to establish efficacy

in humans. Further, because the compound could be stockpiled by government agencies, the

cost of distribution could potentially be significantly less than for traditional pharmaceuticals. We have been collaborating on the development of NEUMUNE for ARS with the U.S. military. Our intent had been to secure procurement contracts with both the Department of Health and Human Services (HHS) and the Department of Defense (DOD). However, in March 2007, after being notified on multiple occasions that we were in the competitive range for an active Request for Proposal (RFP), we were informed by HHS that NEUMUNE did not meet the technical requirements for this RFP. HHS then cancelled the solicitation in its entirety. While we believe DOD remains interested in procuring a drug candidate like NEUMUNE for bone marrow damage from ARS, they have not yet issued a RFP for this indication. Therefore, it is uncertain whether or when a market for NEUMUNE in ARS will materialize and, as a result, we have curtailed our development activities in this indication until such time as the market opportunity becomes more clear.

In addition to the potential role for NEUMUNE in ARS, we believe there is also an opportunity for the compound in preventing or mitigating infections acquired in the healthcare setting. Numerous published preclinical studies indicate that NEUMUNE can significantly improve survival from lethal infections when administered prior to infectious challenge. While we have an open IND for the compound in this indication, in light of HHS cancellation of its RFP described above, we have made the strategic decision to curtail further development of NEUMUNE and will focus our resources on HE3286, HE3235 and follow-on oral compounds for indications that have well defined clinical paths and large, well-established markets. If Congressional intervention or procurement activities by the Department of Defense improve the opportunity for NEUMUNE in the very short term we may revisit this decision. We will also consider licensing or selling the compound to third parties for further development.

We are also in the process of preparing and filing an IND on our lead compound, HE3286, which is being developed initially for type 2 diabetes, a disease affecting approximately 20 million Americans and over 160 million people worldwide. Preclinical studies with the compound indicate that it acts as an insulin sensitizer to improve the utilization of glucose without causing the side effects seen with currently marketed insulin sensitizers.

HE3286 has also shown activity in several preclinical models of rheumatoid arthritis and we anticipate filing an IND in this area if additional preclinical studies are successful. We are continuing to profile both HE3286 and analogs of HE3286 in other preclinical models of autoimmunity.

We have recently identified another compound from our hormonal signaling technology platform, HE3235, that has shown activity in preclinical models of prostate cancer and breast cancer. This compound has now been selected for clinical development, and assuming toxicology studies and manufacturing scale-up activities are successful, we anticipate filing an IND for this compound as well.

Another one of our drug candidates, IMMUNITIN (HE2000), is a Phase II stage IRH that has shown clinical activity in infectious diseases, including HIV, malaria, and preventing reactivation of tuberculosis in AIDS patients. IMMUNITIN may be a candidate for further development as a compound to be used in treating global infectious disease epidemics.

In addition to the four clinical development stage drug candidates described above, we have an active research program that is generating new clinical leads. These new leads are being further evaluated in preclinical models of a number of different diseases including chemotherapy induced bone marrow suppression, autoimmune conditions, inflammatory diseases of the lung, glucose and bone metabolism and regenerative medicine.

We are pursuing a partially integrated approach to building our business. As such, we are utilizing third parties for many of our activities. If we are able to successfully develop our investigational drug candidates, we anticipate marketing them directly in the U.S. and potentially elsewhere in indications for which only a small sales force is required. For certain therapeutic indications or geographic regions that require a larger sales force to successfully commercialize a product, we anticipate establishing strategic collaborations with larger organizations which have the

resources to compete effectively in these settings.

Our principal executive offices are located at 4435 Eastgate Mall, Suite 400, San Diego, CA 92121, and our telephone number is (858) 587-9333. We are incorporated in Delaware.

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Our periodic and current reports that we file with the Securities and Exchange Commission, or SEC, are available free of charge, on our website, as soon as reasonably practicable after we have electronically filed them with, or furnished them to, the SEC. Our internet address is www.holliseden.com. The reference to our website does not constitute incorporation by reference of the information contained on our website.

TECHNOLOGY DESCRIPTION

Immune Regulating Hormones

Our primary technology development efforts are focused on a series of adrenal hormones and hormone analogs that we have labeled immune regulating hormones, or IRHs. We believe these IRHs are key components of the body s natural regulatory system that potentially can be useful in treating a wide variety of medical conditions. To date, these IRHs have demonstrated preclinical activity in protecting the bone marrow from the damaging effects of radiation and chemotherapy. In addition, IRHs appear to reduce inflammation in a broad-spectrum fashion while also improving a number of components of the immune system in conditions of immune suppression. Further, based on preclinical results these compounds appear to be important in regulating metabolism and hormonally driven cancers. These adrenal hormones are known to be depleted as we age, and this process can be accelerated as a result of infectious diseases and other chronic immune system disorders.

Hematopoiesis

One of our initial focus areas for these IRHs revolves around their role in the hematopoietic system. Hematopoiesis is the process by which the body produces a number of key blood cell types, including neutrophils and platelets. Neutrophils are white blood cells that are critical early responders used in combating foreign pathogens. When they are depleted, the host becomes highly susceptible to life-threatening infections. Similarly, a significant loss of platelets, which are key clotting elements in the blood, can lead to life-threatening bleeding episodes. Platelets have also recently been recognized as an important component of innate immunity.

Neutrophils and platelets are produced by the bone marrow. Radiation and chemotherapy can significantly damage bone marrow, which can lead to life-threatening complications.

A number of preclinical studies and initial clinical studies with our IRHs indicate that these compounds can increase both neutrophils and platelets. In addition, preclinical studies indicate the neutrophils that are produced following treatment with IRHs appear to be more effective at killing pathogens than untreated cells.

Mechanistically, IRHs appear both to increase the proliferative potential of residual bone marrow cells after injury and accelerate the rate at which new cells are generated. We believe this recovery of bone marrow cells may be attributable to the ability of NEUMUNE to increase CD34+ hematopoietic stem and progenitor cells, or HSPCs, as demonstrated in results from a Hollis-Eden sponsored preclinical study in rhesus monkeys. In addition, the ability of IRHs to regulate reactive oxygen species and reduce systemic inflammation may also contribute to preventing death of remaining bone marrow cells.

Because of these characteristics, IRHs have the potential to be quite useful in treating a variety of conditions in which the bone marrow is damaged.

Role of Inflammation

The role of inflammation in disease pathogenesis has become increasingly recognized by the medical community. Chronic inflammation is generally believed to be caused by an over-stimulation of certain components of the immune system, such as reactive oxygen species and pro-inflammatory mediators, due to persistent low-grade infections or the body s inability to differentiate between certain cells or tissues in the body and foreign pathogens. Published studies have implicated chronic inflammation in a host of diseases ranging from autoimmune conditions, such as arthritis and psoriasis, to infectious diseases, including HIV, malaria and tuberculosis, and to metabolic disease, including diabetes and cardiovascular disease as well as a number of different cancer types.

One of the most widely used classes of agent for treating inflammation is the corticosteroid class. Industry market research indicates that there are tens of millions of new prescriptions for corticosteroids issued by physicians in the U.S. each year for a wide range of conditions. While these drugs are very potent anti-inflammatory agents, their chronic use can lead to immune suppression and other side effects including bone loss.

Over the last decade, a number of new agents for treating inflammation have been introduced that are focused on inhibiting a specific component of the inflammatory cascade, such as agents that block specific inflammatory cytokines, including TNF-alpha and IL-1 beta, as well as drugs that inhibit specific enzymes, such as COX-2. These drugs have shown impressive activity in a number of clinical conditions such as arthritis, inflammatory bowel disease and psoriasis. However, by focusing on a specific mediator, these agents may not be able to overcome the redundancy built into the immune system and can also cause immune suppression and other side effects in certain patient populations. In addition, the cost of producing a number of these new agents is quite high.

Our IRHs have been shown to regulate a broad array of inflammatory mediators. For example, we have conducted preclinical studies which indicate the ability of IRHs to regulate the nuclear transcription factor NF-kB that may be central to the beneficial effects seen with these compounds in preclinical models of type 2 diabetes and rheumatoid arthritis. In addition, our class of compounds has been shown in early clinical trials to produce long-lasting reductions in a number of other key inflammatory mediators, including TNF-alpha, IL-1 beta and IL-6. Unlike most approaches to reducing inflammation, however, IRHs appear to either maintain or boost a variety of immune responses in conditions of immune suppression, including innate and adaptive cell-mediated immunity.

Innate and Cell-Mediated Immunity

Humans have three lines of defense against infection. The physical barrier of our skin and mucosal surfaces provides our first line of defense. This effectively protects us from numerous pathogens found in our immediate surroundings. Should a microbe gain entry through a break in the skin, by ingestion or by other means, protection comes from the next two lines of defense innate and adaptive immunity.

Innate immunity refers to the all-purpose, immediate antimicrobial response that occurs regardless of the nature of the invader. For example, macrophages, granulocytes and natural killer cells roam our body and recognize and destroy foreign cells they encounter. This response serves to fight the infection after initial exposure, pending development of adaptive immunity.

The adaptive immune system mounts a highly sophisticated and specialized immune response to protect us against specific invaders, and provides long-term protection or immunity from subsequent exposure to those

invaders. Adaptive immunity can be divided into two branches, the cellular or cell-mediated immune response, also known as Th1-type response, and the humoral immune response, also known as Th2-type response. These two interconnected immune functions work in concert through finely tuned checks and balances to mount an appropriate defense. In response to an intracellular pathogen, B-cells of the humoral arm (Th2) proliferate and produce large amounts of appropriate antibodies that flag invaders for elimination from the body. The cellular (Th1) immune response employs specialized T-cells to recognize and destroy host cells showing signs of infection by intracellular pathogens. The relative mobilization of each branch of the immune system depends on the specific disease or condition, and the nature of the response can be influenced by the pathogen itself and where it enters the body.

The balance between the cellular (Th1) and humoral (Th2) arms of the immune system is modulated by a highly integrated network of molecular and cellular interactions driven by cytokines. Cytokines are small proteins that act as intercellular chemical messengers. These cytokines, which are regulated by hormones generated by the endocrine system, can be classified as either Th1 or Th2 depending on their role. Th1 cytokines such as interleukin 2 (IL-2), interferon gamma (IFN-gamma) and interleukin 12 (IL-12) stimulate the cellular response and suppress the humoral response. Th2 cytokines, such as interleukin 10 (IL-10), interleukin 6 (IL-6) and interleukin 4 (IL-4), stimulate the humoral response and suppress the cellular response.

Generally, in healthy individuals the immune system is in homeostasis, or has balanced expression of Th1 and Th2 cytokines. If a foreign invader triggers an adaptive cellular or Th1-type response, the feedback mechanism within the immune system greatly reduces the humoral or Th2-type response. Once the invader is controlled or eliminated, a combination of hormones and cytokines act quickly to return the system back towards homeostasis through the same feedback mechanism.

A wide variety of viruses including HIV, certain parasites such as malaria, and bacteria such as tuberculosis, have evolved ways of evading destruction by the immune system by causing the body to overproduce Th2 cytokines and underproduce Th1 cytokines. This in turn leads to a corresponding overproduction of cells unable to fight these pathogens and an underproduction of cells that can. A key element in this dysregulation is believed to be a state of chronic inflammation that is produced in these conditions.

Our therapeutic strategy is based on the observation that this complicated balance of cytokines is regulated by competing levels of certain adrenal hormones. In young, healthy adults, the balance between corticosteroids such as cortisol, which have immunosuppressive properties, and the IRHs we are developing is a key determinant in whether appropriate levels of cytokines are produced to properly regulate immune responses. As we age, and under conditions of stress, chronic infections or systemic inflammation, levels of these IRHs that counteract the immunosuppressive effect of corticosteroids fall significantly, leading to a decline in the ability to fight off infections that would otherwise be contained by a well functioning immune system.

Hollis-Eden s Approach

With the advent of the technology revolution of the last several decades, scientists have been presented with a whole new series of tools that allow them to study very specific aspects of biological function. This led to a scientific approach that largely centered on how a certain drug might interact with a specific signaling function or target for a specific disease. While this approach has resulted in a number of successful drugs, frequently these compounds are not as effective in clinical practice as anticipated and produce a number of unintended side effects due to the complexity of interactions amongst different systems in human biology.

The research community has increasingly begun to embrace the concept of a systems biology approach to drug development one that accounts for the complexity of interactions between cellular pathways. This approach recognizes that enhancing or inhibiting just one signal in this complicated cascade of events is likely to be too simplistic an approach to overcome many of the more intractable health problems facing medicine today. Researchers in this emerging field are attempting to integrate a number of different scientific disciplines, such as

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molecular biology, high speed computing and engineering, to understand these intricate interactions in immune and metabolic function and the dysregulation in these pathways that can lead to a very diverse set of diseases and conditions at an upstream level. The concept is that there may be common links between diseases such as arthritis, diabetes, HIV, Alzheimer s disease and cancer that can all benefit from an appropriate upstream re-regulation of immune and/or metabolic function.

While most researchers in this area are taking a *ground up* approach to understanding each specific component in these intricate cascades and how they relate to one another, and then trying to design drugs that can successfully intervene in correcting dysregulation across all of these pathways, our approach is more *top down*: identify the hormones that have been developed through millions of years of evolution to be the master signalers involved in initiating these cascades and look at conditions where their modulation is dysregulated. By then applying the latest tools of pharmaceutical development, our goal is to design compounds and routes of administration that deliver these signals when and where they are needed to intervene in this systemic dysregulation.

As factors such as chronic inflammation, innate and adaptive immunity and metabolic function are implicated in a host of diseases, including virtually all diseases of aging, successfully applying this approach has potential utility for a number of important pharmaceutical markets. The hormone series that we are focused on is known to be involved in cell signaling at an upstream level, and these hormones are known to be depleted as we age. This depletion can be accelerated as a result of a number of the conditions we are pursuing. We believe that by starting with the lessons that evolutionary biology has taught us, the time to develop new therapeutics that target these systemic abnormalities will be shortened relative to the *ground up* approach being pursued by others.

PRODUCTS IN DEVELOPMENT

We are currently focusing our development activities on our proprietary series of IRHs. We have already generated indications of activity in human clinical trials with two of these compounds, NEUMUNE and IMMUNITIN, and two other compounds, HE3286 and HE3235, have now been selected for clinical development. Each of these compounds is described in more detail below. In addition, we have an active research program focused on adrenal hormones that is identifying additional clinical candidates for a host of medical conditions.

In addition to the potential role for NEUMUNE in ARS, we believe there is also an opportunity for the compound in preventing or mitigating infections acquired in the healthcare setting. Numerous published preclinical studies indicate that NEUMUNE can significantly improve survival from lethal infections when administered prior to infectious challenge. While we have an open IND for the compound in this indication, in light of HHS cancellation of its RFP described above, we have made the strategic decision to curtail further development of NEUMUNE and will focus our resources on HE3286, HE3235 and follow-on oral compounds for indications that have well defined clinical paths and large, well-established markets. If Congressional intervention or procurement activities by the Department of Defense improve the opportunity for NEUMUNE in the very short term we may revisit this decision. We will also consider licensing or selling the compound to third parties for further development.

HE3286

Type 2 Diabetes

Diabetes is a disease in which the body does not produce adequate quantities of, or properly use, insulin. Insulin is a hormone needed to carry glucose from the blood into cells, where it is converted to energy the cells need to perform properly. When insulin is not present in sufficient quantity or does not function correctly, the result is high levels of glucose in the blood. Over time, chronically elevated blood glucose can lead to

a host of severe medical conditions including nerve disease, blindness, limb amputation, heart attack, stroke and death. There are two forms of diabetes: type 1, or juvenile onset diabetes and type 2 or adult onset diabetes.

HE3286 is a next generation IRH that we are developing for the treatment of type 2 diabetes. The compound was discovered by our scientists in a pharmaceutical development program targeting metabolism.

Studies in rats fed with a diet containing the parent hormone of HE3286 showed a reduction in the expression levels of certain genes encoding key enzymes involved in glucose and cortisol metabolism (e.g. PEPCK or 11ß-HSD1), an effect which should lessen the severity or impact of type 2 diabetes on insulin resistance. This indicates that this hormone is potentially central to glucose metabolism. Through the application of medicinal chemistry, we have extended the inherent properties of that hormone into a more pharmaceutically suitable compound, HE3286, for the treatment of type 2 diabetes.

Data generated to support the use of the compound in this indication include the following:

- When administered orally to genetically obese mice prone to diabetes (*db/db* model), HE3286, after 10 days, significantly ($p<0.02$) suppressed the progression of hyperglycemia typically observed in these animals.

- In an animal model of diet-induced insulin resistance, HE3286 significantly ($p<0.01$) improved glucose handling in an oral glucose tolerance test (OGTT) when compared to the control group and at the end of the study was superior ($p<0.003$) to the active control (rosiglitazone). In addition, HE3286 demonstrated a statistically significant ($p<0.006$) reduction in fasting glucose values when compared to controls at days 14 and 29 of the study, and the activity was similar to the active control (rosiglitazone) ($p<0.05$).

- Additional evidence of improvement in glucose disposal by HE3286 comes from a hyperinsulinemic/euglycemic clamp study, widely acknowledged as the gold standard preclinical model to measure insulin sensitivity *in vivo*. In this study, administration of HE3286 to diabetic *db/db* mice for 14 days markedly increased the glucose infusion rate (GIR) required to maintain normal levels of blood glucose following an intravenous infusion of a high dose of insulin. The GIR is a key parameter used to determine the degree of insulin sensitivity *in vivo*, and its increase following treatment with HE3286 indicates that this compound acts physiologically as an insulin sensitizer in the diabetic state.

In parallel experiments designed to elucidate the possible mechanism of action of HE3286 to produce these metabolic effects, it was found that HE3286 regulates the pro-inflammatory NF-kB pathway in cultured mouse macrophages or human monocytes. We believe this is an important finding because over the last several years reports in the scientific literature suggest that chronic activation of inflammatory pathways such as NF-kB can also lead to insulin resistance and may play a role in the progression towards type 2 diabetes. The January 2007 issue of *Diabetologia* includes a new third party study regarding this pathway, which concludes that moderate inhibition of NF-kB improves glucose tolerance in animals and is a suitable therapeutic target for the treatment of type 2 diabetes.

There are several pharmaceutical approaches to treating type 2 diabetes. These include drugs designed to increase insulin production by the pancreas, drugs designed to reduce glucose production by the liver and drugs designed to increase the body s sensitivity to insulin, thereby improving glucose disposal from the bloodstream. Frequently clinicians will combine drugs from these different approaches in an effort to achieve appropriate glucose control.

The only currently approved anti-diabetic agents that are known to act as insulin sensitizers are the glitazone class of drugs, which collectively represent 48% of the annual sales in the $12 billion per year global oral anti-diabetic market. Glitazones appear to act primarily through the activation of a nuclear hormone receptor known as PPARgamma. While these agents can lower blood glucose, they have been associated with undesirable side effects such as weight gain. In contrast, preclinical studies with HE3286 indicate that it does not act on the PPARgamma receptor and does not have the undesirable effect of weight gain seen with the glitazone class. Therefore, these preclinical studies suggest that HE3286 may represent the first of a new class of insulin sensitizing agents that could be used in controlling type 2 diabetes.

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The need for new classes of agents such as HE3286 to treat type 2 diabetes is clear. There are approximately 20 million Americans with type 2 diabetes and over 160 million type 2 diabetics worldwide. These figures are increasing rapidly as a result of the aging population and the rising incidence of obesity, which is a common risk factor for the disease. Clinical data indicates only 36% of type 2 diabetics are currently able to achieve the American Diabetes Association maximum recommended HbA1c glucose level of 7.0. Large clinical studies have shown that failure to achieve these glucose targets can progressively lead to severe health consequences including neuropathy, blindness, amputation, heart attack, stroke and death.

HE3286 has demonstrated good oral bioavailability in non-human primates. In addition, preliminary results of GLP toxicology studies indicate the compound is well tolerated. Based on these findings, Hollis-Eden is preparing to file an Investigational New Drug application (IND) with the FDA for HE3286 for the treatment of type 2 diabetes.

Rheumatoid Arthritis

HE3286 is also being evaluated for clinical development in the treatment of rheumatoid arthritis. According to the Centers for Disease Control and Prevention, or CDCP, an estimated 46.1 million people were treated for arthritis and other rheumatic conditions in 2003, the latest year for which data available, and an estimated 8 million more people will suffer from arthritis between 2005 and 2015. Rheumatoid arthritis is a type of chronic arthritis that occurs in joints on both sides of the body (such as hands, wrists or knees). In rheumatoid arthritis, the immune system attacks the joints and sometimes the other organs.

Once the immune system is triggered, immune cells migrate from the blood into the joints and produce substances that cause inflammation. The increased number of cells and inflammatory substances within the joint cause irritation, wearing down cartilage (cushioning material at the end of bones), swelling the joint lining (synovium) and causing the joint lining to produce fluid.

As the cartilage wears down, the space between the bones narrows. If the condition worsens, the bones could rub against each other. As the joint lining expands, it may invade into or erode the bone, resulting in irreversible damage to the bone.

Potential mechanisms of action for HE3286 include regulation of NF-kB and increasing the production of regulatory T cells (Treg cells). NF-kB is a well-known transcription regulator that controls the production of inflammatory cytokines such as TNF-alpha and Interferon-gamma. Treg cells are referred to in the scientific literature as the peacekeepers of the body. Their role is to keep the immune system from attacking the body itself. Recent studies of Treg cells indicate that they may play a broader role than simply preventing autoimmune conditions. The medical literature is now suggesting that the manipulations of these cells could offer new treatments for conditions ranging from diabetes to organ rejection.

In a collagen-induced arthritis model (CIA), HE3286, when compared to placebo, significantly reduced the severity of disease and decreased disease over the course of the study. Moreover, histological analysis of joint tissue conducted at the end of the study indicated a marked reduction of tissue damage in the HE3286-treated animals compared to placebo.

HE3286 has also shown a statistically significant reduction in disease in a rodent model of established arthritis. Mice were immunized to induce disease, and one week after disease onset were treated orally with HE3286 or placebo. While the severity of arthritis worsened steadily in the placebo-treated group, it nearly resolved or remained at a minimum in the HE3286-treated group ($p \leq 0.001$). Treatment resulted in a difference in arthritis severity that was on average 45% lower in the HE3286-treated group than in the placebo-treated group. The study was conducted in the DBA mouse model of collagen-induced arthritis, a model widely used in industry and academia to test new agents as potential treatments for

rheumatoid arthritis.

HE3235

We recently selected a new compound, HE3235, for clinical development in the area of hormone driven cancers. HE3235 appears to have good oral bioavailability in non-human primates. The lead indication we are pursuing is for hormone refractory prostate cancer (HRPC).

The incidence of HRPC is estimated at approximately 90,000 in the U.S., resulting in an estimated 36,000 deaths each year. Hormone therapy that blocks production of testosterone can effectively control prostate disease for a period of time. However, hormone therapy will eventually fail and the prostate cancer will continue to grow and spread. HRPC is a disease state represented by tumors that develop the ability to grow despite low levels of testosterone. HRPC cells appear to be able to utilize other endogenously produced adrenal steroids as tumor growth factors.

In our research effort for this program, we screened compounds from our library that inhibited adrenal androgen stimulated proliferation of human LnCaP prostate cancer cells *in vitro*. This system, designed to mimic HRPC in humans, was used to identify lead compounds that would then be tested in a well accepted murine model for HRPC that utilizes human tumor cell lines.

In this mouse model, HE3235 reduced tumor incidence in a dose dependent fashion and, in the high-dose group, completely prevented tumor uptake (0/11), compared to 92% tumor incidence (11/12) in vehicle-treated animals.

These findings have now been extended into animals with established tumors. In this prostate model, mice with rapidly growing prostate tumors were randomized to receive treatment with either HE3235 or placebo, and tumors were then tracked for three weeks. At the end of the study, tumor volume in the animals receiving placebo was on average over 7 times larger (370 mm^3) than their initial size. In contrast, tumor growth in the HE3235 group was arrested at approximately 57 mm^3 ($p<0.001$), with 2 out of the 9 treated animals becoming completely tumor free.

Preliminary results from the first in a series of breast cancer studies further support the concept that HE3235 can block adrenal hormones that stimulate tumor growth. Rats were given the potent carcinogen N-methyl-N-nitrosourea to induce multiple breast tumors. Later in the experiment, animals with detected tumors were randomized to receive one of two strengths of HE3235 or to be assigned to a placebo control group. Treatment with HE3235 resulted in a reduced tumor burden for existing tumors that were present before treatment commenced compared to placebo treated animals ($p<0.001$). In addition, after the treatment period began, all 6 placebo controls developed one or more additional tumors, while not a single new tumor arose in the 10 animals treated with HE3235. This preventive action of HE3235 on the occurrence of new tumors also reached statistical significance ($p<0.01$).

In addition to further profiling HE3235 in cancer models, we have begun scaling up the manufacturing process in anticipation of conducting IND-enabling toxicology studies. Assuming results of these activities are successful, we anticipate filing an IND for HE3235 in late 2007 or early 2008.

NEUMUNE

NEUMUNE has been under development as a treatment for acute radiation syndrome, or ARS, a condition for which there are no approved therapeutics. ARS, also referred to as radiation sickness, is a potentially fatal acute illness caused by high doses of radiation exposure over a significant portion of the body. This exposure results in the depletion of hematopoietic stem and progenitor cells in the bone marrow, which then leads to thrombocytopenia (loss of key clotting elements known as platelets), and neutropenia (loss of white blood cells known as neutrophils).

Thrombocytopenia increases the risk of uncontrolled bleeding, while neutropenia can significantly increase an individual s susceptibility to life threatening infections. Either of these conditions can

lead to death, which usually occurs in the first thirty to sixty days following radiation exposure. ARS also causes anemia (loss of oxygen carrying red blood cells) which can contribute to morbidity and mortality. If an individual can survive this initial period of insult, the bone marrow will generally return to normal production of these critical blood cell components.

We licensed certain patents related to NEUMUNE from Dr. Roger Loria, a professor of microbiology and immunology at Virginia Commonwealth University. We have been developing the compound in collaboration with the Armed Forces Radiobiology Research Institute, or AFRRI, an agency within the U.S. Department of Defense. AFRRI is a leader in studying the effects of radiation injury. Published studies by AFRRI with NEUMUNE in rodents have shown dramatic survival improvements in NEUMUNE-treated animals versus controls in models of radiation-induced immune suppression, leading AFRRI to identify NEUMUNE as its lead ARS candidate.

We have been developing NEUMUNE as a countermeasure to ARS under the FDA Animal Rule, which was adopted in 2002 for review of medical countermeasures to weapons of mass destruction. Traditional drug development programs require large-scale clinical studies to establish efficacy in humans in order for a drug candidate to be granted FDA approval. Under the Animal Rule, however, for indications in which it would be unethical to conduct efficacy studies in humans, as is the case with ARS, approval may be granted on the basis of efficacy in relevant animal species and safety in humans.

Pursuant to the Animal Rule, we have designed and conducted multiple efficacy studies in rhesus monkeys to assess the effect of NEUMUNE on mitigating the hematopoietic effects of ARS as well as on survival. To date, these studies indicate that NEUMUNE can provide benefit in non-human primate models across a wide range of radiation exposures, including lethal exposures, and in settings where no other medical support is administered, as well as in settings where supportive care can be provided.

In a sublethal model, studies conducted in rhesus monkeys exposed to 4 Gy of total body irradiation showed protection with NEUMUNE at doses ranging from 2.5 to 42.5 mg/kg. Published data from one of these studies, giving the compound once per day for 5 days by intramuscular injection at a dose of 15 mg/kg, showed the number of days of severe neutropenia were reduced from 12 to 3. In this study severe thrombocytopenia and severe anemia were eliminated.

High-dose radiation models were also conducted in rhesus monkeys with and without clinical support such as antibiotics, IV fluids and platelet transfusions. In the studies conducted without supportive care, 32.5% of the 40 control animals died versus only 12.5% of the 40 NEUMUNE treated animals. NEUMUNE-treated animals also required fewer platelet and blood transfusions and fewer antibiotic courses than placebo treated animals in the model where such supportive care was provided when needed. Animals receiving NEUMUNE experienced reductions in neutropenia, thrombocytopenia and anemia in both models.

In Phase I human safety studies conducted in the U.S. and The Netherlands, as of January 2007, a total of 129 volunteers had been enrolled including 57 in multi-dose studies designed to mimic the anticipated therapeutic regimen. One of these multi-dose studies included a separate cohort of healthy elderly subjects. An analysis of results from these studies indicates that the compound is generally well tolerated, with pain and swelling at the injection site being the most commonly reported adverse event. These healthy young and elderly volunteers also experienced a dose dependent increase in neutrophils and platelets during the multi-dose study. The magnitude of the increase in platelets and neutrophils in healthy volunteers was generally consistent with that seen in unirradiated monkeys when given doses of NEUMUNE that led to protection in radiation studies.

In light of the current risk of a terrorist attack with a nuclear or radiological weapon, we believe the market opportunity for a drug that could be used to ameliorate the effects of ARS could be significant. Further, because the compound could be stockpiled by government agencies, the cost of distribution could potentially be significantly less than for traditional pharmaceuticals. Our intent had been to secure procurement contracts for

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NEUMUNE with both the Department of Health and Human Services (HHS) and the Department of Defense (DOD). However, in March 2007, after being notified on multiple occasions that we were in the competitive range for an active Request for Proposal (RFP), we were informed by HHS that NEUMUNE did not meet the technical requirements for this RFP. HHS then cancelled the solicitation in its entirety. While we believe DOD remains interested in procuring a drug candidate like NEUMUNE for bone marrow damage from ARS, they have not yet issued a RFP for this indication. Therefore, it is uncertain whether or when a market for NEUMUNE in ARS will materialize and as a result, we have curtailed our development activities in this indication until such time as the market opportunity becomes more clear.

If an agency within the federal government does ultimately decide to procure NEUMUNE, we also believe state and local governments, foreign governments and civilians may be interested in stockpiling the compound, if it is approved by the FDA for this indication.

We believe that a successful pivotal registration efficacy study in monkeys and a successful pivotal registration safety study in humans will be required prior to the submission of a New Drug Application, or NDA, for FDA approval. Accordingly, we would plan to meet with the FDA and other appropriate government agencies to gain concurrence on final protocol design for those studies prior to initiating any such activities.

IMMUNITIN

IMMUNITIN is a clinical-stage IRH that we have tested as a monotherapy in a number of infectious disease studies. Specifically, IMMUNITIN has been tested in a series of Phase I/II and Phase II clinical trials in HIV/AIDS patients in the U.S. and South Africa. In over 200 patients, IMMUNITIN treatment demonstrated an attractive safety profile. Results from studies in HIV-infected patients included long-lasting, statistically significant declines in a number of key inflammatory mediators, including TNF-alpha, IL-1 and IL-6, compared to placebo-treated patients, while increasing a wide variety of immune cell subsets associated with innate and cell-mediated immunity. In addition, patients receiving IMMUNITIN experienced a reduction in viral load.

In late-stage AIDS patients, IMMUNITIN-treated patients experienced a reduction in the number of opportunistic infections such as tuberculosis compared to those treated with placebo. We have also shown in a series of preclinical studies in models of tuberculosis that IMMUNITIN is effective when given as a monotherapy in either the acute or chronic phase of this bacterial infection. In addition, IMMUNITIN appears to have an additive effect when combined with the current three-drug regimen standard of care of antibiotic treatment for tuberculosis in this model system.

Based on favorable results in multiple preclinical malaria studies with the U.S. Navy with IMMUNITIN, we also undertook two Phase II clinical studies with the compound in malaria patients in Thailand. Results from these studies indicated that IMMUNITIN was effective at reducing parasite count and cleared malarial parasites in most patients within seven days.

The growing prevalence of infectious diseases such as HIV, malaria and tuberculosis in the developing world has created a significant need for affordable, effective therapies. While we believe our IRHs have a number of attributes that make them potentially useful globally, significant geo-political barriers-to-entry exist that make investment in this area difficult to justify currently. These barriers include compulsory licensing and lack of sufficient third party funding for research and development. Recently, a number of third party initiatives designed to provide funding for effective approaches to these diseases have appeared to gain momentum. If we are able to receive support from these initiatives for both development and commercialization, subject to obtaining regulatory approvals, marketing IMMUNITIN in developing countries could become commercially attractive.

IRHs in Chemotherapy Protection

Based on of our knowledge of structure-activity relationships with this class of compounds, we are profiling next-generation IRHs that we believe may be well suited for use in chemotherapy protection in cancer patients. As with radiation injury, chemotherapy can damage the bone marrow, causing depletion of neutrophils and platelets, which can be life-threatening. Preclinical data in rhesus monkeys with IRHs in models of chemotherapy-induced immune suppression indicate that these IRHs could significantly protect both neutrophils and platelets.

Additional IRHs in Other Autoimmune Disease

Given the anti-inflammatory and immune regulating effects seen with IRHs in preclinical and early clinical trials, we are also interested in exploring the potential for new IRHs in rheumatoid arthritis as well as other autoimmune indications.

These small molecule drug candidates are structurally similar to widely used corticosteroids, but unlike corticosteroids they do not appear to cause immune suppression or bone loss two common side effects of corticosteroids. Statistically significant anti-inflammatory effects have been demonstrated with our IRHs in *in vivo* models of pleurisy, a model of lung inflammation, experimental autoimmune encephalomyelitis, (EAE), which is a model of multiple sclerosis, and lipopolysaccharide challenge, a lethal model of endotoxic shock.

In addition to these anti-inflammatory properties, IRHs were shown to improve immune function (rather than suppress it as would be expected with corticosteroids) in a popliteal lymph node assay and were also shown to counteract corticosteroid-induced changes responsible for bone loss in *in vitro* studies. We are continuing to profile new IRHs in a number of preclinical models of autoimmunity and, if these results are successful, may enter one or more of these compounds into development for additional autoimmune indications.

IRHs in Pulmonary Diseases

Inflammation and infection in the lungs are common to many serious diseases, such as asthma, chronic obstructive pulmonary disease, or COPD, and cystic fibrosis, or CF. CF is a fatal genetic disease associated with chronic pulmonary infections and intense airway inflammation. The anti-inflammatory and immune regulating activity of IRHs has already shown benefit in several preclinical models of pulmonary infection and inflammation including the CFTR mouse model of CF and the LPS induced lung injury model. We are collaborating with Cystic Fibrosis Foundation Therapeutics, the non-profit drug discovery and development arm of the Cystic Fibrosis Foundation, to develop a new anti-inflammatory agent for use in CF. If we are able to successfully develop a compound for CF, there may also be opportunities to pursue other pulmonary indications for this type of drug.

Competition

Given the large market opportunities for products that treat the indications for which we are developing our IRHs, most major pharmaceutical companies and many biotechnology companies have programs directed toward finding drugs to treat indications we are exploring. In the field of hematopoiesis, the leading products on the market designed to enhance the production of neutrophils in patients receiving chemotherapy treatment are Neupogen and Neulasta from Amgen and Leukine from Schering. Other companies also have products either on the market or in development to enhance hematopoiesis.

In the area of immune modulators for correcting immune dysregulation, a number of companies are targeting inhibition or enhancement of a single cytokine or other mediator. For example, Amgen s Enbrel® targets TNF-alpha, as does Johnson & Johnson s Remicade®. Other immune-modulating drugs such as Celebrex® from Pfizer target COX-2. While these targeted approaches have shown clinical benefit and have generated significant sales volumes, redundant mechanisms in the immune system can limit their effectiveness.

In addition, side effects and cost issues may limit their global utility. In contrast, our immune regulating hormones appear to affect multiple cytokines and inflammatory mediators in a physiologic way that may make them more attractive drug candidates than currently available therapies.

In infectious disease, most current approaches are targeted at creating pathogen-specific compounds rather than drugs that target correcting dysregulations in the immune system. As described above, while these approaches have had success, their limitations in the areas of side effects, resistance and cost have become increasingly recognized. In addition, we believe they can be expected to have different profiles than our compounds and may therefore be complementary to our efforts. Companies like GlaxoSmithKline, Merck and Abbott have developed drugs for treating infectious diseases such as HIV, and many other drugs candidates are in development.

In metabolism and type 2 diabetes, there are a number of drugs such as Actos® from Takeda Pharmaceuticals and Avandia® from GlaxoSmithKline already approved for improving insulin sensitivity, and additional drugs are in development. While, based on preclinical study results, we have identified certain potential advantages of HE3286 over currently marketed drugs in this area, there can be no assurance that these advantages will be observed in human clinical trials. Even if these advantages are found in humans, there can be no assurance our compound can be successfully developed or marketed.

Government Regulation

General

The manufacturing and marketing of our proposed products and our research and development activities are and will continue to be subject to regulation by federal, state and local governmental authorities in the U.S. and other countries. In the U.S., pharmaceuticals are subject to rigorous regulation by the FDA, which reviews and approves the marketing of drugs. The Federal Food, Drug and Cosmetic Act, the regulations promulgated thereunder, and other federal and state statutes and regulations govern, among other things, the testing, manufacturing, labeling, storage, record keeping, advertising and promotion of our potential products.

Approval Process

The process of obtaining FDA approval for a new drug may take many years and generally involves the expenditure of substantial resources. The steps required before a new drug can be produced and marketed for human use include clinical trials and the approval of a New Drug Application.

Preclinical Testing. In the preclinical phase of development, the promising compound is subjected to extensive laboratory and animal testing to determine if the compound is biologically active and safe.

Investigational New Drug, or IND. Before human tests can start, the drug sponsor must file an IND application with the FDA, showing how the drug is made and the results of animal testing. IND status allows initiation of clinical investigation within 30 days of filing if the FDA does not respond with questions during the 30-day period.

Human Clinical Testing. The human clinical testing program usually involves three phases which generally are conducted sequentially, but which, particularly in the case of anti-cancer and other life-saving drugs, may overlap or be combined. Clinical trials are conducted in accordance with protocols that detail the objectives of the study, the parameters to be used to monitor safety and the efficacy criteria to be evaluated. Each protocol is submitted to the FDA as part of the IND filing. Each clinical study is conducted under the auspices of an independent Institutional Review Board, or IRB, for each institution at which the study will be conducted. The IRB will consider, among other things, all existing pharmacology and toxicology information on the product, ethical factors, the risk to human subjects and the potential benefits of therapy relative to risk.

In Phase I clinical trials, studies usually are conducted on healthy volunteers or, in the case of certain terminal illnesses such as AIDS or cancer, patients with disease that has failed to respond to other treatment, to determine the maximum tolerated dose, side effects and pharmacokinetics of a product. Phase II studies are conducted on a small number of patients having a specific disease to determine initial efficacy in humans for that specific disease, the most effective doses and schedules of administration, and possible adverse effects and safety risks. Phase II/III differs from Phase II in that the trials involved may include more patients and, at the sole discretion of the FDA, be considered the pivotal trials, or trials that will form the basis for FDA approval. Phase III normally involves the pivotal trials of a drug, consisting of wide-scale studies on patients with the same disease, in order to evaluate the overall benefits and risks of the drug for the treated disease compared with other available therapies. The FDA continually reviews the clinical trial plans and results and may suggest design changes or may discontinue the trials at any time if significant safety or other issues arise.

As described above, for NEUMUNE in the setting of Acute Radiation Syndrome, we may apply for approval based upon a rule adopted by the FDA in 2002, titled Approval of New Drugs When Human Efficacy Studies Are Not Ethical or Feasible (Part 314, Subpart I), which is also referred to as the Animal Rule. Pursuant to this new rule, in situations where it would be unethical to conduct traditional Phase II and Phase III efficacy studies in humans, as is the case with countermeasures to a number of weapons of mass destruction, the FDA will review new drugs for approval on the basis of safety in humans and efficacy in relevant animal models.

New Drug Application, or NDA. Upon successful completion of Phase III clinical trials, the drug sponsor files an NDA with the FDA for approval containing all information that has been gathered. The NDA must include the chemical composition of the drug, scientific rationale, purpose, animal and laboratory studies, results of human tests, formation and production details, and proposed labeling.

Post Approval. If the FDA approves an NDA, the drug sponsor is required to submit reports periodically to the FDA containing adverse reactions, production, quality control and distribution records. The FDA may also require post-marketing testing to support the conclusion of efficacy and safety of the product, which can involve significant expense. After FDA approval is obtained for initial indications, further clinical trials may be necessary to gain approval for the use of the product for additional indications.

The testing and approval process is likely to require substantial time and effort, and there can be no assurance that any FDA approval will be granted on a timely basis, if at all. The approval process is affected by a number of factors, primarily the side effects of the drug (safety) and its therapeutic benefits (efficacy). Additional preclinical or clinical trials may be required during the FDA review period and may delay marketing approval. The FDA may also deny an NDA if applicable regulatory criteria are not met.

Outside the U.S., we will be subject to foreign regulatory requirements governing human clinical trials and marketing approval for our products. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursements vary widely from country to country.

Manufacturing

We do not have, and do not intend to establish, manufacturing facilities to produce our drug candidates or any future products. We plan to control our capital expenditures by using contract manufacturers to make our products. We believe that there are a sufficient number of high quality FDA approved contract manufacturers available, and we have had discussions and in some cases established relationships to fulfill our near-term production needs for both clinical and commercial use.

The manufacture of our drug candidates or any future products, whether done by outside contractors as planned or internally, will be subject to rigorous regulations, including the need to comply with the FDA s current Good Manufacturing Practice standards. As part of obtaining FDA

approval for each product, each of the manufacturing facilities must be inspected, approved by and registered with the FDA. In addition to obtaining

FDA approval of the prospective manufacturer s quality control and manufacturing procedures, domestic and foreign manufacturing facilities are subject to periodic inspection by the FDA and/or foreign regulatory authorities.

Patents

We currently own or have obtained a license to numerous U.S. and foreign patents and foreign patent applications.

We consider the protection of our technology, whether owned or licensed, to the exclusion of use by others, to be vital to our business. While we intend to focus primarily on patented or patentable technology, we may also rely on trade secrets, unpatented property, know-how, regulatory exclusivity, patent extensions and continuing technological innovation to develop our competitive position. In the U.S. and certain foreign countries, the exclusivity period provided by patents covering pharmaceutical products may be extended by a portion of the time required to obtain regulatory approval for a product.

In certain countries, pharmaceuticals are not patentable or only recently have become patentable, and enforcement of intellectual property rights in many countries has been limited or non-existent. Future enforcement of patents and proprietary rights in many countries can be expected to be problematic or unpredictable. We cannot guarantee that any patents issued or licensed to us will provide us with competitive advantages or will not be challenged by others. Furthermore, we cannot be certain that others will not independently develop similar products or will not design around patents issued or licensed to us.

In most cases, patent applications in the U.S. are maintained in secrecy until 18 months after the earliest filing or priority date. Publication of discoveries in the scientific or patent literature, if made, tends to lag behind actual discoveries by at least several months. U.S. patent applicants can elect to prevent publication until the application issues by agreeing not to file the application outside the U.S. This option is rarely used for pharmaceutical patent applications. Consequently, we cannot be certain that a licensor of its intellectual property was the first to invent certain technology or compounds covered by pending patent applications or issued patents or that it was the first to file patent applications for such inventions. In addition, the patent positions of biotechnology companies, including our own, are generally uncertain, partly because they involve complex legal and factual questions.

In addition to the considerations discussed above, companies that obtain patents claiming products, uses or processes that are necessary for, or useful to, the development of our drug candidates or future products could bring legal actions against us claiming infringement. Patent litigation is typically costly and time consuming, and if such an action were brought against us, it could result in significant cost and diversion of our attention. We may be required to obtain licenses to other patents or proprietary rights, and we cannot guarantee that licenses would be made available on terms acceptable to us. If we do not obtain such licenses, we could encounter delays in product market introductions while we attempt to license technology designed around such patents or could find that the development, manufacture or sale of products requiring such licenses is foreclosed.

Further, we cannot guarantee that patents that are issued will not be challenged, invalidated or infringed upon or designed around by others, or that the claims contained in such patents will not infringe the patent claims of others, or provide us with significant protection against competitive products, or otherwise be commercially valuable. We may need to acquire licenses under patents belonging to others for technology potentially useful or necessary to us. If any such licenses are required, we cannot be certain that they will be available on terms acceptable to us, if at all. To the extent that we are unable to obtain patent protection for our products or technology, our business may be materially adversely affected by competitors who develop substantially equivalent technology.

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Technology Agreements

In December 1999, we entered into a license agreement with Dr. Roger M. Loria. Dr. Loria exclusively licensed to us all rights to NEUMUNE and HE2200, together with all related patents and patent applications. This agreement was amended on April 9, 2002 and on December 12, 2006. Dr. Loria is a Professor of Microbiology and Immunology at Virginia Commonwealth University.

In January 2000, we entered into two agreements with Patrick T. Prendergast, Colthurst Ltd. and Edenland, Inc. The first agreement assigned to us ownership of all patents, patent applications and current or future improvements of the IMMUNITIN (HE2000) technology. Under the second agreement, the Sponsored Research and License Agreement, Edenland exclusively licensed to us a number of additional compounds, together with all related patents and patent applications. In connection with a recent settlement of a dispute, the Sponsored Research and License Agreement was terminated, and all technology previously licensed thereunder, (which does not include IMMUNITIN or any other IRH s being developed by us), reverted back to Edenland.

In August 2002, we entered into a Sublicense Agreement with Pharmadigm, Inc. (currently known as Inflabloc Pharmaceuticals, Inc.). Under the agreement, we obtained exclusive worldwide rights to certain intellectual property of Pharmadigm and the University of Utah and we agreed to make aggregate payments of $0.9 million in cash or in shares of our common stock, at our option, over the next year. We elected to make such payments in equity and have issued a total of 168,921 shares of our common stock in complete satisfaction of this requirement. We will also make additional milestone and royalty payments to Pharmadigm if we meet specified development and commercialization milestones for products covered by the patents. No such milestones have been met to date. The principal patents licensed under the agreement, originally licensed to Pharmadigm from the University of Utah, relate to inventions by Dr. Raymond Daynes and Dr. Barbara A. Areneo. Dr. Daynes served as a scientific consultant to Hollis-Eden from 1999 to mid-2003.

In February 2004, we acquired CPC and replaced CPC as the exclusive licensee to certain intellectual property rights held by the University of Chicago. These intellectual property rights consist of a series of patents and patent applications that relate to discoveries made by David J. Grdina, Ph.D., Professor of Radiation and Cellular Oncology at the University of Chicago. The patented technology covers a series of compounds, which are currently in the preclinical stages of development that have the potential to protect against DNA mutations that can occur as a result of radiation injury or chemotherapy. In the acquisition we issued approximately 50,000 shares of our common stock to the former stockholders of CPC. In addition, if we achieve certain development milestones, we will be required to issue additional shares of our common stock to the former stockholders of CPC. In the event all of the milestones are achieved, the total number of additional shares that we would be required to issue to the former stockholders of CPC is 275,000, more than half of which would be issued only upon FDA approval of CPC s product. Furthermore, upon regulatory approval and commercialization of products covered by the licensed intellectual property, we may be required to pay royalties to the former stockholders of CPC and the University of Chicago. Following the acquisition, Dr. Grdina agreed to an exclusive consulting arrangement with us in the fields of hematopoiesis and radiation and chemotherapy exposure.

Employees

As of March 1, 2007, we had 66 full-time, non-union employees. We believe that our relations with our employees are good.

Executive Officers and Senior Management

Our executive officers and senior management and their ages as of March 1, 2007 are as follows:

Name	Age	Position
Richard B. Hollis	54	Chairman of the Board, President and Chief Executive Officer
Daniel D. Burgess	45	Chief Operating Officer and Chief Financial Officer
James M. Frincke, Ph.D.	56	Chief Scientific Officer
Steven A. Gordziel, Ph.D.	60	Vice President, Product Development
Eric J. Loumeau	44	Vice President, Corporate General Counsel
Robert L. Marsella	54	Sr.Vice President, Business Development and Marketing
Christopher L. Reading, Ph.D.	59	Executive Vice President, Scientific Development
Dwight R. Stickney, M.D.	64	Vice President, Medical Affairs
Robert W. Weber	56	Chief Accounting Officer and Vice President Controller

Richard B. Hollis founded Hollis-Eden in August 1994. Mr. Hollis currently serves as our Chairman, President and Chief Executive Officer. Mr. Hollis has over 25 years experience in the health care industry, has a proven track record of launching and marketing important new medical products, and a distinguished career of managing the growth and operations of companies in a variety of senior management positions. Prior to founding Hollis-Eden, Mr. Hollis served as Chief Operating Officer of Bioject Medical from 1991 to 1994 and as Vice President Marketing and Sales/General Manager for Instromedix from 1989 to 1991. From 1986 to 1989, Mr. Hollis served as a general manager of the Western business unit of Genentech, Inc., a manufacturer of biopharmaceuticals. Prior to joining Genentech, Mr. Hollis served as a divisional manager of Imed Corporation, Inc., a manufacturer of drug delivery systems. Mr. Hollis began his career in the health care industry with Baxter Travenol. Mr. Hollis received his B.A. in Psychology from San Francisco State University.

Daniel D. Burgess became Chief Operating Officer and Chief Financial Officer of Hollis-Eden in August 1999. Mr. Burgess joined Hollis-Eden from Nanogen Inc., where he served as Vice President and Chief Financial Officer. Prior to joining Nanogen in 1998, Mr. Burgess spent ten years with Gensia Sicor, Inc. (acquired by Teva Pharmaceutical Industries Limited) and Gensia Automedics, Inc., a partially owned subsidiary of Gensia Sicor. He served as President and a director of Gensia Automedics, where he was responsible for all functional areas of this medical products company. In addition, he was Vice President and Chief Financial Officer of Gensia Sicor, where he was responsible for finance, investor relations, business development and other administrative functions. Prior to joining Gensia, Mr. Burgess held positions at Castle & Cooke, Inc. and Smith Barney, Harris Upham and Company. He received a degree in Economics from Stanford University and an MBA from Harvard Business School. Mr. Burgess is a member of the Boards of Directors of Santarus, Inc. and Metabasis Therapeutics, Inc.

James M. Frincke, Ph.D. joined Hollis-Eden as Vice President, Research and Development in November 1997, was promoted to Executive Vice President in March 1999, and to Chief Scientific Officer in December 2001. Dr. Frincke joined Hollis-Eden from Prolinx, Inc., where he served as Vice President, Therapeutics Research and Development from 1995 to 1997. During his 24 years in the biotechnology industry, Dr. Frincke has managed major development programs including drugs, biologicals, and cellular and gene therapy products aimed at the treatment of cancer, infectious diseases and organ transplantation. Since joining the biotechnology industry, Dr. Frincke has held vice president, research and development positions in top tier biotechnology companies including Hybritech/Eli Lilly and SyStemix Inc. (acquired by Novartis). In various capacities, he has been responsible for all aspects of pharmaceutical development including early stage research programs, product evaluation, pharmacology, manufacturing, and the management of regulatory and clinical matters for lead product opportunities. Dr. Frincke has authored or co-authored more than 100 scientific articles, abstracts and regulatory filings. Dr. Frincke received his B.S. in Chemistry and his Ph.D. in Chemistry from the University of California, Davis. Dr. Frincke completed his postdoctoral work at the University of California, San Diego.

Steven A. Gordziel, Ph.D., joined Hollis-Eden in 2004 as Vice President, Product Development. Prior to joining Hollis-Eden, Dr. Gordziel was Vice President of Pharmaceutical Development at Penwest Pharmaceutical Company from 2002 to 2004. At Penwest, he managed a team of 30 members responsible for formulation development, analytical development and validation, stability evaluation, scale up and process development and preparation of clinical supplies for regulatory filings and clinical studies. Previously, Dr. Gordziel was Vice President, Development Research, for the Wallace Pharmaceuticals Division of Carter Wallace, Inc. where he was employed from 1979 to 2002. With Carter Wallace for more than 20 years, Dr. Gordziel had the opportunity to build the company s product development capabilities and assume increasing management responsibility in all aspects of product development. During this time Dr. Gordziel was heavily involved in numerous Investigational New Drug (IND) and New Drug Application (NDA) submissions. Dr. Gordziel began his career at Ortho Pharmaceuticals and Wyeth Laboratories as a formulations scientist. He earned a B.S. in Pharmacy from the Philadelphia College of Pharmacy, and his Ph.D. in Pharmaceutical Chemistry from the University of Connecticut, Storrs.

Eric J. Loumeau became Vice President, Corporate General Counsel in September 1999. Mr. Loumeau joined Hollis-Eden from the law firm of Cooley Godward LLP, where he had primary responsibility for Hollis-Eden s account for the previous four years. As a partner at Cooley Godward, Mr. Loumeau represented a number of private and public companies in corporate and securities law matters. He joined the firm in 1995 from Skadden, Arps, Slate, Meagher and Flom, where he was an associate for four years. Mr. Loumeau attended Harvard Law School and the University of California, Berkeley, Boalt Hall School of Law, where he received a J.D. degree. He holds a B.S. degree in Business Administration with an emphasis in finance from Brigham Young University.

Robert L. Marsella became Vice President of Business Development and Marketing of Hollis-Eden in September 1997, and was promoted to Senior Vice President of Business Development and Marketing in December 2004. Mr. Marsella has more than 25 years of medical sales, marketing, and distribution experience. Prior to joining Hollis-Eden, Mr. Marsella acted as a distributor of various cardiac related hospital products for a number of years. In addition, he has also served as Regional Manager for Genentech and launched Activase, t-pa (a biopharmaceutical drug) in the Western United States. Prior to joining Genentech, Mr. Marsella marketed intravenous infusion pumps for Imed Corporation for four years. Mr. Marsella began his career as a field sales representative and soon after was promoted to regional sales manager for U.S. Surgical Corporation, Auto Suture division. Mr. Marsella received his B.A. degree from San Diego State University.

Christopher L. Reading, Ph.D. became Vice President of Scientific Development in January 1999 and was promoted to Executive Vice President, Scientific Development in March 2002. Prior to joining Hollis-Eden, Dr. Reading was Vice President of Product and Process Development at Novartis Inc.-owned SyStemix Inc. During this time, he successfully filed three investigational new drug applications (INDs) in the areas of stem cell therapy technology and stem cell gene therapy for HIV/AIDS. Prior to joining SyStemix, Dr. Reading served on the faculty of the M.D. Anderson Cancer Center in Houston for nearly 13 years. His positions there included Associate and Assistant Professor of Medicine in the Departments of Hematology and Tumor Biology. During his career, Dr. Reading has given more than 25 national and international scientific presentations, published more than 50 peer-reviewed journal articles and 15 invited journal articles as well as written nearly 20 book chapters, and received numerous grants and contracts which supported his research activities. Dr. Reading has served on the National Science Foundation Advisory Committee for Small Business Innovative Research Grants (SBIR) as well as on the editorial boards of *Journal of Biological Response Modifiers* and *Molecular Biotherapy*. He holds a number of patents for his work with monoclonal antibodies and devices. Dr. Reading received his Ph.D. in Biochemistry at the University of California at Berkeley and completed postdoctoral study in tumor biology at The University of California at Irvine. He earned his B.A. in biology at the University of California at San Diego.

Dwight R. Stickney, M.D. was appointed Vice President, Medical Affairs in March 2003. He joined Hollis-Eden as Medical Director, Oncology in May 2000. Dr. Stickney joined Hollis-Eden from the Radiation Oncology Division of Radiological Associates of Sacramento Medical Group, Inc., in Sacramento, California, where he

served as an oncologist since 1993. While at Radiological Associates, he served as Chairman of the Radiation Oncology Division from 1997 to 1999 and was a member of the Radiation Study section of the National Institute of Health s Division of Research Grants from 1993 to 1997. He also served as the Director of Radiation Research for Scripps Clinic and Research Foundation in La Jolla, California. Dr. Stickney has taught in medical academia as Associate Professor of Radiation Medicine at Loma Linda University School of Medicine and has served as Director of the International Order of Forresters Cancer Research Laboratory and on the Board of Directors of the California Division of the American Cancer Society. Earlier in his career, Dr. Stickney held positions with Burroughs Wellcome and the Centers for Disease Control, and academic teaching appointments at The University of California at Los Angeles and The University of California at Riverside. He has also served as a consultant for a number of biotechnology companies on the design and conduct of clinical trials. Dr. Stickney holds a Bachelor of Science in Microbiology, a Masters of Science in Immunology, and a M.D. from Ohio State University. In addition, he is certified as a Diplomat of the American Board of Internal Medicine and Hematology and a Diplomat of the American Board of Radiology, Therapeutic Radiology.

Robert W. Weber joined Hollis-Eden in March 1996 and currently serves as Chief Accounting Officer and Vice President-Controller. Mr. Weber has over twenty-five years of experience in financial management. Mr. Weber has been employed at executive levels by multiple start-up companies and contributed to the success of several turnaround situations. He previously served as Vice President of Finance at Prometheus Products, a subsidiary of Sierra Semiconductor (now PMC Sierra), from 1994 to 1996, and Vice President Finance and Chief Financial Officer for Amercom, a personal computer telecommunications software publishing company, from 1993 to 1994. From February 1988 to August 1993, Mr. Weber served as Vice President Finance and Chief Financial Officer of Instromedix, a company that develops and markets medical devices and software. Mr. Weber brings a broad and expert knowledge of many aspects of financial management. In various capacities, he has been responsible for all aspects of finance and accounting including cost accounting, cash management, SEC filings, investor relations, private and venture financing, corporate legal matters, acquisitions/divestitures as well as information services and computer automation. Mr. Weber received a B.S. from GMI Institute of Technology (now Kettering University) and a MBA from the Stanford Graduate School of Business.

Item 1A. Risk Factors

In evaluating our business, you should consider the following discussion of risks, in addition to other information contained in this report as well as our other public filings with the Securities and Exchange Commission. Any of the following risks could materially adversely affect our business, financial condition, results of operations and prospects.

If we do not obtain government regulatory approval for our products, we cannot sell our products and we will not generate revenues.

Our principal development efforts are currently centered around a proprietary class of small compounds which we believe shows promise for the treatment of diseases and disorders in which the body is unable to mount an appropriate immune response. However, all drug candidates require approval by the FDA before they can be commercialized in the U.S. as well as approval by various foreign government agencies before they can commercialized in other countries. These regulations change from time to time and new regulations may be adopted. None of our drug candidates have been approved for commercial sale. We may incur significant additional operating losses for the foreseeable future as we fund development, preclinical and clinical testing and other expenses in support of regulatory approval of our drug candidates. While limited clinical trials of our drug candidates have been conducted to date, significant additional trials are required, and we may not be able to demonstrate that these drug candidates are safe or effective. If we are unable to demonstrate the safety and effectiveness of a particular drug candidate to the satisfaction of regulatory authorities, the drug candidate will not obtain required government approval. If we do not receive FDA or foreign approvals for our drug candidates, we will not be able to sell products and will not generate revenues. If we receive regulatory approval of one of our drug candidates, such approval may impose limitations on the indicated uses for which we may market the

resulting product, which may limit our ability to generate significant revenues. Further, U.S. or foreign regulatory agencies could change existing, or promulgate new, regulations at any time which may affect our ability to obtain approval of our drug candidates or require significant additional costs to obtain such approvals. In addition, if regulatory authorities determine that we or a partner conducting research and development activities on our behalf have not complied with regulations in the research and development of one of our drug candidates, then they may not approve the drug candidate and we will not be able to market and sell it. If we were unable to market and sell our drug candidates, our business and results of operations would be materially and adversely affected.

If we do not successfully commercialize our products, we may never achieve profitability.

We have experienced significant operating losses to date because of the substantial expenses we have incurred to acquire and fund development of our drug candidates. We have never had significant operating revenues and have never commercially introduced a product. Our accumulated deficit was approximately $191.5 million as of December 31, 2006. Our net losses for fiscal years 2006, 2005 and 2004 were approximately $30.2 million, $29.4 million and $24.8 million, respectively. Many of our research and development programs are at an early stage. Potential drug candidates are subject to inherent risks of failure. These risks include the possibilities that no drug candidate will be found safe or effective, meet applicable regulatory standards or receive the necessary regulatory clearances. Even safe and effective drug candidates may never be developed into commercially successful drugs. If we are unable to develop safe, commercially viable drugs, we may never achieve profitability. If we become profitable, we may not remain profitable.

The market for treating acute radiation syndrome is uncertain as are our development plans and timelines for NEUMUNE.

We do not believe any drug has ever been approved and commercialized for the treatment of acute radiation syndrome. In addition, the incidence of large-scale exposure to nuclear or radiological events has been low. Accordingly, even if NEUMUNE, our lead drug candidate to treat ARS, is approved by the FDA, we cannot predict with any certainty the size of this market. The initial potential market for NEUMUNE is largely dependent on the size of stockpiling orders, if any, procured by government agencies. While a number of governments have historically stockpiled drugs to treat indications such as smallpox, anthrax exposure, plague, tularemia and certain long-term effects of radiation exposure, we are unaware of any significant stockpiling orders for drugs to treat ARS. On December 9, 2005, the U.S. Department of Health and Human Services (HHS) issued a Request for Proposal (RFP), which specified an initial potential stockpiling order of up to 100,000 treatment courses, which is substantially lower than we had anticipated. We responded to the RFP in February 2006, and were informed in March 2007 that NEUMUNE was no longer in the competitive range for this RFP and that the RFP had been cancelled in its entirety. As a result of the decision by HHS to cancel the RFP, our development plans and timelines for NEUMUNE are uncertain and may not continue at all. In addition, even if NEUMUNE is approved by regulatory authorities, we cannot guarantee that we will receive any stockpiling orders for NEUMUNE, that any such order would be profitable to us or that NEUMUNE will achieve market acceptance by the general public.

As a result of our intensely competitive industry, we may not gain enough market share to be profitable.

The biotechnology and pharmaceutical industries are intensely competitive. We have numerous competitors in the U.S. and elsewhere. Because we are pursuing potentially large markets, our competitors include major multinational pharmaceutical companies, specialized biotechnology firms and universities and other research institutions. Several of these entities have already successfully marketed and commercialized products that will compete with our products, assuming that our products gain regulatory approval. Companies such as Amgen Inc. have developed or are developing products to boost neutrophils or platelets after chemotherapy. A large number of companies, including Merck & Company, Inc., Pfizer Inc., Johnson & Johnson Inc. and Amgen Inc., are also developing and marketing new drugs for the treatment of chronic inflammatory conditions. A large number of

companies including Merck & Company, Inc., GlaxoSmithKline, TAP Pharmaceutical Products, Inc., and Eli Lilly and Co. are also developing and marketing new drugs for the treatment of type 2 diabetes. Companies such as GlaxoSmithKline, Merck & Company, Inc., Roche Pharmaceuticals, Pfizer Inc. and Abbott Laboratories have significant market share for the treatment of a number of infectious diseases such as HIV. In addition, biotechnology companies such as Gilead Sciences Inc., Chiron Corporation and Vertex Pharmaceuticals Inc., as well as many others, have marketed products or research and development programs in these fields.

Many of these competitors have greater financial and other resources, larger research and development staffs and more effective marketing and manufacturing organizations than we do. In addition, academic and government institutions have become increasingly aware of the commercial value of their research findings. These institutions are now more likely to enter into exclusive licensing agreements with commercial enterprises, including our competitors, to develop and market commercial products.

Our competitors may succeed in developing or licensing technologies and drugs that are more effective or less costly than any we are developing. Our competitors may succeed in obtaining FDA or other regulatory approvals for drug candidates before we do. If competing drug candidates prove to be more effective or less costly than our drug candidates, our drug candidates, even if approved for sale, may not be able to compete successfully with our competitors existing products or new products under development. If we are unable to compete successfully, we may never be able to sell enough products at a price sufficient to permit us to generate profits.

We may need to raise additional money before we achieve profitability; if we fail to raise additional money, it could be difficult or impossible to continue our business.

As of December 31, 2006, our cash and cash equivalents totaled approximately $67.1 million. Based on our current plans, we believe these financial resources, and interest earned thereon, will be sufficient to meet our operating expenses and capital requirements for at least the next 12 months. However, changes in our research and development plans or other events affecting our operating expenses may result in the expenditure of such cash before that time. We may require substantial additional funds in order to finance our drug discovery and development programs, fund operating expenses, pursue regulatory clearances, develop manufacturing, marketing and sales capabilities, and prosecute and defend our intellectual property rights. We may seek additional funding through public or private financing or through collaborative arrangements with strategic partners.

You should be aware that in the future:

- we may not obtain additional financial resources when necessary or on terms favorable to us, if at all; and
- any available additional financing may not be adequate.

If we cannot raise additional funds when needed, or on acceptable terms, we will not be able to continue to develop our drug candidates.

Failure to protect our proprietary technology could impair our competitive position.

We own or have obtained a license to numerous U.S. and foreign patents and foreign patent applications. Our success depends in part on our ability to obtain and defend patent rights and other intellectual property rights that are important to our ability to commercialize our drug candidates, if approved and our ability to operate our business without infringing the proprietary rights of third parties. We place considerable importance on obtaining patent protection for significant new technologies, products and processes. Legal standards relating to the validity of patents covering pharmaceutical and biotechnology inventions and the scope of claims made under such patents are still developing. In some of the countries in which we intend to market our drug candidates, if

approved, pharmaceuticals are either not patentable or have only recently become patentable. Past enforcement of intellectual property rights in many of these countries has been limited or non-existent. Future enforcement of patents and proprietary rights in many other countries may be problematic or unpredictable. Moreover, the issuance of a patent in one country does not assure the issuance of a similar patent in another country. Claim interpretation and infringement laws vary by nation, so the extent of any patent protection is uncertain and may vary in different jurisdictions. Our domestic patent position is also highly uncertain and involves complex legal and factual questions. The applicant or inventors of subject matter covered by patent applications or patents owned by or licensed to us may not have been the first to invent or the first to file patent applications for such inventions. Due to uncertainties regarding patent law and the circumstances surrounding our patent applications, the pending or future patent applications we own or have licensed may not result in the issuance of any patents. Existing or future patents owned by or licensed to us may be challenged, infringed upon, invalidated, found to be unenforceable or circumvented by others. Further, any rights we may have under any issued patents may not provide us with sufficient protection against similar competitive products or technologies that do not infringe on patents or otherwise cover commercially valuable products or processes.

Litigation or other disputes regarding patents and other proprietary rights may be expensive, cause delays in bringing products to market and harm our ability to operate.

The manufacture, use or sale of our drug candidates may infringe on the patent rights of others. If we are unable to avoid infringement of the patent rights of others, we may be required to seek a license, defend an infringement action or challenge the validity of the patents in court. Patent litigation is costly and time consuming and can preclude, delay or suspend commercialization of products. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, if we do not obtain a license, develop or obtain non-infringing technology, or fail to successfully defend an infringement action or have the patents we are alleged to infringe declared invalid, we may

- incur substantial money damages;
- encounter significant delays in bringing our drug candidates to market;
- be precluded from participating in the manufacture, use or sale of our drug candidates or methods of treatment without first obtaining licenses to do so; and/or
- not be able to obtain any required license on favorable terms, if at all.

In addition, if another party claims the same subject matter or subject matter overlapping with the subject matter that we have claimed in a U.S. patent application or patent, we may decide or be required to participate in interference proceedings in the U.S. Patent and Trademark Office in order to determine the priority of invention. Loss of such an interference proceeding would deprive us of patent protection sought or previously obtained and could prevent us from commercializing our products. Participation in such proceedings could result in substantial costs, whether or not the eventual outcome is favorable. These additional costs could adversely affect our financial results.

Litigation may be expensive and time consuming and may adversely affect our operations.

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business. Participation in such proceedings is time consuming and could result in substantial costs, whether or not the eventual outcome is favorable. These additional costs could adversely affect our financial results.

Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information.

In order to protect our proprietary technology and processes, we also rely in part on confidentiality agreements with our employees, consultants, outside scientific collaborators and sponsored researchers and other

advisors. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover trade secrets and proprietary information. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Existing pricing regulations and reimbursement limitations may reduce our potential profits from the sale of our products.

The requirements governing product licensing, pricing and reimbursement vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after product-licensing approval is granted. As a result, we may obtain regulatory approval for a drug candidate in a particular country, but then be subject to price regulations that reduce our profits from the sale of the product. In some foreign markets pricing of prescription pharmaceuticals is subject to continuing government control even after initial marketing approval. In addition, certain governments may grant third parties a license to manufacture our product without our permission. Such compulsory licenses may be on terms that are less favorable to us and would likely have the effect of reducing our revenues.

Varying price regulation between countries can lead to inconsistent prices and some re-selling by third parties of products from markets where products are sold at lower prices to markets where those products are sold at higher prices. Any practice of exploiting price differences between countries could undermine our sales in markets with higher prices and reduce the sales of our future products, if any.

While we do not have any applications for regulatory approval of our drug candidates currently pending, any decline in the size of the markets in which we may in the future sell commercial products, assuming our receipt of the requisite regulatory approvals, could cause the perceived market value of our business and the price of our common stock to decline.

Our ability to commercialize our drug candidates successfully also will depend in part on the extent to which reimbursement for the cost of our drug candidates and related treatments will be available from government health administration authorities, private health insurers and other organizations. Third-party payers are increasingly challenging the prices charged for medical products and services. If we succeed in bringing any of our drug candidates to the market, such drug candidates may not be considered cost effective and reimbursement may not be available or sufficient to allow us to sell such drug candidates on a profitable or competitive basis.

Delays in the conduct or completion of our preclinical or clinical studies or the analysis of the data from our preclinical or clinical studies may result in delays in our planned filings for regulatory approvals, or adversely affect our ability to enter into collaborative arrangements.

The current status of our drug candidates is set forth below. We have either completed or are in the midst of:

- animal efficacy studies with NEUMUNE for the treatment of radiation exposure;
- Phase I clinical trials with NEUMUNE in the United States and the Netherlands;

Phase II clinical trials with IMMUNITIN in South Africa and Phase I/II clinical trials with IMMUNITIN in the United States for the treatment of HIV/AIDS; and

Phase II clinical trials with IMMUNITIN in Thailand for the treatment of malaria

We may encounter problems with some or all of our completed or ongoing studies that may cause us or regulatory authorities to delay or suspend our ongoing studies or delay the analysis of data from our completed or

ongoing studies. We rely, in part, on third parties to assist us in managing and monitoring our preclinical and clinical studies. We generally do not have control over the amount and timing of resources that our business partners devote to our drug candidates. Our reliance on these third parties may result in delays in completing or failure to complete studies if third parties fail to perform their obligations to us. If the results of our ongoing and planned studies for our drug candidates are not available when we expect or if we encounter any delay in the analysis of the results of our studies for our drug candidates:

- we may not have the financial resources to continue research and development of any of our drug candidates; and
- we may not be able to enter into collaborative arrangements relating to any drug candidate subject to delay in regulatory filing.

Any of the following reasons, among others, could delay or suspend the completion of our ongoing and future studies:

- delays in enrolling volunteers;
- interruptions in the manufacturing of our drug candidates or other delays in the delivery of materials required for the conduct of our studies;
- lower than anticipated retention rate of volunteers in a trial;
- unfavorable efficacy results;
- serious side effects experienced by study participants relating to the drug candidate;
- new communications from regulatory agencies about how to conduct these studies; or
- failure to raise additional funds.

If the manufacturers of our drug candidates do not comply with current Good Manufacturing Practices regulations, or cannot produce sufficient quantities of our drug candidates to enable us to continue our development, we will fall behind on our business objectives.

Manufacturers producing our drug candidates must follow current Good Manufacturing Practices regulations enforced by the FDA and foreign equivalents. If a manufacturer of our drug candidates does not conform to current Good Manufacturing Practices regulations and cannot be brought up to such a standard, we will be required to find alternative manufacturers that do conform. This may be a long and difficult process, and may delay our ability to receive FDA or foreign regulatory approval of our drug candidates.

We also rely on our manufacturers to supply us with a sufficient quantity of our drug candidates to conduct clinical trials. If we have difficulty in the future obtaining our required quantity and quality of supply, we could experience significant delays in our development programs and regulatory process.

Our ability to achieve any significant revenue may depend on our ability to establish effective sales and marketing capabilities.

Our efforts to date have focused on the development and evaluation of our drug candidates. As we continue preclinical and clinical studies and seek to commercialize our drug candidates, we may need to build a sales and marketing infrastructure. As a company, we have no experience in the sales and marketing of pharmaceutical products. If we fail to establish a sufficient marketing and sales force or to make alternative arrangements to have our drug candidates marketed and sold by others on attractive terms, it will impair our ability to commercialize our drug candidates and to enter new or existing markets. Our inability to effectively enter these markets would materially and adversely affect our ability to generate significant revenues.

If we were to lose the services of Richard B. Hollis, or fail to attract or retain qualified personnel in the future, our business objectives would be more difficult to implement, adversely affecting our operations.

Our ability to successfully implement our business strategy depends highly upon our Chief Executive Officer, Richard B. Hollis. The loss of Mr. Hollis services could impede the achievement of our objectives. We also highly depend on our ability to hire and retain qualified scientific and technical personnel. The competition for these employees is intense. Thus, we may not be able to continue to hire and retain the qualified personnel needed for our business. Loss of the services of or the failure to recruit key scientific and technical personnel could adversely affect our business, operating results and financial condition.

We may face product liability claims related to the use or misuse of our drug candidates, which may cause us to incur significant losses.

We are currently exposed to the risk of product liability claims due to administration of our drug candidates in clinical trials, since the use or misuse of our drug candidates during a clinical trial could potentially result in injury or death. If we are able to commercialize our products, we will also be subject to the risk of losses in the future due to product liability claims in the event that the use or misuse of our commercial products results in injury or death. We currently maintain liability insurance on a claims-made basis. Because we cannot predict the magnitude or the number of claims that may be brought against us in the future, we do not know whether the insurance policies coverage limits are adequate. The insurance is expensive, difficult to obtain and may not be available in the future on acceptable terms, or at all. Any claims against us, regardless of their merit, could substantially increase our costs and cause us to incur significant losses.

Our securities could be subject to extreme price fluctuations that could adversely affect your investment.

The market prices for securities of life sciences companies, particularly those that are not profitable, are highly volatile. Publicized events and announcements may have a significant impact on the market price of our common stock. For example:

- biological or medical discoveries by competitors;
- public concern about the safety of our drug candidates;
- delays in the conduct or analysis of our preclinical or clinical studies;
- unfavorable results from preclinical or clinical studies;
- delays in obtaining or failure to obtain purchase orders of our drug candidates;
- announcements in the scientific and research community;
- changes in the potential commercial markets for our drug candidates;

unfavorable developments concerning patents or other proprietary rights;

unfavorable domestic or foreign regulatory or governmental developments or actions; or

broader economic, industry and market trends unrelated to our performance

may have the effect of temporarily or permanently driving down the price of our common stock. In addition, the stock market from time to time experiences extreme price and volume fluctuations which particularly affect the market prices for emerging and life sciences companies, such as ours, and which are often unrelated to the operating performance of the affected companies**.** For example, our stock price has ranged from $2.67 to $16.50 between January 1, 2004 and March 9, 2007.

These broad market fluctuations may adversely affect the ability of a stockholder to dispose of his shares at a price equal to or above the price at which the shares were purchased. In addition, in the past, following periods of volatility in the market price of a company s securities, securities class-action litigation has often been

instituted against that company. Any litigation against our company, including this type of litigation, could result in substantial costs and a diversion of management s attention and resources, which could materially adversely affect our business, financial condition and results of operations.

We may be delisted from The Nasdaq Global Market, which could materially limit the trading market for our common stock.

Our common stock is quoted on The Nasdaq Global Market. In order to continue to be included in The Nasdaq Global Market, a company must meet Nasdaq s maintenance criteria. We may not be able to continue to meet these listing criteria. Failure to meet Nasdaq s maintenance criteria may result in the delisting of our common stock from The Nasdaq Global Market. If our common stock is delisted, in order to have our common stock relisted on The Nasdaq Global Market we would be required to meet the criteria for initial listing, which are more stringent than the maintenance criteria. Accordingly, if we were delisted we may not be able to have our common stock relisted on The Nasdaq Global Market. If our common stock is removed from listing on The Nasdaq Global Market, it may become more difficult for us to raise funds and may materially limit the trading market of our common stock.

Because stock ownership is concentrated, you and other investors will have minimal influence on stockholders decisions.

Assuming that outstanding warrants and options have not been exercised, Richard B. Hollis, our Chief Executive Officer, owns approximately 9% of our outstanding common stock as of December 31, 2006. Assuming that Mr. Hollis exercises all of his outstanding warrants and options that vest within 60 days of December 31, 2006, Mr. Hollis would beneficially own approximately 14% of our outstanding common stock. As a result, Mr. Hollis may be able to significantly influence our management and all matters requiring stockholder approval, including the election of directors. Such concentration of ownership may also have the effect of delaying or preventing a change in control of our company.

Substantial sales of our stock may impact the market price of our common stock.

Future sales of substantial amounts of our common stock, including shares that we may issue upon exercise of options and warrants, could adversely affect the market price of our common stock. Further, if we raise additional funds through the issuance of common stock or securities convertible into or exercisable for common stock, the percentage ownership of our stockholders will be reduced and the price of our common stock may fall.

Issuing preferred stock with rights senior to those of our common stock could adversely affect holders of common stock.

Our charter documents give our board of directors the authority to issue shares of preferred stock without a vote or action by our stockholders. The board also has the authority to determine the terms of preferred stock, including price, preferences and voting rights. The rights granted to holders of preferred stock may adversely affect the rights of holders of our common stock. For example, a series of preferred stock may be granted the right to receive a liquidation preference a pre-set distribution in the event of a liquidation that would reduce the amount available for distribution to holders of common stock. In addition, the issuance of preferred stock could make it more difficult for a third party to acquire a majority of our outstanding voting stock. As a result, common stockholders could be prevented from participating in transactions that would offer an optimal price for their shares.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

Our corporate headquarters are currently located at 4435 Eastgate Mall, Suite 400, San Diego, CA 92121, where we have leased approximately 22,000 square feet of office space through December 2009. In addition, we have leased approximately 13,000 square feet of laboratory and office space in San Diego, CA. through November 2009. We believe that our facilities are adequate for our current operations.

Item 3. Legal Proceedings

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business. While it is impossible to predict accurately or to determine the eventual outcome of these matters, as of the date of this report, we do not believe that we are engaged in any legal proceedings that are expected, individually or in the aggregate, to have a material adverse effect on our business, financial condition or operating results.

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

No matters were submitted to a vote of security holders during the fourth quarter of 2006.

PART II

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

Our common stock is traded on the Nasdaq National Market System under the symbol HEPH.

The following table sets forth the quarterly high and low bid quotations and/or selling prices for our common stock from January 1, 2005 through March 9, 2007.

2005		
First Quarter	$ 9.62	$ 6.65
Second Quarter	8.62	6.50
Third Quarter	11.17	6.11
Fourth Quarter	6.17	4.53
2006		
First Quarter	$ 7.93	$ 4.44
Second Quarter	6.16	4.52
Third Quarter	7.25	4.09
Fourth Quarter	7.49	5.16
2007		
January 1 March 9	$ 6.24	$ 2.67

Performance Measurement Comparison[(1)]

The following graph compares changes through December 31, 2006, in the cumulative total return on n our common stock, a broad market index, namely the NASDAQ Composite Index (the NASDAQ Index), and an industry index, namely the NASDAQ Biotechnology Index (the Industry Index). The Industry Index comprises all companies listed on the NASDAQ Stock Market under SIC 283. All values assume reinvestment of the full amount of all dividends as of December 31 of each year.

(1) *The material in this section is not soliciting material is not deemed filed with the SEC, and is not to be incorporated by reference into any filing of the Company under the 1933 or 1934 Act.*

On March 9, 2007, the closing price of our common stock as reported by the Nasdaq National Market System was $2.83 share. There were approximately 12,000 shareholders of record and beneficial stockholders of our common stock as of such date. We have not paid cash dividends on our common stock and do not intend to do so in the foreseeable future.

There were no sales of unregistered equity securities in the fourth quarter 2006.

We made no repurchases of our securities during the year ended December 31, 2006.

Item 6. Selected Financial Data

The following data summarizes certain selected financial data for each of the five years ended December 31, 2006 through 2002 and the period from inception (August 15, 1994) to December 31, 2006. The information presented should be read in conjunction with the financial statements and related notes included elsewhere in this report (in thousands, except per share amounts).

	2006	2005	2004	2003	2002	Period from Inception (Aug. 15, 1994) to December 31, 2006
Statement of Operations Data:						
Contract revenues	$ 444	$ 56	$ 63	$	$	$ 563
Research and development	23,764(3)	18,342	18,488	10,306	12,895	126,310
General and administrative	9,644(3)	9,777	7,216	7,785(1)	4,975	68,090
Settlement of dispute		3,000				3,000
Total operating expenses	33,408	31,119	25,704	18,091	17,870	197,400
Interest Income (Expense)	2,741	1,622	917	49	389	13,008
Other income (expense)	(8)		(33)	(7,629)(2)	(21)	(7,691)
Net loss	$ (30,231)	$ (29,441)	$ (24,757)	$ (25,671)	$ (17,502)	$ (191,520)
Net loss per share, basic and diluted	$ (1.20)	$ (1.46)	$ (1.28)	$ (1.67)	$ (1.35)	
Weighted average number of common Shares outstanding, basic and diluted	25,131	20,125	19,267	15,381	12,932	
Balance Sheet Data:						
Cash and equivalents	$ 67,135	$ 45,130	$ 61,991	$ 84,852	$ 13,087	
Total assets	68,512	46,582	63,242	85,381	13,982	
Total Current Liabilities	6,734	7,708	5,008	3,329	2,950	
Stockholders equity	$ 61,778	$ 38,874	$ 58,234	$ 82,052	$ 11,032	

(1) 2003 General and administrative expenses include $2.3 million for non-cash charges related to options and warrants issued and term changes.

(2) 2003 Other income includes $7.6 million for non-cash amortization of deemed discount and deferred issuance costs on convertible debentures that was subsequently converted to common stock.

(3) 2006 Research and development and general and administrative expenses include the expense for stock-based compensation under SFAS 123R. Stock-based compensation expense was not included in financial results for previous years. (See Accounting for Stock-Based Compensation in the Notes to Financial Statements).

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

The following discussion contains forward-looking statements that involve risks and uncertainties. See Forward-Looking Statements elsewhere in this report. This discussion and analysis should be read in conjunction with the financial statements and notes included elsewhere in this report.

General

We are a development-stage pharmaceutical company engaged in developing a proprietary new class of small molecule compounds based on our hormonal signaling technology platform. These compounds, metabolites or synthetic analogs of adrenal steroid hormones, are designed to restore the biological activity of cellular signaling pathways disrupted by disease and aging. In investigational studies, they have been demonstrated in humans to possess several properties with potential therapeutic benefit they regulate innate and adaptive immunity, reduce nonproductive inflammation, and stimulate cell proliferation.

We have been unprofitable since our inception. As of December 31, 2006, we had an accumulated deficit of approximately $191.5 million. We expect to incur substantial additional operating losses and capital expenditures for the foreseeable future as we increase expenditures on research and development and begin to allocate significant and increasing resources to clinical testing and other activities in support of the development of our drug candidates. In addition, during the next few years, we may have to meet the substantial new challenge of developing the capability to market products if we are successful in obtaining regulatory approval for any of our current or future drug candidates. Accordingly, our activities to date are not as broad in depth or scope as the activities we may undertake in the future, and our historical operations and financial information are not indicative of the future operating results or financial condition or ability to operate profitably as a commercial enterprise when and if we succeed in bringing any drug candidates to market.

On March 26, 1997, Hollis-Eden, Inc., a Delaware corporation, was merged with and into us, then known as Initial Acquisition Corp. (IAC), a Delaware corporation. Upon consummation of the merger of Hollis-Eden, Inc. with IAC (the Merger), Hollis-Eden, Inc. ceased to exist, and IAC changed its name to Hollis-Eden Pharmaceuticals, Inc.

Results of Operations

We have devoted substantially all of our resources to the payment of research and development expenses and general and administrative expenses. From inception through December 31, 2006, we have incurred approximately $126.3 million in research and development expenses, $68.1 million in general and administrative expenses, and $3.0 million in a settlement of dispute. From inception through December 31, 2006 we have generated approximately $0.6 million in revenues (which resulted from providing research and development services under our Study Funding Agreement with Cystic Fibrosis Foundation Therapeutics, Inc. (CFFT)). We have earned $5.3 million in other income. The other income and expense is comprised of $7.6 million in deemed discount expense and $0.4 million in interest expense. These expenses have been offset by $13.4 million in interest income. The combination of these resulted in a net loss of $191.5 million for the period from inception until December 31, 2006.

Research and development and general and administrative expenses include the expense for stock-based compensation for the year ended December 31, 2006, while stock-based compensation expense was not included in our financial results for 2005 (See Accounting for Stock-Based Compensation in the Notes to Financial Statements).

Research and development expenses were $23.8 million, $18.3 million and $18.5 million in 2006, 2005 and 2004, respectively. The research and development expenses relate primarily to the ongoing development, preclinical testing, clinical trials for our drug candidates, and patent expenses. Research and development expenses increased $5.4 million in 2006 compared to 2005. The increase in research and development expenses

was due primarily to the growth in our laboratory operations, stock-based compensation, as well as preclinical and clinical activities and personnel associated with advancing our drug candidate, NEUMUNE, through development. Research and development expenses decreased $0.1 million in 2005 compared to 2004. The decrease in research and development expenses was mainly due to our investment in Congressional Pharmaceutical Corporation (CPC), which was expensed as in-process R&D in the first quarter of 2004, and there was no such investment in 2005.

General and administrative expenses were $9.6 million, $9.8 million and $7.2 million in 2006, 2005 and 2004, respectively. General and administrative expenses relate to salaries and benefits, facilities, legal, accounting/auditing, investor relations, consultants, insurance and travel. General and administrative expenses decreased $0.1 million in 2006 compared to 2005 primarily as a result of reduced legal expenses offset by the impact of stock-based compensation expense related to the adoption of SFAS No. 123R in 2006. Legal fees were $0.3 million and $2.9 million in 2006 and 2005, respectively while stock-based compensation expense was $2.3 million and $0 in 2006 and 2005, respectively. General and administrative expenses increased $2.6 million in 2005 compared to 2004 primarily as a result of increased legal fees associated with certain legal proceedings. Also, an additional operating expense of $3.0 million was incurred in 2005 due to settlement of a dispute.

Other income and expenses were $2.7 million, $1.6 million and $0.9 million in 2006, 2005 and 2004, respectively. During 2006 and 2005, we earned interest income totaling $2.7 million and $1.6 million, respectively. The interest income increase in 2006 compared to 2005 was due to higher interest rates.

Liquidity and Capital Resources

We have financed our operations since inception primarily through the sale of shares of common stock. During the year ended December 31, 1995, we received cash proceeds of $250,000 from the sale of securities. In May 1996, we completed a private placement of shares of common stock, from which we received aggregate gross proceeds of $1.3 million. In March 1997, the Merger of IAC and Hollis-Eden, Inc. provided us with $6.5 million in cash and other receivables. In May 1998, we completed a private placement of common stock and warrants, from which we received gross proceeds of $20 million. During January 1999, we completed two private placements of common stock raising approximately $25 million. In December 2001, we completed a private placement of common stock and warrants, from which we received gross proceeds of $11.5 million. In February 2003, we completed a private placement of convertible debentures and warrants, from which we received gross proceeds of $10.0 million. In June 2003, we completed a private placement of common stock and warrants, from which we received gross proceeds of $14.7 million. In October 2003 we completed a public offering of our common stock from which we received $62.5 million in gross proceeds. In June 2005, we completed a sale of shares of our common stock and warrants from which we received $10.0 million in gross proceeds. During 2006 (in February and in November), we completed two sales of shares of our common stock and warrants from which we received, in the aggregate gross proceeds of approximately $52.0 million. In addition, we have received a total of $17.8 million from the exercise of warrants and stock options from inception.

On June 20, 2003, convertible debentures with a face value of $0.5 million were converted into 87,720 shares of our common stock, leaving a $9.5 million aggregate principal amount of convertible debentures outstanding.

We became entitled to convert the outstanding debentures into common stock in August 2003 and the remaining aggregate principal amount of convertible debentures with a face value of $9.5 million were converted into 1,666,680 shares of our common stock with a value of $5.70 per share.

A summary of our current contractual obligations is as follows (in thousands):

	Payments Due by Period				
Contractual Obligations	**Total**	**Less than one year**	**One to three years**	**Three to five years**	**More than Five years**
Operating Leases	$ 3,428	$ 1,089	$ 2,327	$ 12	$

We may also be required to make substantial milestone or royalty payments in cash based on the terms of some of our agreements (See Note 6 to the Financial Statements).

Our operations to date have consumed substantial capital without generating any revenues other than the small amount received under the CFFT collaboration. We will continue to require substantial and increasing amounts of funds to conduct necessary research and development and preclinical and clinical testing of our drug candidates, and to market any drug candidates that receive regulatory approval. We do not expect to generate revenue from operations for the foreseeable future, and our ability to meet our cash obligations as they become due and payable may depend for at least the next several years on our ability to sell securities, borrow funds or some combination thereof. Based upon our current plans, we believe that our existing capital resources, together with interest thereon, will be sufficient to meet our operating expenses and capital requirements for at least the next 12 months. However, changes in our research and development plans or other events affecting our operating expenses may result in the expenditure of such cash before that time. We may not be successful in raising necessary funds. As of December 31, 2006, our cash and cash equivalents totaled approximately $67.1 million.

Our future capital requirements will depend upon many factors, including progress with preclinical testing and clinical trials, whether there are changes in our development plans and timelines for our drug candidate NEUMUNE as a result of HHS s decision to exclude our proposal from the competitive range and cancel the RFP in its entirety, the number and breadth of our programs, the time and costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims and other proprietary rights, the time and costs involved in obtaining regulatory approvals, competing technological and market developments, and our ability to establish collaborative arrangements, effective commercialization, marketing activities and other arrangements. We may incur increasing negative cash flows and net losses for the foreseeable future. We may seek additional funding through public or private financing or through collaborative arrangements with strategic partners.

Critical Accounting Policies

Certain of our accounting policies require the application of judgment and estimates by management, which may be affected by different assumptions and conditions. These estimates are typically based on historical experience, terms of existing contracts, trends in the industry and information available from other outside sources, as appropriate. We believe the estimates and judgments associated with our reported amounts are appropriate in the circumstances. Actual results could materially vary from those estimates under different assumptions or conditions.

All research and development costs are expensed as incurred. The value of acquired in-process research and development is charged to expense on the date of acquisition. Research and development expenses include, but are not limited to, acquired in-process technology deemed to have no alternative future use, license fees related to license agreements, preclinical and clinical trial studies, payroll and personnel expense, and lab supplies, consulting and research-related overhead. Research and development expenses paid in the form of cash and Company stock to related parties aggregated $11.5 million for the period from inception (August 15, 1994) to December 31, 2003 (see Note 6, Colthurst, Edenland and Mr. Prendergest and Aeson Therapeutics). No such related party expenses were incurred in 2004, 2005 or 2006.

In December 2006, the FASB issued FASB Staff Position (FSP) No. EITF 00-19-2, *Accounting for Registration Payment Arrangements.* This FSP specifies that the contingent obligation to make future payments or otherwise transfer consideration under a registration payment arrangement, whether issued as separate

agreement or included as a provision of a financial instrument or other agreement, should be separately recognized and measured in accordance with FASB Statement No. 5, *Accounting for Contingencies.* The guidance in this FSP amends FASB Statement No. 133, *Accounting for Derivative Financial Instruments and Hedging Activities*, and No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity* and FIN 45, *Guarantor s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others* to include scope exceptions for registration payment arrangements. This FSP is effective immediately for registration payment arrangements and the financial instruments subject to those arrangements that are entered into or modified subsequent to the date of issuance of this FSP. For registration payment arrangements and financial instruments subject to those arrangements that were entered into prior to the issuance of this FSP, this guidance shall be effective for financial statements issued for fiscal years beginning after December 15, 2006, and interim periods within those fiscal years. We have adopted EITF 00-19-2 as of December 31, 2006 and it did not have a material impact on our financial statements.

As of January 1, 2006, we account for stock-based compensation in accordance with SFAS No. 123-R, *Share-Based Payment*. Under the fair value recognition provisions of this statement, share-based compensation cost is measured at the grant date based on the value of the award and is recognized as expense over the vesting period. Determining the fair value of share-based awards at the grant date requires judgment, including estimating our stock price volatility and employee stock option exercise behavior. If actual results differ significantly from these estimates, stock-based compensation expense and our results of operations could be materially impacted.

Our expected volatility is based upon the historical volatility of our stock. We have chosen to utilize the safe harbor expected life for our options. Because stock-based compensation expense is recognized in our statement of operations based on awards ultimately expected to vest, the amount of expense has been reduced for estimated forfeitures. SFAS No. 123-R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures were estimated based on historical experience. If factors change and we employ different assumptions in the application of SFAS No. 123-R, the compensation expense that we record in future periods may differ significantly from what we have recorded in the current period.

Impact of Recently Issued Accounting Pronouncements

On July 13, 2006, the Financial Accounting Standards Board issued Interpretation No. 48, *Accounting for Uncertainty in Income Taxes* , which is effective for fiscal years beginning after December 15, 2006, which establishes recognition and measurement thresholds that must be met before a tax benefit can be recognized in the financial statements. The Company is currently analyzing the effects of the new standard and its potential impact on its financial statements.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements.* SFAS No. 157 establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. The standard applies whenever other standards require (or permit) assets or liabilities to be measured at fair value. The standard does not expand the use of fair value in any new circumstances. In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Liabilities.* SFAS No. 157 and 159 are effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. The Company is currently analyzing the effects of the new standards, and its potential impact on its financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

At December 31, 2006, our investment portfolio included only cash and money market accounts and did not contain fixed-income securities, with the exception of a small amount held in a restricted CD. There would be no material impact to our investment portfolio, in the short term, associated with any change in interest rates, and any decline in interest rates over time will reduce our interest income, while increases in interest rates over time will increase our interest income.

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Item 8. Financial Statements and Supplementary Data

Hollis-Eden Pharmaceuticals, Inc.

(A Development Stage Company)

Balance Sheets

	December 31,	
	2006	**2005**
	(In thousands, except par value)	
ASSETS:		
Current assets:		
Cash and cash equivalents	$ 67,135	$ 45,130
Prepaid expenses	188	204
Deposits	39	52
Other receivable		8
Receivable from related party	4	7
Total current assets	67,366	45,401
Property and equipment, net of accumulated depreciation of $990 and $740	1,051	1,116
Receivable from related party		4
Deposits	61	61
Restricted cash	34	
Total assets	$ 68,512	$ 46,582
LIABILITIES AND STOCKHOLDERS EQUITY:		
Current liabilities:		
Accounts payable and accrued expenses	$ 6,734	$ 7,515
Deferred revenue		193
Total current liabilities	6,734	7,708
Commitments and contingencies (Notes 6, 11, 12)		
Stockholders equity: (Notes 3, 7, 8, 9, 10)		
Preferred stock, $.01, 10,000 shares authorized; no shares issued or outstanding		
Common stock, $.01 par value, 50,000 shares authorized; 28,971 and 20,782 shares issued and 28,913 and 20,723 outstanding respectively	290	208
Paid-in capital	253,354	200,301
Cost of treasury stock (59 shares)	(346)	(346)
Deficit accumulated during development stage	(191,520)	(161,289)
Total stockholders equity	61,778	38,874
Total liabilities and stockholders equity	$ 68,512	$ 46,582

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

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Hollis-Eden Pharmaceuticals, Inc.

(A Development Stage Company)

Statements of Operations

	For the year ended December 31,			Period from Inception (Aug. 15, 1994) to
	2006	2005	2004	December 31, 2006
	(In thousands, except per share amounts)			
Revenue:				
Contract R&D revenue	$ 444	$ 56	$ 63	$ 563
Total revenue	444	56	63	563
Operating expenses:				
Research and development				
R & D operating expenses	22,177	18,342	18,485	119,056
R & D costs related to common stock and stock option grants for collaborations and technology purchases	1,587		3	7,254
Total research and development	23,764	18,342	18,488	126,310
General and administrative				
G & A operating expenses	7,365	9,746	7,083	53,439
G & A costs related to options / warrants granted	2,279	31	133	14,651
Total general and administrative	9,644	9,777	7,216	68,090
Settlement of dispute		3,000		3,000
Total operating expenses	33,408	31,119	25,704	197,400
Other income (expense):				
Loss on disposition of assets	(8)		(33)	(64)
Non-cash amortization of deemed discount and deferred issuance costs on convertible debentures				(7,627)
Interest income	2,741	1,622	917	13,396
Interest expense				(388)
Total other income, net	2,733	1,622	884	5,317
Net loss	$ (30,231)	$ (29,441)	$ (24,757)	$ (191,520)
Net loss per share, basic and diluted	$ (1.20)	$ (1.46)	$ (1.28)	
Weighted average number of common shares outstanding, basic and diluted	25,131	20,125	19,267	

The accompanying notes are an integral part of these financial statements

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Hollis-Eden Pharmaceuticals, Inc.

(A Development Stage Company)

Statements of Stockholders Equity

	Preferred stock at par value		Common stock at par value		Capital in excess of par value	Cost of Repurchased Common Stock		Deficit accumulated during development stage	Total
	Shares	Amount	Shares	Amount		Shares	Amount		
	(In thousands)								
Contribution by stockholder		$		$	$ 103		$	$	$ 103
Common stock issued for cash			2,853		25				25
Common stock issued as consideration for the license agreements (Note 6)			543		5				5
Net loss								(1,277)	(1,277)
Balance at December 31, 1994			3,396		133			(1,277)	(1,144)
Common stock issued for cash			679		250				250
Common stock issued as consideration for amendments to the license agreements (Note 6)			76		28				28
Net loss								(672)	(672)
Balance at December 31, 1995			4,151		411			(1,949)	(1,538)
Common stock issued in conversion of debt (Note 7)			165		371				371
Common stock issued for cash, net of expenses (Note 7)			580		1,234				1,234
Common stock issued as consideration for termination of a finance agreement			15		34				34
Warrants issued to consultants for services rendered					24				24
Net loss								(692)	(692)
Balance at December 31, 1996			4,911		2,074			(2,641)	(567)
Recapitalization of Company upon the merger with Initial Acquisition Corp. (Note 3)			883	58	6,213				6,271
Warrants issued to a certain director upon the successful closure of the merger (Note 3)					570				570
Exercise of warrants, net of expenses			978	10	5,619				5,629
Deferred compensation stock options (Note 9)									
Amortization of deferred compensation					282				282
Exercise of stock options					1				1
Net loss								(5,253)	(5,253)
Balance at December 31, 1997			6,772	68	14,759			(7,894)	6,933
Exercise of warrants			399	4	1,196				1,200
Exercise of stock options			53	1	155				156
Private Placement, net of expenses (Note 7)	4		1,329	13	19,877				19,890
Warrants issued for services in lieu of cash (Note 10)					408				408
Stock issued for license fee (Note 6)			33		500				500
Stock issued for services in lieu of cash			6		95				95
Options issued for services in lieu of cash (Note 9)					240				240
Amortization of deferred compensation					308				308
Net loss								(5,427)	(5,427)
Balance at December 31, 1998	4		8,592	86	37,538			(13,321)	24,303
Exercise of warrants			755	8	5,136				5,144

Exercise of stock options		10		75			75
Private Placement, net of expenses (Note 7)		1,368	14	24,759			24,773
Preferred Stock Conversion (Note 7,8)	(4)	346	3	(3)			
Deferred compensation-Options forfeited (Note 9)				51			51
Amortization of non-employee options				559			559
Warrants issued for services in lieu of cash (Note 10)				2,140			2,140
Options accelerated vesting (Note 9)				4,900			4,900
Net loss						(15,320)	(15,320)

Hollis-Eden Pharmaceuticals, Inc.

(A Development Stage Company)

Statements of Stockholders Equity (Continued)

	Preferred stock at par value		Common stock at par value		Capital in excess of	Cost of Repurchased Common Stock		Deficit accumulated during development stage	Total
	Shares	Amount	Shares	Amount	par value	Shares	Amount		
	(In thousands)								
Balance at December 31, 1999		$	11,071	$ 111	$ 75,155		$	$ (28,641)	$ 46,625
Exercise of warrants			133	2	758				760
Exercise of stock options			1		5				5
Common Stock issued for 401k/401m plan			6		63				63
Common Stock issued for In-Process R&D (Note 6)			209	2	1,998				2,000
Options granted for license fee			38		598				598
Amortization of non-employee options					79				79
Common Stock issued for purchase of technology			132	1	1,847				1,848
Net loss								(19,515)	(19,515)
Balance at December 31, 2000			11,590	116	80,503			(48,156)	32,463
Exercise of stock options			10		22				22
Common Stock issued for 401k/401m plan			16		96				96
Private Placement, net of expenses (Note 7)			1,280	13	10,644				10,657
Warrants issued for services in lieu of cash (Note 10)					80				80
Amortization of non-employee options					96				96
Warrants issued for services					208				208
Net loss								(15,762)	(15,762)
Balance at December 31, 2001			12,896	129	91,649			(63,918)	27,860
Exercise of stock options					2				2
Common Stock issued for 401k/401m plan			26		137				137
Common Stock issued for sublicense agreement (Note 6)			50	1	204				205
Common Stock issued to consultants					17				17
Amortization of non-employee options					66				66
Warrants issued for services					247				247
Net loss								(17,502)	(17,502)
Balance at December 31, 2002			12,972	130	92,322			(81,420)	11,032
Common Stock issued for 401k/401m plan			32		223				223
Exercise of warrants			467	5	3,323				3,328
Exercise of stock options			85	1	955				956
Stock options issued					561				561
Private Placement, net of expenses			1,283	13	14,290				14,303
Common Stock issued for sublicense agreement (Note 6)			119	1	644				645
Common Stock issued for milestone payment			50	1	281				282
Debt Conversion			1,755	17	9,983				10,000
Common Stock issued in lieu of cash / interest			9		142				142
Public Offering, net of expenses			2,500	25	58,576				58,601
Deemed discount on convertible debentures					6,470				6,470
Warrants issued for services					1,398				1,398
Amortization of non-employee options					128				128
Purchase of treasury stock						(59)	(346)		(346)

Net loss							(25,671)	(25,671)
Balance at December 31, 2003		19,272	193	189,296	(59)	(346)	(107,091)	82,052

Hollis-Eden Pharmaceuticals, Inc.

(A Development Stage Company)

Statements of Stockholders Equity (Continued)

	Preferred stock at par value		Common stock at par value		Capital in excess of	Cost of Repurchased Common Stock		Deficit accumulated during development stage	Total
	Shares	Amount	Shares	Amount	par value	Shares	Amount		
	(In thousands)								
Common Stock issued for 401k			17		147				147
Exercise of warrants			6		11				11
Exercise of stock options			4		16				16
Common Stock issued for In-Process R&D (Note 6)			48		629				629
Amortization of non-employee options					136				136
Net loss								(24,757)	(24,757)
Balance at December 31, 2004		$	19,347	$ 193	$ 190,235	(59)	$ (346)	$ (131,848)	$ 58,234
Common Stock issued for 401k			25		151				151
Exercise of warrants			42	1	260				261
Exercise of stock options			35	1	123				124
Public Offering, net of expenses (Note 7)			1,333	13	9,502				9,515
Amortization of non-employee options					30				30
Net loss								(29,441)	(29,441)
Balance at December 31, 2005			20,782	208	200,301	(59)	(346)	(161,289)	38,874
Common Stock issued for 401k			45	1	224				225
Exercise of warrants			10		1				1
Warrants issued to consultants					226				