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2011 Annual Report

Geron is a biopharmaceutical company developing first-in-class therapies for cancer. The company has two lead product candidates in clinical development, imetelstat and GRN1005. Imetelstat is a telomerase inhibitor that is being evaluated in four Phase 2 clinical trials: metastatic breast cancer, advanced non-small cell lung cancer, essential thrombocythemia and multiple myeloma. GRN1005 is a peptide-drug conjugate that is designed to transport a proven anti-cancer drug, paclitaxel, across the blood-brain barrier by targeting low-density lipoprotein receptor-related proteins (LRPs), specifically LRP-1. GRN1005 is being evaluated in two Phase 2 clinical trials: brain metastases arising from breast cancer and brain metastases arising from non-small cell lung cancer.

Except for the historical information contained herein, this letter to stockholders contains forward-looking statements made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Investors are cautioned that without limita the following statements in this regarding Geron's plans or expectations for or of: (a) dates in 2012 or 2013 to enroll patients or to report top-line data from any of the Phase 2 clinical trials; (b) prospects for the clinical success of any of the product candidates and success of the business; and (c) having sufficient cash to fund the Company through near-term value inflection points associated with the oncology programs with minimal near-term financing requirements, constitute forward-looking statements. These statements involve risks and uncertainties that can cause actual results to differ materially from those in such forward-looking statements. These risks and uncertainties, include without limitation, regarding: (a) dates to enroll patients or report top-line data – delays in enrollment, delays caused by institutional review boards or regulatory agencies, shortage of supply, dependence on clinical trial collaborators, insufficient number of progression events, and safety issues; (b) clinical success of the product candidates and success of the business – those risks and uncertainties inherent in the development of potential therapeutic products such as successful clinical trial results, and challenges to or enforcement of Geron's intellectual property rights; and (c) having sufficient cash to fund the Company through near-term value inflection points associated with the oncology programs with minimal near-term financing requirements – unanticipated expenses, such as those related to clinical trials, manufacturing, litigation and challenges to or enforcement of Geron's intellectual property rights. More detailed additional information and factors that could cause actual results to differ materially from those in the forward-looking statements are contained in Geron's periodic reports filed with the Securities and Exchange Commission under the heading "Risk Factors," including the Annual Report on Form 10-K for the year ended December 31, 2011. Geron is providing the information in
which speak only as of the date they are made, and the facts and assumptions underlying the forward-looking statements may change. Except as required by law, Geron disclaims any obligation to update these forward-looking statements to reflect future information, events or circumstances.

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

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Fiscal Year Ended December 31, 2011
or

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

Commission File Number: 0-20859

GERON CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**75-2287752**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
230 Constitution Drive, Menlo Park, CA	**94025**
(Address of principal executive offices)	*(Zip Code)*

Registrant's telephone number, including area code: (650) 473-7700

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

Title of each class	**Name of each exchange on which registered**
Common Stock, $0.001 par value	Nasdaq Global Select Market

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 ☒

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

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

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

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

The aggregate market value of voting and non-voting common equity held by non-affiliates of the registrant was approximately $508,641,000 based upon the closing price of the common stock on June 30, 2011 on the Nasdaq Global Select Market. Shares of common stock held by each officer, director and holder of five percent or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 22, 2012, there were 132,488,871 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

Document	**Form 10-K Parts**
Portions of the Registrant's definitive proxy statement for the 2012 annual meeting of stockholders to be filed pursuant to Regulation 14A within 120 days of the Registrant's fiscal year ended December 31, 2011	III

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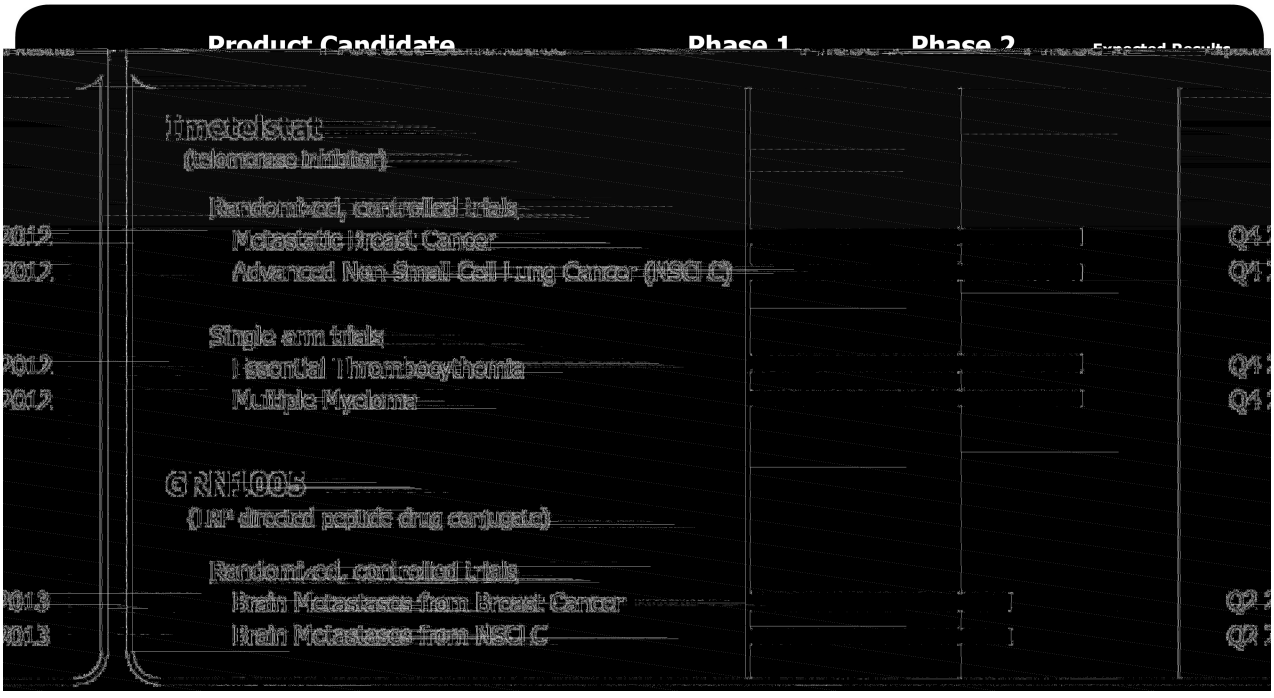
a proprietary peptide, Angiopep-2, which is a ligand for LRP-1. This enables GRN1005 to be actively transported across the blood-brain barrier by LRP-1. The LRP-1 transport mechanism also facilitates uptake of the conjugate into tumor cells inside and outside of the brain. The bond linking Angiopep-2 peptide and paclitaxel is cleaved when it is taken up into cells, including tumor cells both inside and outside of the brain, releasing active paclitaxel.

Brain metastases in cancer patients are associated with considerable morbidity and mortality. Current treatments for brain metastases include whole brain radiation therapy (WBRT), stereotactic radiosurgery (SRS), and/or surgical resection, each of which provides limited efficacy and is associated with significant side effects. There is no approved drug therapy for brain metastases.

We are conducting two single-arm Phase 2 trials of GRN1005, one in patients with brain metastases associated with breast cancer and the other in brain metastases associated with non-small cell lung cancer. We selected these indications because in Phase 1 trials clinical activity was observed in patients with these tumor types. We expect to have top-line data from these two Phase 2 trials by the end of the second quarter of 2013.

A summary of our ongoing clinical trials and the expected timing for top-line results from each of the trials is summarized in the table below.



Imetelstat: Telomerase Inhibitor for Treating Solid Tumors and Hematologic Malignancies

Overview

Imetelstat is a potent and specific inhibitor of telomerase currently in clinical development as a therapeutic agent for the treatment of solid tumors and hematologic malignancies. This first-in-class compound is a specially designed and modified oligonucleotide which targets and binds with high affinity directly to the RNA template component of telomerase. The proprietary oligonucleotide chemistry improves binding affinity and stability, and the lipid modification enhances cellular and tissue penetration.

Scientific Rationale

Telomerase as a Molecular Target in Oncology

Telomeres are repeats of a DNA sequence located at the ends of chromosomes. They act as protective caps to maintain stability and integrity of the chromosomes, which contain the cell's genetic material. Telomerase is an enzyme that can rebuild telomeres and prevent them from shortening during cell division. The telomerase enzyme includes a protein component and an RNA template component.

Because of the role of telomerase in extending cancer cell longevity and proliferation, we believe that inhibiting telomerase may be an effective strategy for treating a broad range of malignancies. Elevated expression and activity of telomerase is associated with the limitless cellular replication characteristic of cancer. Telomerase expression has been found to be present in approximately 90% of biopsies from a broad range of human cancers, and its activity is generally found to increase with grade and stage of tumor.

Based on the results of preclinical and clinical studies, it is believed that progression, relapse and metastasis of many cancers are driven by cancer progenitor cells, many of which have been found to express high levels of telomerase and have high levels of telomerase activity. Standard chemotherapy and other conventional agents are effective against bulk tumor cells, but are not as effective against cancer progenitor cells. As a result, after initial responses to standard treatments, tumors may re-grow due to proliferation and differentiation of progenitor cells, causing relapse of the disease. For this reason, cancer progenitor cells have become important targets for novel therapies. Because cancer progenitor cells have increased telomerase activity, they may be susceptible to telomerase inhibition by imetelstat.

Imetelstat: Our Telomerase Inhibitor

Despite the clinical potential of telomerase as a target for developing new cancer treatments, small molecule telomerase inhibitors have not progressed to the clinic due to lack of potency or specificity. Consequently, we utilized a proprietary nucleic acid chemistry platform to develop imetelstat as a short, modified oligonucleotide to be a potent and specific inhibitor of telomerase. Imetelstat binds with high affinity to the RNA template of telomerase, thereby directly inhibiting telomerase activity. It has a proprietary nucleic acid backbone which provides resistance to the effect of cellular nucleases, thus conferring improved stability in plasma and tissues, as well as significantly improved binding affinity to its target. To improve cell permeability, we conjugated the oligonucleotide to a lipid group. Imetelstat is the first telomerase inhibitor to advance to clinical development.

Imetelstat Preclinical Data

The effects of imetelstat on tumor cells, including breast and lung cancers, have been well characterized in numerous preclinical studies conducted by scientists at Geron and academic collaborators. Results of these studies demonstrated that:

- Imetelstat inhibits telomerase activity, leading to the inhibition of cancer cell growth;
- Imetelstat inhibits the growth of a variety of tumor types in cell culture systems and in rodent models of human cancers (xenograft and orthotopic models), impacting the growth of primary tumors and reducing metastases;
- Imetelstat has additive and synergistic anti-tumor effects in a variety of tumor cell culture systems and xenograft models when administered in combination with approved anti-cancer therapies including radiation, conventional chemotherapies and targeted agents; and
- Imetelstat is an effective inhibitor of cancer progenitor cell proliferation in a broad range of tumor types, including breast cancer, lung cancer, myeloma and myeloproliferative neoplasms such as essential thrombocythemia.

Imetelstat Clinical Experience

Phase 1 Clinical Trials

We conducted six Phase 1 trials, treating 183 patients, to evaluate the safety, tolerability, pharmacokinetics and pharmacodynamics of imetelstat, both alone and in combination with other standard therapies in patients with solid tumors and hematological malignancies. Results from the trials include the following findings:

- Imetelstat was well tolerated with adverse events that were manageable and reversible. The dose-limiting toxicities were thrombocytopenia (reduced platelet count) and neutropenia (reduced white blood cell count);
- Target exposures to imetelstat in patients were achieved at a dose and schedule that had acceptable tolerability, and were consistent with the exposures required for efficacy in mouse models of cancer;
- Inhibition of telomerase activity was observed following administration of imetelstat in various types of tissue in which telomerase activity is measurable, including normal bone marrow hematopoietic cells, malignant plasma cells, hair follicle cells, and peripheral blood mononuclear cells; and
- Clinical responses were observed in combination with cytotoxic chemotherapy in patients with breast cancer. No single agent clinical responses were observed.

Current Clinical Trials

Based on the results seen in preclinical studies and Phase 1 clinical trials, we are currently conducting four Phase 2 clinical trials of imetelstat. For these trials, we have specifically selected cancers where there is evidence that disease progression, relapse and metastasis is driven by cancer progenitor cells. We believe that using imetelstat in combination with or following standard debulking chemotherapy may extend the duration of response and progression-free survival (PFS) in patients by inhibiting the subsequent proliferation of cancer progenitor cells. Based on this rationale and the unmet medical need in both diseases, we are studying imetelstat in two randomized, controlled Phase 2 trials, one in metastatic breast cancer and the other in advanced non-small cell lung cancer (NSCLC). We are also conducting two single-arm Phase 2 trials of imetelstat in hematologic malignancies in order to directly assess the impact of imetelstat on cancer progenitor cells. Our imetelstat Phase 2 program is summarized below:

Indication	Trial Design Summary	Population	Number of Patients	Primary / Other Endpoints
Metastatic Breast Cancer	Open-label, multi-center, randomized; imetelstat plus paclitaxel (+/-bevacizumab) vs. paclitaxel +/- bevacizumab only	Locally recurrent or metastatic disease without prior chemotherapy or after one non-taxane based chemotherapy in the metastatic setting	166 Enrolled	Progression-free survival
Advanced Non-Small Cell Lung Cancer (NSCLC)	Open-label, multi-center, randomized; imetelstat as maintenance therapy plus standard therapy (observation +/- bevacizumab) vs. standard therapy only	Recurrent locally advanced or Stage IV disease (completed first line platinum-based doublet induction therapy +/- bevacizumab)	Approx. 96	Progression-free survival
Essential Thrombocythemia (ET)	Open-label, single-arm, single agent	Disease requiring cytoreduction and have failed/intolerant of prior therapy or refuse standard therapy	Up to 40	Hematologic response rate; mutant JAK2 or MPL allelic burden
Multiple Myeloma	Open-label, single-arm; imetelstat +/- lenalidomide	Detectable but non-progressing disease after prior therapy	Up to 48	Improvement in response; *ex vivo* measures of myeloma progenitor cell proliferation

Our metastatic breast cancer and NSCLC trials require that a sufficient number of progression events must occur in order to perform the planned data analyses. We anticipate an accrual of events that will allow us to report top-line results by the end of 2012. We also expect top-line results from our single-arm trials in essential thrombocythemia and multiple myeloma by the end of 2012.

Imetelstat in Metastatic Breast Cancer

Disease Background

Excluding cancers of the skin, breast cancer is the most frequently diagnosed cancer in women in the United States, with nearly 227,000 new cases of invasive breast cancer expected to occur in 2012. Based on SEER *(Surveillance Epidemiology and End Results*) data, we estimate that roughly 65,000 breast cancer patients will be diagnosed with metastatic disease or progress to first metastases from an earlier stage of disease in 2012. Despite advances in the treatment of breast cancer, 40,000 women are expected to die of the disease in the United States in 2012. For metastatic breast cancer patients in particular, prognosis is poor, and novel approaches and new therapies are needed.

Current treatments for metastatic breast cancer aim to achieve disease control (generally defined as durable tumor response, disease stabilization or improvement in progression-free survival), palliate symptoms and prolong overall survival, while maintaining quality of life. Current standards of care include cytotoxic, hormonal and targeted therapies. The choice of treatment regimens depends on many factors, including the receptor status of the tumor, extent of the metastases, other medical co-morbidities, age, and the toxicities from treatment that are acceptable for an individual patient.

In general, metastatic breast cancer patients whose tumors over-express estrogen (ER-positive) or progesterone (PR-positive) hormone receptors, or human epidermal growth factor receptor-2 (HER2-positive) are candidates for hormonal therapies or HER2-directed therapies, which have led to improvements in survival. However, HER2-negative patients who have failed hormonal therapy or who have triple negative disease (ER-negative, PR-negative, HER2-negative) continue to have poor outcomes on current therapies, and, as a result, represent a significant unmet medical need.

Breast cancer is a disease in which there is evidence that disease progression, relapse and metastasis is driven in part by cancer progenitor cells. Our research has shown that imetelstat is a potent and specific inhibitor of telomerase and that it inhibits the proliferation of breast cancer cells, including breast cancer progenitor cells, both in cell culture systems and in breast cancer xenograft models, suppressing tumor growth and metastases. Imetelstat was also observed to act synergistically with paclitaxel to inhibit breast cancer cell proliferation *in vitro.* We believe that the use of imetelstat in combination with standard debulking chemotherapy, such as paclitaxel, may increase the duration of response and progression-free survival (PFS) in metastatic breast cancer patients.

Imetelstat in HER2-Negative Locally Recurrent or Metastatic Breast Cancer (Trial B014)

We are conducting a Phase 2 clinical trial to evaluate the potential benefit of imetelstat, in combination with paclitaxel, for patients with locally recurrent or metastatic breast cancer. Patients with triple negative disease, and patients with hormone-receptor positive disease who had failed hormonal therapy or had symptomatic visceral metastases, are included in this trial. Eligible patients either have not received chemotherapy previously for metastatic breast cancer (1st line) or have previously received one non-taxane based chemotherapeutic drug for metastatic breast cancer (2nd line). This trial completed patient enrollment in February 2012.

Patients have been randomized on a 1:1 basis to receive imetelstat in addition to paclitaxel (treatment arm) or to receive paclitaxel alone (comparator arm). The protocol allows up to 30% of patients in both arms of the trial to also receive bevacizumab, or Avastin, based on the investigator's decision and drug availability to the patient. We will stratify the analysis for efficacy based on whether patients were receiving bevacizumab.

Since the trial started, the FDA has revoked the approval for bevacizumab in this patient population in the United States, and as such, we expect that the data for the patients in this trial who are not receiving bevacizumab concurrently (at least 70% of the overall trial) will be more relevant for our analysis. Bevacizumab remains approved for metastatic breast cancer in various jurisdictions around the world, including the EU.

The primary objective of this trial is to obtain an estimate of the PFS in metastatic breast cancer patients receiving imetelstat in addition to paclitaxel and, optionally, bevacizumab. While we have not powered this trial to demonstrate statistical significance of efficacy results, we will focus our analysis on the efficacy trends in the overall patient population as well as in important subgroups, such as 1st line vs. 2nd line and ER negative/PR negative breast cancer, or triple negative. Based on historical results taken from the Eastern Cooperative Oncology Group-sponsored E2100 study of 1st line patients with metastatic breast cancer and the Genentech-sponsored RIBBON 2 study of 2nd line patients with metastatic breast cancer, we estimate that patients on the comparator arm will have a median PFS of approximately seven months. We believe that an improvement in the treatment arm of approximately three months in PFS compared to the comparator arm would be consistent with a meaningful clinical benefit, assuming a representative patient population was enrolled and the safety and tolerability profile is consistent with our Phase 1 data. The trial also has a number of secondary endpoints for efficacy, including objective response rate and clinical benefit rate.

Imetelstat in Advanced Non-Small Cell Lung Cancer (NSCLC)

Disease Background

Lung cancer is the leading cause of cancer-related mortality worldwide. In the United States alone, an estimated 226,000 new cases and an estimated 160,000 deaths due to lung cancer are expected in 2012. Non-small cell lung cancer (NSCLC) accounts for 80-85% of incident lung cancers. Based on SEER data, we estimate that 162,000 NSCLC cancer patients will be diagnosed with metastatic disease or progress to advanced disease from an earlier stage of disease in the United States in 2012. For advanced NSCLC patients in particular, prognosis is poor, and novel approaches and new therapies are needed.

Platinum-based doublet chemotherapy (cisplatin or carboplatin in combination with one of several other agents) is a recognized standard of care for patients with advanced NSCLC. Other cytotoxic agents, such as pemetrexed, are also being used. Bevacizumab may be added to the regimen for patients with non-squamous cell histology. Following chemotherapy, patients who have responded to treatment or have stable disease may be continued on a portion of the initial therapy, known as continuation maintenance therapy, until progression. More recently, the concept of introducing a new agent in the maintenance setting, or switch maintenance, was shown in trials of erlotinib and pemetrexed to be potentially effective in extending survival and PFS in some patients. Despite the availability of these agents, the outcomes for patients with advanced NSCLC remain poor.

NSCLC is a disease in which there is evidence that disease progression, relapse and metastasis is driven in part by cancer progenitor cells. Our research has shown that imetelstat is a potent and specific inhibitor of telomerase and that it inhibits the proliferation of NSCLC cells, including progenitor cells, both in cell culture systems and in xenograft models, suppressing tumor growth and metastases. Imetelstat was also observed to have an additive effect in combination with bevacizumab to inhibit lung cancer growth *in vivo.* We believe that the use of imetelstat as maintenance therapy after standard debulking chemotherapy may increase the duration of response and progression-free survival (PFS) in advanced NSCLC patients.

Imetelstat in Advanced NSCLC (Trial B012)

We are conducting a Phase 2 clinical trial to evaluate the potential benefit of imetelstat as maintenance therapy for patients with advanced NSCLC. Patients who have not progressed after platinum-based induction chemotherapy are eligible for this trial. Patients are randomized on a 2:1 basis to receive either imetelstat in addition to standard of care (treatment arm) or standard of care alone (comparator arm). The standard of care in this trial is observation or observation with bevacizumab. Patients who previously received bevacizumab with their induction chemotherapy will continue to receive bevacizumab in this trial.

The primary objective of this trial is to obtain an estimate of PFS in NSCLC patients receiving imetelstat as maintenance therapy. While we have not powered this trial to demonstrate statistical significance of efficacy results, we will focus our analysis on the efficacy trends in the overall patient population as well as in important subgroups, such as imetelstat monotherapy vs. combination with bevacizumab and adenocarcinoma vs. squamous histology. Based on historical results from other trials, we estimate that patients on the comparator arm will have a median PFS of approximately three and one-half months. We believe that an improvement of approximately two months in PFS in the treatment arm compared to the comparator arm would be consistent with a meaningful clinical benefit, assuming a representative patient population was enrolled and the safety and tolerability profile is consistent with our Phase 1 data. The trial also has a number of secondary endpoints for efficacy including objective response rate.

Imetelstat in Essential Thrombocythemia (ET)

Disease Background

Essential thrombocythemia (ET, also known as essential thrombocytosis) is representative of a group of diseases known as myeloproliferative neoplasms (MPNs), which also includes primary polycythemia and myelofibrosis. ET is a chronic blood disorder characterized by increased numbers of platelets in the blood. These platelets may have abnormal function, which can lead to an increased risk of thrombotic or hemorrhagic complications. Patients with ET may also develop myelofibrosis or acute myeloid leukemia.

In the United States, we estimate there will be 8,000 new cases of MPNs in 2012, of which approximately 25%, or 2,000, will be ET.

ET is driven by malignant hematopoietic progenitor cells in the bone marrow. Some currently used treatments, such as hydroxyurea and anagrelide, can be effective in reducing platelet counts in patients with ET by causing nonspecific suppression of the bone marrow, but they do not specifically target the malignant bone marrow progenitor cells. Another therapy, interferon-alpha, may have a selective effect on the malignant cells; however, its utility is limited by tolerability concerns. Clinical resistance to or intolerance of these treatments may occur in a substantial proportion of patients.

Ex vivo studies have shown that imetelstat can inhibit growth of malignant platelet progenitor cells (megakaryocytes) from patients with ET. As a consequence, we believe that imetelstat has the potential to impact the malignant progenitor cells in the bone marrow that produce the high platelet counts in patients with ET. In addition, significant decreases in platelet counts were observed in Phase 1 trials of imetelstat. Thus, we believe that imetelstat may be able to reduce the high platelet counts that accompany ET.

Approximately 50% of patients with ET have mutations in the genes for Janus kinase 2 (JAK2) or, less frequently, myeloproliferative leukemia (MPL). These mutations can serve as specific markers of the malignant cells. By measuring the relative proportion of mutant compared to normal versions of these genes in blood cells, we believe we can directly assess the specific impact of imetelstat on the malignant cells in these patients.

Imetelstat in Essential Thrombocythemia (Trial B015)

We are conducting an open-label, single-arm Phase 2 clinical trial designed to evaluate the activity of imetelstat in patients with ET. This study is enrolling patients who have failed or are intolerant to at least one prior therapy, or who have chosen not to receive standard therapy.

The primary endpoints in the trial are hematologic response (as measured by a reduction in platelets), and in patients with JAK2 or MPL gene mutations, molecular response (as measured by a reduction in mutant JAK2 or MPL allelic burden). The study will be considered successful if greater than 60% of patients show a hematologic response, and at least 35% of patients with JAK2 or MPL gene mutations show a molecular response.

The study will also measure the duration of any responses observed. In patients who have a mutation in the JAK2 or MPL genes, we will collect data to evaluate the rate of molecular response.

While we may choose to enroll as many as 40 patients in this trial (including up to 20 with JAK2 or MPL gene mutations), we may enroll fewer based on early results, either positive or negative. Encouraging results from this trial may enable us to expand the imetelstat program into other myeloproliferative diseases such as primary polycythemia and myelofibrosis.

Imetelstat in Multiple Myeloma

Disease Background

Multiple myeloma arises from malignant hematopoietic progenitor cells in the bone marrow. Despite improvements in the standard of care, the majority of multiple myeloma patients relapse after initial therapy, eventually become refractory to all therapies and die from the disease. In the United States, an estimated 22,000 new cases and an estimated 11,000 deaths due to multiple myeloma are expected in 2012.

Cancer progenitor cells are thought to drive progression and relapse in multiple myeloma, and imetelstat has been shown in preclinical research to inhibit proliferation of those cancer progenitor cells. Since we can sample the bone marrow of patients with this disease before and during treatment with imetelstat, we may be able to determine whether imetelstat is specifically inhibiting proliferation of the multiple myeloma progenitor cells. If this is the case, it could provide compelling clinical evidence that imetelstat directly inhibits the proliferation of cancer progenitor cells, thus confirming this important mechanism of action.

Imetelstat in Multiple Myeloma (Trial B013)

We are conducting an open label, single-arm Phase 2 clinical trial designed to evaluate the effect of imetelstat in patients with multiple myeloma who have non-progressing but residual disease after initial cytoreductive therapy. This patient population has a high risk of relapse, yet should be able to be dosed for a sufficient period of time to evaluate the effect of imetelstat treatment. Imetelstat is being administered alone or in combination with lenalidomide in a maintenance setting.

The important endpoint in this study is to measure the change in the growth of myeloma progenitor cell populations taken from the patients' bone marrow over time. *Ex vivo* measurements of myeloma progenitor cell proliferation, obtained by bone marrow aspiration before and after imetelstat treatment, will measure the direct effects of imetelstat on these cancer progenitor cells. Other endpoints include PFS and improvement in response.

While we may choose to enroll as many as 48 patients in this trial, we may enroll fewer based on early results, either positive or negative.

GRN1005: LRP-Directed Peptide-Drug Conjugate for Treating Patients with Brain Metastases

Overview

GRN1005 is a peptide-drug conjugate designed to deliver a proven anti-cancer drug (paclitaxel) to the brain to treat brain metastases. Brain metastases are associated with considerable morbidity and mortality, and there are currently no approved drug therapies. Brain cancers are very difficult to treat because the blood-brain barrier (BBB) prevents most drugs, including oncology drugs such as paclitaxel, from reaching the brain at levels that are clinically therapeutic. Enabling transport across the BBB and into tumors is critical for developing effective treatments for cancer in the brain.

GRN1005 was designed to overcome this challenge by conjugating three molecules of paclitaxel to a proprietary peptide, AngioPep-2. This peptide binds to lipoprotein receptor-related protein-1, or LRP-1, a physiologic transporter of large molecules across the BBB. This enables GRN1005 to be actively transported across the BBB by LRP-1. The LRP-1 transport mechanism also facilitates uptake of the conjugate into tumor cells inside and outside the brain.

We licensed GRN1005 from Angiochem, Inc. in December 2010. Our exclusive worldwide license provides us access to Angiochem's proprietary peptide technology that facilitates the transport of anti-cancer compounds across the BBB to enable the treatment of primary brain cancers and cancers that have metastasized to the brain. The license agreement covers Angiochem's proprietary receptor-targeting peptides conjugated to tubulin disassembly inhibitors, which include, but are not limited to, taxanes and epothilones and their derivatives.

Scientific Rationale

The BBB has two major functions: to protect the brain and regulate brain homeostasis. The brain is protected by tight junctions between the endothelial cells of the capillaries in the brain. As a consequence, most small molecules, proteins and peptides do not cross the BBB. However, the brain needs many molecules for survival, including insulin and low-density lipoprotein. Certain receptors present on the BBB actively transport these molecules from the blood into the brain.

The LRP-1 receptor is one of the most highly expressed receptors in the BBB and naturally transports numerous proteins to the brain. By linking an LRP-1 peptide binding moiety to therapeutic agents, such as paclitaxel, the receptor can be targeted to exploit this native mechanism for crossing the BBB to deliver therapeutic agents into the brain.

LRP-1 is also upregulated in many tumors; thus entry into tumor cells may also occur via LRP-1. As a result, GRN1005 may enter tumors in the brain and outside the brain using the same receptor-mediated pathway, making it an attractive strategy for treating brain metastases as well as the primary tumors that cause them.

Disease Background

The incidence of metastatic cancer in the brain is increasing. This may be due to a number of factors, including improved central nervous system screening and imaging. It may also relate to the improvement in therapies to treat disease outside of the brain, resulting in prolonged survival and increased risk of brain metastases. Lung cancer is the most common cause of brain metastases, followed by breast cancer.

Brain metastases are associated with considerable morbidity and mortality, and there are no approved drug therapies. Current treatments for brain metastases include whole brain radiation therapy (WBRT), stereotactic radiosurgery (SRS), and/or surgical resection.

GRN1005 Clinical Experience

Phase 1 Clinical Trials

GRN1005 has been evaluated in two separate Phase 1 trials conducted by Angiochem. These were multi-center, open-label, dose escalation clinical trials to identify the maximum tolerated dose and obtain data on safety, tolerability and preliminary evidence of efficacy in patients with heavily pre-treated advanced solid tumors with brain metastases and in patients with recurrent malignant glioma.

In these trials, GRN1005 demonstrated evidence of single agent activity against brain metastases arising from a variety of epithelial malignancies, including NSCLC and breast cancer. In that Phase 1 clinical trial, the overall response rate in patients who received the maximum tolerated dose of GRN1005 was 20% (5/20). Furthermore, 24% (4/17) of patients with brain metastases had ≥30% shrinkage in brain lesions and 50% (5/10) of patients with lung lesions had ≥30% shrinkage in those lesions. Shrinkage of tumors was observed in patients previously treated with a taxane and indicated that GRN1005 has the potential to be effective against paclitaxel resistant tumors. In addition to metastases in the brain, responses were also observed in lesions in the lung, liver and lymph nodes, suggesting that GRN1005 has activity both inside and outside the brain.

In a sub-study of patients with malignant glioma, concentrations of GRN1005, well above those required for cytotoxicity, were detected in brain tumor samples taken from patients who had received a single dose of the drug prior to undergoing debulking surgery, indicating that the drug successfully crossed the BBB and entered the tumor.

Toxicity of GRN1005 in these Phase 1 trials was similar to that observed in other trials of paclitaxel alone, with dose-limiting toxicity due to neutropenia, which was manageable. No central nervous system toxicity was observed in patients as assessed by neurocognitive testing.

Current Clinical Trials

Based on the results of preclinical studies and Phase 1 clinical trials, we are now conducting two Phase 2 clinical trials of GRN1005. Our Phase 2 program is summarized below:

Indication	Trial Design Summary	Population	Number of Patients	Primary Endpoint
Brain Metastases from Breast Cancer (GRABM-B)	Open label, single arm, single agent or in combination with trastuzumab	Patients with metastatic breast cancer who may or may not have had whole brain radiation therapy	50 HER2-positive 50 HER2-negative	Intra-cranial response rate
Brain Metastases from Non-Small Cell Lung Cancer (NSCLC) (GRABM-L)	Open label, single-arm, single agent	Patients with metastatic NSCLC who may or may not have had whole brain radiation therapy	50	Overall response rate

GRN1005 in Brain Metastases from Breast Cancer (GRABM-B)

We are conducting a single-arm, open-label Phase 2 clinical trial to evaluate the potential benefit of GRN1005 in patients whose breast cancer has metastasized to the brain.

The study consists of two cohorts: patients with HER2-negative disease (including hormone receptor positive and triple negative), and patients with HER2-positive disease. The HER2-negative and HER2-positive patients will be assessed as separate cohorts because the natural history, treatment and outcomes for patients with brain metastases from these subtypes of breast cancer differ.

The standard of care for HER2-positive breast cancer outside of the brain is trastuzumab, or Herceptin, and patients with brain metastases have better overall outcomes when this drug is administered due to extra-cranial disease control. As a result, for patients with brain metastases from HER2-positive disease, GRN1005 will be assessed in combination with trastuzumab. GRN1005 will be evaluated as a single agent in patients with brain metastases from HER2-negative metastatic breast cancer.

Patients are allowed to enroll in this study whether or not they have received prior whole brain radiation therapy, or WBRT. Some patients and their physicians may decide to defer WBRT until disease progression for a variety of reasons, including the possibility of associated neurotoxicity.

The primary endpoint of this trial is intra-cranial response rate. We are specifically assessing the intra-cranial activity of GRN1005 in this trial because therapies used to control extra-cranial disease have minimal efficacy against metastases inside the brain. We believe that an intra-cranial response rate significantly higher than the historical control, which is approximately 5% in metastatic breast cancer patients progressing after prior cranial radiation, would be considered clinically meaningful in this patient population. In addition, secondary endpoints include duration of intra-cranial response, three-month intra-cranial PFS, duration of intra-cranial PFS and six-month overall survival.

GRN1005 in Brain Metastases from NSCLC (GRABM-L)

We are conducting a single-arm, open-label Phase 2 clinical trial to evaluate the potential benefit of GRN1005 in patients whose non-small cell lung cancer (NSCLC) has metastasized to the brain. Patients are allowed to enroll in this study whether or not they have received prior WBRT. Some patients and their physicians may decide to defer WBRT until disease progression for a variety of reasons, including the possibility of associated neurotoxicity.

In patients with advanced NSCLC, disease both inside and outside the brain is usually poorly controlled. In the Phase 1 clinical trial of GRN1005, shrinkage of lung cancer lesions was observed both inside and outside the brain. As such, in our Phase 2 trial, we are assessing the activity of GRN1005 both inside and outside the brain.

The primary endpoint of this trial is overall response rates in both intra-cranial and extra-cranial disease. In contrast to many types of metastatic breast cancer, advanced NSCLC often progresses both inside the brain and outside the brain at the same time; therefore we are measuring response rates in both areas. We believe that an overall response rate significantly higher than the historical control, which is approximately 8% in NSCLC patients receiving salvage therapy, would be considered clinically meaningful in this patient population. In addition, secondary endpoints include the duration of PFS, six-month overall survival and the duration of overall objective response.

Discovery Research Programs

We have developed a deep expertise in the science of telomerase and telomerase inhibition, as well as nucleic acid chemistry. We are engaged in continued research to generate new drug candidates for clinical development leveraging our knowledge and technology. Our discovery research includes:

- Using our proprietary nucleic acid platform to develop drug candidates against new targets.
- Finding additional modalities to target telomerase and telomere function.
- Investigating the use of peptides to transport telomere-targeted agents into the brain.
- Activating telomerase in cells to restore functional capacity.

Telomerase Activation

Accelerated telomere loss or dysfunction of telomerase may play a role in many degenerative diseases. Controlled activation of telomerase may restore the regenerative and functional capacity of cells in various organ systems impacted by senescence, injury or chronic disease. Studies using cell-based and animal model systems have demonstrated the potential utility of small molecule telomerase activators in a range of human diseases associated with cellular senescence, fibrotic disorders and telomerase deficiency.

Data were obtained in one study using a rodent model of idiopathic pulmonary fibrosis (IPF), a chronic, progressive disease of the lung characterized by inflammation and fibrosis. Administration of GRN510, our lead small molecule telomerase activator, resulted in an increase in telomerase activity in lung tissue samples. In these preliminary studies, reductions in inflammatory cells in the lungs and improvements in lung compliance, or elasticity, were also observed.

Further studies are underway to determine the suitability of GRN510 as an investigational development candidate. If GRN510 advances to become an IND candidate for IPF or other non-oncology indications, we may seek a partner for further development.

Divestiture of Human Embryonic Stem Cell Programs

In November 2011, we announced that we will exclusively focus on our oncology programs and consequently, we discontinued development of our stem cell programs. We continue to accrue data on the patients already enrolled in the Phase 1 trial of GRNOPC1 for spinal cord injury. We intend to divest our stem cell programs in 2012, which include GRNOPC1 for spinal cord injury, currently in a Phase 1 clinical trial, as well as programs in cardiomyocytes for heart disease, pancreatic islet cells for diabetes, dendritic cells as an immunotherapy vehicle and chondrocytes for cartilage repair.

Research and Development

For information regarding research and development expenses incurred during 2011, 2010 and 2009, see Item 7, "Management Discussion and Analysis of Financial Condition and Results of Operations—Research and Development Expense".

Intellectual Property

Intellectual property, including patent protection, is very important to our business. We file patent applications in the United States and other jurisdictions, and we also rely on trade secret protection and contractual arrangements to protect aspects of our business. An enforceable patent with appropriate claim coverage can provide an advantage over competitors who may seek to employ similar approaches to develop therapeutics, and so our future commercial success will be in part dependent on our intellectual property strategy. The information provided in this section should be reviewed in the context of the section entitled "Risks Related to Protecting Our Intellectual Property" that begins on page 28.

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arrangements for research, clinical development and marketing of products similar to ours. These companies and institutions compete with us in recruiting and retaining qualified scientific and management personnel as well as in acquiring technologies complementary to our programs.

We believe that our ability to successfully compete will depend on, among other things:

- efficacy, safety and reliability of our product candidates;
- timing and scope of regulatory approvals and clearances;
- the speed at which we develop product candidates;
- our ability to complete preclinical testing and clinical development and obtaining regulatory approvals and clearances for product candidates;
- our ability to manufacture and sell commercial quantities of a product to the market;
- the availability of reimbursement for product use in approved indications;
- product acceptance by physicians and other health care providers;
- quality and breadth of our technology;
- skills of our employees and our ability to recruit and retain skilled employees;
- protection of our intellectual property; and
- availability of substantial capital resources to fund development and commercialization activities.

Any products that we may develop or discover are likely to be in highly competitive markets. We are aware of products in research or development by our competitors that address the diseases we are targeting, and any of these products may compete with our product candidates. Our competitors may succeed in developing their products before we do, obtaining approvals from the FDA or other regulatory agencies for their products more rapidly than we do, or developing products that are more effective than our product candidates. These products or technologies might render our technology obsolete or noncompetitive. There may also be product candidates of which we are not aware at an earlier stage of development that may compete with our product candidates.

In addition, any product candidate that we successfully develop may need to compete or combine with existing therapies, many with long histories of use. Approved and established therapies in metastatic breast cancer include gemcitabine, paclitaxel, ixabepilone and capecitabine. Approved and established therapies in metastatic NSCLC include bevacizumab, crizotinib, erlotinib and pemetrexed. Approved and established therapies in essential thrombocythemia include hydroxyurea, anagrelide and interferon alfa-2B. Approved and established therapies in multiple myeloma include bortezomib, lenalidomide and thalidomide. Imetelstat may compete or combine with these or other therapies.

Whole brain radiation therapy (WBRT) and stereotactic radiosurgery (SRS) are standards of care for brain metastases. GRN1005 may compete or combine with these or other therapies.

Government Regulation

Regulation by governmental authorities in the United States and other countries is a significant factor in the development, manufacture and marketing of our proposed products and in our ongoing research and product development activities. The nature and extent to which such regulation applies to us will vary depending on the nature of any products which may be developed by us. We anticipate that many, if not all, of our proposed products will require regulatory approval by governmental agencies prior to commercialization. In particular, human therapeutic products are subject to rigorous preclinical and clinical testing and other approval procedures of the FDA and similar regulatory authorities in European and other countries. Various governmental statutes and regulations also govern or influence testing, manufacturing, safety, labeling, storage and recordkeeping related to such products and their marketing. The process of obtaining these approvals and the subsequent compliance with appropriate statutes and regulations require the expenditure of substantial time and money, and there can be no guarantee that approvals will be granted.

United States Food and Drug Administration (FDA) Approval Process

Prior to commencement of clinical trials involving humans, preclinical testing of new pharmaceutical products is generally conducted on animals in the laboratory to evaluate the potential efficacy and safety of the product candidate. The results of these studies are submitted to the FDA as part of an IND application, which must be cleared by the FDA before clinical testing in humans can begin. Typically, clinical evaluation involves a time-consuming and costly three-phase trial process. In Phase 1, clinical trials are conducted with a small number of healthy volunteers or patients afflicted with a specific disease to assess safety and to evaluate the pattern of drug distribution and metabolism within the body. In Phase 2, clinical trials are conducted with groups of patients afflicted with a specific disease in order to determine preliminary efficacy, optimal dosages and expanded evidence of safety. The Phase 2 trials can be conducted comparing the investigational treatment to a comparator arm, or not. If used, a comparator usually includes standard of care therapy. Safety and efficacy data from Phase 2 clinical trials, even if favorable, may not provide sufficient rationale for proceeding to a Phase 3 clinical trial. In Phase 3, large-scale, multi-center, comparative trials are conducted with patients afflicted with a target disease to provide sufficient data to demonstrate the efficacy and safety required by the FDA. The FDA closely monitors the progress of each of the three phases of clinical testing and may, at its discretion, re-evaluate, alter, suspend, or terminate the trials.

The results of the preclinical and clinical testing of small molecules or on non-biologic drugs are submitted to the FDA in the form of a New Drug Application (NDA) for review and for approval prior to commencement of commercial sales. In the case of large molecules, vaccines or gene and cell therapies, the results of clinical trials are submitted to the FDA as a Biologics License Application (BLA). In responding to an NDA/BLA submission, the FDA may grant marketing authorization, may request additional information, may deny the application if it determines that the application does not provide an adequate basis for approval, and may also refuse to review an application that has been submitted if it determines that the application does not provide an adequate basis for filing and review.

European and Other Regulatory Approval Process

Prior to initiating clinical trials in a region outside of the United States, a clinical trial application will need to be submitted and reviewed by the appropriate regulatory authority regulating the country in which the trial will be conducted. Whether or not FDA clearance or approval has been obtained, approval of a product by comparable regulatory authorities in Europe and other countries will be necessary prior to commencement of marketing the product in such countries. The regulatory authorities in each country may impose their own requirements and may refuse to grant an approval, or may require additional data before granting it, even though the relevant product has been cleared or approved by the FDA or another authority. As with the FDA, the regulatory authorities in the European Union (EU) and other developed countries have lengthy approval processes for pharmaceutical products. The process for gaining approval in particular countries varies, but generally follows a similar sequence to that described for FDA approval. In Europe, the European Medicine Agency (EMA) and the European Committee for Proprietary Medicinal Products (CPMP) provide a mechanism for EU-member states to exchange information on all aspects of product licensing. The EU has established a European Medicine Agency for the evaluation of medical products, with both a centralized procedure with which the marketing authorization is recognized in all EU member states and a decentralized procedure, the latter being based on the principle of licensing within one member country followed by mutual recognition by the other member countries.

Other Regulations

We are also subject to various and often changing federal, state, local and international laws, rules, regulations, guidelines and recommendations relating to safe working conditions, laboratory and manufacturing practices and the use and disposal of hazardous or potentially hazardous substances, including radioactive compounds and infectious disease agents.

Manufacturing

A typical sequence of steps in the manufacture of imetelstat and GRN1005 drug products includes the following key components:

- starting materials, which are well defined materials that are incorporated as significant structural fragments into the structure of a bulk drug substance;
- bulk drug substance, which is the active ingredient in a drug product that provides pharmacological activity or other direct effect in the treatment of disease; and
- final drug product, which is the finished dosage form that contains the drug substance, often in association with other active or inactive ingredients, that is shipped to the clinic for patient treatment.

The final drug products we use in clinical trials are produced by outside contractors. We have no long-term commitments or supply agreements with any of our imetelstat or GRN1005 suppliers. If we are able to achieve regulatory approval in the United States or other countries to market and sell our products, we intend to continue to rely on outside contractors for the production of necessary supplies. We are not planning to establish our own manufacturing capabilities.

Imetelstat

We currently employ a dual-supplier strategy for production of starting materials used in the manufacture of imetelstat, as well as for production of imetelstat bulk drug substance and final drug product. These manufacturers currently provide our clinical supply requirements on a proposal-by-proposal basis under master supply agreements.

We currently have a master service agreement with a single contractor for labeling and packaging of imetelstat final drug product and for distribution of imetelstat to clinical sites in North America. In addition, we have a single contractor for Qualified Person release and distribution of imetelstat drug product to clinical sites in Europe. These contractors provide services on a proposal-by-proposal basis.

We have also entered into quality agreements with our imetelstat bulk drug substance and final drug product manufacturers, and our labeling, packaging and distribution service providers. The master and quality agreements are designed to ensure product quality, compliance with cGMP, and oversight over all critical aspects of imetelstat production, testing, release, labeling and packaging, storage and distribution.

GRN1005

We currently have only a single supplier of GRN1005 bulk drug substance. We employ a dual-supplier strategy for production of the paclitaxel and Angiopep-2 peptide used in the manufacture of GRN1005 as well as for the production of GRN1005 final drug product. Our manufacturers provide our clinical supply requirements on a proposal-by-proposal basis under master supply agreements.

We currently have an agreement with only one contractor for distribution of GRN1005 and imetelstat drug product to clinical sites in North America. This contractor provides distribution services under a master services agreement on a proposal-by-proposal basis.

We have also entered into quality agreements with our primary GRN1005 bulk drug substance and final drug product manufacturers. The master and quality agreements are designed to ensure product quality, compliance with cGMP, and oversight over all critical aspects of GRN1005 production, testing, release, labeling and packaging, storage and distribution.

Scientific Consultants

We have consulting agreements with a number of leading academic scientists and clinicians. These individuals serve as key consultants, expert witnesses, or as members of "clinical focus group panels" with respect to our product development programs and strategies or in legal proceedings. We use consultants to provide us with expert advice and consultation on our scientific and clinical programs and strategies, as well as on the ethical aspects of our work. They also serve as important contacts for us throughout the broader scientific community. They are distinguished scientists and clinicians with expertise in numerous scientific and medical fields, including telomere and telomerase biology, developmental biology, cellular biology, molecular biology and oncology.

We retain each consultant according to the terms of a consulting agreement. Under such agreements, we pay them a consulting fee and reimburse them for out-of-pocket expenses incurred in performing their services for us. In addition, some consultants hold options to purchase our common stock and restricted stock awards, subject to the vesting requirements contained in the consulting agreements. Our consultants may be employed by other entities and therefore may have commitments to their employer, or may have other consulting or advisory agreements that may limit their availability to us.

Executive Officers of the Company

The following table sets forth certain information with respect to our current executive officers:

Name	Age	Position
John A. Scarlett, M.D.	61	President and Chief Executive Officer
Graham K. Cooper	42	Executive Vice President, Finance and Business Development, and Chief Financial Officer
Stephen M. Kelsey, M.D., F.R.C.P., F.R.C.Path.	51	Executive Vice President, Head of R&D, and Chief Medical Officer
Stephen N. Rosenfield, J.D.	62	Executive Vice President, General Counsel and Corporate Secretary
David J. Earp, J.D., Ph.D.	47	Senior Vice President, Corporate Transactions, and Chief Legal Officer
Melissa A. Kelly Behrs	48	Senior Vice President, Strategic Portfolio Management and Product Development and Manufacturing
Melanie I. Nallicheri	43	Senior Vice President, Corporate Development
Olivia K. Bloom	43	Vice President, Chief Accounting Officer, and Treasurer

John A. Scarlett, M.D., has served as our Chief Executive Officer and a director since September 2011 and President since January 2012. Prior to joining Geron, Dr. Scarlett served as President, Chief Executive Officer and a member of the board of directors of Proteolix, Inc., a privately held, oncology-oriented biopharmaceutical company, from February 2009 until its acquisition by Onyx Pharmaceuticals, Inc., an oncology-oriented biopharmaceutical company, in November 2009. From February 2002 until its acquisition by Ipsen, S.A. in October 2008, Dr. Scarlett served as the Chief Executive Officer and a member of the board of directors of Tercica, Inc., an endocrinology-oriented biopharmaceutical company, and also as its President from February 2002 through February 2007. From March 1993 to May 2001, Dr. Scarlett served as President and Chief Executive Officer of Sensus Drug Development Corporation. In 1995, he co-founded Covance Biotechnology Services, Inc. and served as a member of its board of directors from inception to 2000. From 1991 to 1993, Dr. Scarlett headed the North American Clinical Development Center and served as Senior Vice President of Medical and Scientific Affairs at Novo Nordisk Pharmaceuticals, Inc., a wholly owned subsidiary of Novo Nordisk A/S. Dr. Scarlett received his B.A. degree in chemistry from Earlham College and his M.D. from the University of Chicago, Pritzker School of Medicine.

Graham K. Cooper has served as our as Executive Vice President, Finance and Business Development, and Chief Financial Officer, since January 2012. From May 2006 until March 2011, Mr. Cooper served as Senior Vice President, Chief Financial Officer and Treasurer of Orexigen Therapeutics, a biopharmaceutical company focused on the treatment of obesity. He was instrumental in growing Orexigen from a venture-backed startup into a sizable public company, completing a large Phase 3 obesity program and filing an NDA with the FDA. Previously, Mr. Cooper held the position of Director, Health Care Investment Banking, at Deutsche Bank Securities, a leading global investment bank, where for approximately eight years he was responsible for executing and managing a wide variety of financing and merger and acquisition transactions in the life sciences field. Mr. Cooper has earned a C.P.A., holds a B.A. in Economics from the University of California at Berkeley and an M.B.A. from the Stanford Graduate School of Business.

Stephen M. Kelsey, M.D., F.R.C.P., F.R.C.Path., has served as our Executive Vice President and Chief Medical Officer, Oncology since April 2009. From June 2002 until April 2009, Dr. Kelsey held various positions at Genentech, Inc., a leading biotechnology company (now a member of the Roche group), most recently as vice president, clinical hematology/oncology. From June 2000 to June 2002, Dr. Kelsey was the director of clinical affairs at Pharmacia Corporation (SUGEN, Inc.) in South San Francisco and director of global clinical development

(oncology) at Pharmacia Corporation, a global pharmaceutical company, in Milan, Italy. From July 1993 to June 2000, Dr. Kelsey served as a senior lecturer in hematology/oncology at St. Bartholomews and the Royal London School of Medicine and Dentistry and visiting fellow at Vancouver General Hospital and Terry Fox Laboratories. Dr. Kelsey earned his B.Sc. in Pharmacology, M.B., Ch.B., and Doctorate of Medicine (M.D.) degrees from the University of Birmingham in the United Kingdom.

Stephen N. Rosenfield, J.D., has served as our Executive Vice President, General Counsel and Corporate Secretary since February 2012, General Counsel and Secretary since January 2012 and Secretary since October 2011. From July 2009 to February 2012, Mr. Rosenfield has been a consultant to private companies. From October 2008 until June 2009, Mr. Rosenfield was the General Counsel and Secretary of Tercica, Inc., a U.S. subsidiary of Ipsen, SA., a global pharmaceutical company. From June 2004 until October 2008, Mr. Rosenfield was the General Counsel and Secretary of Tercica, Inc., an endocrinology-oriented biopharmaceutical company, from January 2006 until October 2008, he was also the Executive Vice President of Legal Affairs, and from June 2004 until January 2006, Mr. Rosenfield was the Senior Vice President of Legal Affairs. Prior to joining Tercica, Mr. Rosenfield served as the Executive Vice President of Legal Affairs, General Counsel and Secretary of InterMune, Inc., a biotechnology company focused in pulmonology and fibrotic diseases. Prior to joining InterMune, Mr. Rosenfield was an attorney at Cooley Godward LLP, an international law firm, where he served as outside counsel for biotechnology and technology clients. Mr. Rosenfield received a B.S. from Hofstra University and a J.D. from Northeastern University School of Law.

David J. Earp, J.D., Ph.D., has served as our Senior Vice President, Corporate Transactions, and Chief Legal Officer since May 2011. He is also a director of our wholly owned subsidiary, Geron Bio-Med, Ltd. and Executive Chairman of ViaGen, Inc., a Geron affiliate. From May 2004 until May 2011, Dr. Earp served as our Senior Vice President, Business Development and Chief Patent Counsel. From October 1999 until May 2004, he served as our Vice President, Intellectual Property. Prior to joining Geron, Dr. Earp was a partner at the intellectual property law firm of Klarquist Sparkman, LLP. Dr. Earp holds a B.Sc. in microbiology from the University of Leeds, England, a Ph.D. from the biochemistry department of The University of Cambridge, England, and conducted postdoctoral research at the University of California at Berkeley/U.S.D.A. Plant Gene Expression Center. He received his J.D. from the Northwestern School of Law of Lewis and Clark College.

Melissa A. Kelly Behrs has served as our Senior Vice President, Strategic Portfolio Management and Product Development and Manufacturing, since May 2011. She served as Senior Vice President, Therapeutic Development, Oncology from January 2007 until May 2011, and as Vice President, Oncology from January 2003 until January 2007. From April 2002 until January 2003, Ms. Behrs served as our Vice President, Corporate Development. From April 2001 until April 2002, Ms. Behrs served as our General Manager, Research and Development Technologies. Ms. Behrs joined us in November 1998 as Director of Corporate Development. From 1990 to 1998, Ms. Behrs worked at Genetics Institute, Inc., a biotechnology research and development company, serving initially as Assistant Treasurer and then as Associate Director of Preclinical Operations where she was responsible for all business development, regulatory, and project management activities for the Preclinical Development function. Ms. Behrs received a B.S. from Boston College and an M.B.A. from Babson College.

Melanie I. Nallicheri has served as our Senior Vice President, Corporate Development, since joining us in April 2011. Prior to Geron, Melanie was a partner and senior member of the global health team at Booz & Company/Booz Allen Hamilton, a management and technology consulting firm. She joined Booz in 1993 and advised clients across all sectors of healthcare, including large pharma, bio-pharmaceutical companies, payors and providers in both the U.S. and Europe. The focus of her work was on commercialization strategies, strategic planning, corporate strategy including M&A, due diligence, payor/provider economics and performance improvement. Ms. Nallicheri received an M.S. in Business and Economics from the WHU Otto Beisheim School in Germany and an M.B.A from Columbia Business School.

Olivia K. Bloom has served as our Vice President since January 2007, Chief Accounting Officer since September 2010 and Treasurer since February 2011. Ms. Bloom was Controller from 1996 to 2011 and joined Geron in 1994 as a Senior Financial Analyst. Prior to Geron, Ms. Bloom started her career in public accounting at KPMG Peat Marwick, a Big 4 audit, tax and advisory firm, and became a Certified Public Accountant in 1994. Ms. Bloom graduated Phi Beta Kappa with a B.S. in Business Administration from the University of California at Berkeley.

Employees

As of December 31, 2011, we had 178 employees of whom 48 held Ph.D. degrees and 49 held other advanced degrees, most of whom were engaged in full-time research and development activities. After giving effect to the restructuring we implemented on November 14, 2011, as of February 1, 2012, we had 111 full-time employees, 29 of whom held Ph.D. degrees and 35 of whom held other advanced degrees. Of this current total workforce, 80 employees were engaged in, or directly supported, our research and development activities and 31 employees were engaged in business development, legal, finance and administration. In addition, as of February 1, 2012, we continued to employ on a full-time basis 14 employees impacted by the November 2011 restructuring who are primarily facilitating the transition of our research and development activities for our stem cell programs and are discontinuing employment with us through various dates in the first half of 2012. We also retain outside consultants. None of our employees are covered by a collective bargaining agreement, nor have we experienced work stoppages. We consider relations with our employees to be good.

Corporate Information

Geron Corporation was incorporated in the State of Delaware on November 28, 1990.

Available Information

Our internet address is www.geron.com. Information included on our website is not part of this Form 10-K. We make available free of charge on our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission (SEC). In addition, copies of our annual reports are available free of charge upon written request. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is www.sec.gov.

ITEM 1A. RISK FACTORS

Our business is subject to various risks, including those described below. You should carefully consider these risk factors, together with all of the other information included in this Form 10-K. Any of these risks could materially adversely affect our business, operating results and financial condition.

RISKS RELATED TO OUR BUSINESS

Our business is at an early stage of development, and we must overcome numerous risks and uncertainties to become successful.

Our business is at an early stage of development, in that we do not yet have product candidates in late-stage clinical trials or commercially available. Our ability to develop product candidates that progress to and through commercial launch is subject to our ability to, among other things:

- achieve success in Phase 2 and Phase 3 clinical trials;
- collaborate successfully with clinical trial sites, academic institutions, physician investigators, clinical research organizations and other third parties;
- manufacture product candidates at commercially reasonable costs;
- obtain required regulatory clearances and approvals;
- maintain and enforce adequate intellectual property protection for our product candidates; and
- obtain financing on commercially reasonable terms to fund our operations.

There are many reasons why we may need to delay or abandon efforts to research, develop or obtain regulatory approvals to market our product candidates. Our product candidates require significant clinical testing prior to regulatory approval in the United States and other countries. It may also be difficult to assess the success or failure of any of our clinical trials for many reasons, including but not limited to the subjectivity and changing landscape that accompanies the benefit-to-risk assessment in any given patient population, and because subpopulation data might not be available at the time we report top-line data or other results. Our product candidates also may prove to have undesirable and unintended side effects or other characteristics adversely affecting their safety, efficacy

or cost-effectiveness that could prevent or limit their approval for marketing and successful commercial use. In addition, they may not prove to be more effective for treating disease than current therapies. Competitors may also have proprietary rights that prevent us from developing and marketing our products, or those competitors may sell similar, superior or lower-cost products that make our products unsuitable for marketing. Our product candidates also may not be able to be manufactured in commercial quantities at an acceptable cost. All of the foregoing factors could delay or prevent us from commercializing and marketing our product candidates, which would materially adversely affect our business.

Our research and development programs are subject to numerous risks and uncertainties.

The science and technology of telomere biology and telomerase, as well as receptor-targeting peptides that cross the blood-brain barrier (BBB), are relatively new. There is no precedent for the successful commercialization of therapeutic product candidates based on these technologies. In addition, we, our licensees, and our collaborators must undertake significant research and development activities to develop product candidates based on these technologies, which will require additional funding and may take years to accomplish, if ever.

Because of the significant scientific, regulatory and commercial milestones that must be reached for any of our research and development programs to be successful, any program may be delayed or abandoned, even after we have expended significant resources on it. Such a delay or abandonment of our programs in telomerase technology or receptor-targeting peptide technology to cross the BBB**,** would have a material adverse effect on our business.

In our Phase 1 clinical trials of imetelstat, we observed dose-limiting toxicities, including thrombocytopenia when the drug was used as a single agent, and neutropenia when the drug was used in combination with paclitaxel, as well as a low incidence of severe infusion reactions. We also did not observe single-agent efficacy with imetelstat in our Phase 1 program. Further, the information we have related to the ability of GRN1005 to penetrate brain tissue and its anti-tumor activity is preliminary and based on Phase 1 clinical trials conducted by Angiochem. In the Phase 1 trials of GRN1005, Grade 4 neutropenia was the primary dose-limiting toxicity observed. In our Phase 2 clinical trials of imetelstat or GRN1005, we may observe similar dose-limiting toxicities or other safety issues which may require us to conduct additional, unforeseen trials or abandon these programs entirely.

If we are not able to divest our stem cell assets for substantial financial value, or at all, the proceeds of the divestiture will be limited and our stock price may decline.

Our stem cell programs are at an early stage of development, and we can give no assurance regarding the consideration we will receive, if any, for their disposition. In addition, some of our investors purchased shares of our common stock because they were interested in the opportunities presented by our human embryonic stem cell programs. Thus, certain stockholders attribute substantial financial value to our stem cell assets, and that we will receive such value through the divestiture of the stem cell programs. However, we can give no assurance that we will receive the financial value that these stockholders may attribute to our stem cell assets, or any financial value at all, and, as a result, our stock price may decline.

RISKS RELATED TO CLINICAL AND COMMERCIALIZATION ACTIVITIES

Our ability to complete ongoing clinical trials on a timely basis is subject to risks and uncertainties related to factors such as patient enrollment, drug supply and regulatory approval.

Completion of ongoing clinical trials of our product candidates may be delayed, or not occur, due to insufficient patient enrollment, which is a function of many factors, including the size and nature of the patient populations, the nature of the protocols, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease, and the eligibility criteria for the clinical trials. Other delays could be caused by:

- disruptions in drug supply;
- not receiving timely regulatory clearances or approvals, including, for example, acceptance of new manufacturing specifications by regulatory authorities;
- unavailability of any study-related treatment (including comparator therapy); or
- unanticipated issues with key vendors of clinical services, such as contract research organizations.

For example, enrollment in our Phase 2 trials of imetelstat in multiple myeloma and essential thrombocythemia has been slower than expected and with respect to our clinical studies of GRN1005, we have aggressive enrollment goals. Delays in timely completion of clinical testing of our product candidates could increase research and development costs and could prevent or would delay us from obtaining regulatory approval for our product candidates, both of which would likely have a material adverse effect on our business. Additionally, we can give no assurance that our enrollment goals will be met as we have projected, or at all.

Delays in the initiation of later-stage clinical testing of our current product candidates could result in increased costs to us and would delay our ability to generate revenues.

The commencement of later-stage clinical trials can be delayed for a variety of reasons, including delays in:

- demonstrating sufficient safety and efficacy in Phase 2 clinical trials to obtain regulatory clearance to commence a Phase 3 clinical trial;
- obtaining sufficient funding;
- manufacturing sufficient quantities of drug;
- producing drugs that meet the quality standards of the FDA and other regulatory agencies;
- ensuring our ability to manufacture drugs at acceptable costs for later-stage clinical trials and commercialization;
- obtaining clearance or approval of a proposed trial design or manufacturing specifications from the FDA and other regulatory authorities;
- reaching agreement on acceptable terms with our collaborators on all aspects of the clinical trial, including the contract research organizations and the trial sites; and
- obtaining institutional review board approval to conduct a clinical trial at a prospective site.

We may not be able to manufacture at costs or scales necessary to conduct our clinical programs or potential future commercialization activities.

Our product candidates are likely to be more expensive to manufacture than most other treatments currently available today or that may be available in the future. The commercial cost of manufacturing imetelstat and GRN1005 will need to be significantly lower than our current costs in order for these product candidates to become commercially successful products. Oligonucleotides are relatively large molecules produced using complex chemistry, and the cost of manufacturing an oligonucleotide like imetelstat is greater than the cost of making typical small-molecule drugs. Our present imetelstat manufacturing processes are conducted at a relatively modest scale appropriate for Phase 2 clinical trials. Similarly, our GRN1005 manufacturing processes are currently conducted at a relatively small scale, and there is also limited history of manufacturing of GRN1005. Accordingly, we can provide no assurance that we will uar4(n)-e clscialm(l)7(y s)-7(u)-3(c)-7(c)-6(e)-o38rolf scro2lhesanuo(l)-2(t)-61(n)319(nn-

Our ability to manufacture our product candidates and products is risky and uncertain because we must rely on third parties for manufacturing. There may be shortages of key materials, and we may have only one source of manufacture or supply.

We rely on other companies for certain process development, supply of starting materials, manufacturing or other technical and scientific work with respect to our imetelstat and GRN1005 product candidates, but we do not have direct control over their personnel or operations. If these companies do not perform the work which they were assigned or do not complete the work within the expected timelines, or if they choose to exit the business, our ability to develop or manufacture our product candidates could be significantly harmed. For example, we may need to change one or more of our suppliers due to these or other reasons and the change could lead to delays in drug supply. In addition, we have not established long-term agreements for the supply of imetelstat or GRN1005.

In addition, our manufacturers may need to make substantial investments to enable sufficient capacity increases, cost reductions, and to implement those regulatory and compliance standards necessary for successful Phase 3 trials and commercial production. We can provide no assurance that our manufacturers will achieve such capacity increases, cost reductions, or regulatory and compliance standards, and even if they do, that such achievements will be at a commercially reasonable cost to us.

There are other risks and uncertainties that we face with respect to manufacturing. For example, we do not have a secondary source for the supply of GRN1005 bulk drug substance (unformulated peptide-paclitaxel conjugate). In addition, we currently have an agreement with only a single contractor for distribution of imetelstat and GRN1005 final drug product to clinical sites in North America. As another example, certain commonly used reagents and solvents can experience market shortages and, if these shortages occur, they may adversely impact our ability to manufacture our product candidates.

Our reliance on the activities of our consultants, research institutions, and scientific contractors, whose activities are not wholly within our control, may lead to delays in development of our product candidates.

We rely extensively upon and have relationships with scientific consultants and contractors at academic and other institutions. Some of our scientific consultants and contractors conduct research at our request, and others assist us in formulating our research and development and clinical strategy or other matters. These consultants and contractors are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. We have limited control over the activities of these consultants and contractors and, except as otherwise required by our collaboration and consulting agreements, can expect only limited amounts of their time to be dedicated to our activities.

In addition, we have formed research collaborations with many academic and other research institutions throughout the world. These research facilities may have commitments to other commercial and noncommercial entities. We have limited control over the operations of these laboratories and can expect only limited amounts of their time to be dedicated to our research goals.

If any of these third parties are unable or refuse to contribute to projects on which we need their help, our ability to generate advances in our technologies and develop our product candidates could be significantly harmed.

RISKS RELATED TO OUR FINANCIAL POSITION AND NEED FOR ADDITIONAL FINANCING

We have a history of losses and anticipate future losses, and continued losses could impair our ability to sustain operations.

We have incurred operating losses every year since our operations began in 1990. As of December 31, 2011, our accumulated deficit was approximately $785.5 million. Losses have resulted principally from costs incurred in connection with our research and development activities and from general and administrative costs associated with our operations. We expect to incur additional operating losses and, as our development efforts and clinical testing activities continue, our operating losses may increase in size.

Substantially all of our revenues to date have been research support payments under collaboration agreements and revenues from our licensing arrangements. We may be unsuccessful in entering into any new corporate collaboration or license agreements that result in revenues. We do not expect that the revenues generated from these arrangements will be sufficient alone to continue or expand our research or development activities and otherwise sustain our operations.

While we receive royalty revenue from licenses, we do not expect to receive sufficient royalty revenues from these licenses to independently sustain our operations. Our ability to continue or expand our research and development activities and otherwise sustain our operations is dependent on our ability, alone or with others, to, among other things, discover, develop, manufacture and market therapeutic products.

We also expect to experience negative cash flow for the foreseeable future as we fund our operating losses and capital expenditures. This will result in decreases in our working capital, total assets and stockholders' equity, which may not be offset by future financings. We will need to generate significant revenues to achieve profitability. We may not be able to generate these revenues, and we may never achieve profitability. Our failure to achieve profitability could negatively impact the market price of our common stock and our ability to sustain operations. Even if we do become profitable, we cannot assure you that we would be able to sustain or increase profitability on a quarterly or annual basis.

We will need additional capital to conduct our operations and develop our product candidates, and our ability to obtain the necessary funding is uncertain.

We will require substantial capital resources in order to conduct our operations and develop our product candidates, and we cannot assure you that our existing capital resources, interest income and equipment financing arrangement will be sufficient to fund future planned operations. The timing and degree of any future capital requirements will depend on many factors, including:

- the accuracy of the assumptions underlying our estimates for our capital needs for 2012 and beyond;
- changes in our clinical development plans for our product candidates, imetelstat and GRN1005;
- our ability to meaningfully reduce manufacturing costs of current product candidates;
- the magnitude and scope of our research and development programs, including the number and type of product candidates we intend to pursue;
- the progress we make in our research and development programs, preclinical development and clinical trials;
- our ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- the timing of a divesture of or partnering for our stem cell program assets and the consideration we may receive as result of such divesture or partnering transaction;
- the time and costs involved in obtaining regulatory approvals and clearances; and
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims.

Additional financing through strategic collaborations, public or private equity financings, capital lease transactions or other financing sources may not be available on acceptable terms, or at all. The receptivity of the public and private equity markets to proposed financings is substantially affected by the general economic, market and political climate and by other factors which are unpredictable and over which we have no control. Additional equity financings, if we obtain them, could result in significant dilution to our stockholders. Further, in the event that additional funds are obtained through arrangements with collaborative partners, these arrangements may require us to relinquish rights to some of our technologies, product candidates or proposed products that we would otherwise seek to develop and commercialize ourselves. If sufficient capital is not available, we may be required to delay, reduce the scope of, suspend or eliminate one or more of our programs, any of which could have a material adverse effect on our business. For example, in November 2011 we announced that we were discontinuing further development of our human embryonic stem cell programs in order to focus on our oncology programs.

RISKS RELATED TO PROTECTING OUR INTELLECTUAL PROPERTY

Our success will depend on our ability to protect our technologies and our product candidates through patents and other intellectual property rights and to operate without infringing the rights of others. If we or our licensors are unsuccessful in either of these regards, the value of our technologies and product candidates will be adversely affected and we may be unable to continue our development work.

Protection of our proprietary technology is critically important to our business. Our success will depend in part on our ability to obtain and enforce our patents and maintain trade secrets, both in the United States and in other countries. By way of example, we do not yet have issued patents for GRN1005 in Europe or Japan, or for imetelstat in Europe after 2020. Further, our patents may be challenged, invalidated or circumvented, and our patent rights may not provide proprietary protection or competitive advantages to us. In the event that we or our licensors are unsuccessful in obtaining and enforcing patents, we may not be able to further develop or commercialize our product candidates and our business would be negatively impacted. By way of example, we depend in part on the ability of Angiochem to obtain, maintain and enforce patent rights for the proprietary peptide-drug conjugate technology that we have licensed.

Publication of discoveries in scientific or patent literature tends to lag behind actual discoveries by at least several months and sometimes several years. Therefore, the persons or entities that we or our licensors name as inventors in our patents and patent applications may not have been the first to invent the inventions disclosed in the patent applications or patents, or the first to file patent applications for these inventions. As a result, we may not be able to obtain patents for discoveries that we otherwise would consider patentable and that we consider to be extremely significant to our future success.

The patent positions of pharmaceutical and biopharmaceutical companies, including ours, are highly uncertain and involve complex legal and technical questions. In particular, legal principles for biotechnology and pharmaceutical patents in the United States and in other countries are evolving, and the extent to which we will be able to obtain patent coverage to protect our technology, or enforce issued patents, is uncertain.

If we infringe the patents of others, we may be blocked from continuing development work or be required to obtain licenses on terms that may impact the value of our product candidates.

Challenges to our patent rights can result in costly and time-consuming legal proceedings that may prevent or limit development of our product candidates.

Our patents may be challenged through administrative or judicial proceedings. Such proceedings are typically lengthy and complex, and an adverse decision can result in the loss of important patent rights. For example, where more than one party seeks U.S. patent protection for the same technology, the Patent Office may declare an interference proceeding in order to ascertain the party to which the patent should be issued. Patent interferences are typically complex, highly contested legal proceedings, subject to appeal. They are usually expensive and prolonged, and can cause significant delay in the issuance of patents. Notably, under the America Invents Act (AIA) signed into law in September 2011, interference proceedings will be eliminated in March 2013, to be replaced with other types of proceedings, including post-grant review procedures. Until such time, our pending patent applications, or our issued patents, may be drawn into interference proceedings which may delay or prevent the issuance of patents, or result in the loss of issued patent rights.

Certain jurisdictions, such as Europe, New Zealand and Australia, permit oppositions to be filed against granted patents or patents proposed to be granted. Because our intent is to commercialize products internationally, securing both proprietary protection and freedom to operate outside of the United States is important to our business. We are involved in both opposing the grant of patents to others through such opposition proceedings and in defending our patent applications against oppositions filed by others. For example, we have been involved in several patent oppositions before the EPO with a series of companies (GemVax, Pharmexa and KAEL-GemVax) developing GV1001, a cancer vaccine that employs a short telomerase peptide to induce an immune response against telomerase. The rights to GV1001 passed from GemVax, a Norwegian company, to Pharmexa, a Danish company, as a result of a 2005 acquisition. In late 2008, Pharmexa reported that it sold its telomerase vaccine program to a Korean company, KAEL Co. Ltd., and the continuing company now operates under the name KAEL-GemVax. Various clinical studies of GV1001 are underway, including a Phase 3 combination study in pancreatic cancer. Pharmexa originally obtained a European patent with broad claims to the use of telomerase vaccines for the

treatment of cancer, and we opposed that patent in 2004. In 2005, the Opposition Division (OD) of the EPO revoked the claims originally granted to Pharmexa, but permitted Pharmexa to add new, narrower claims limited to five specific small peptide fragments of telomerase. The decision was appealed to the Technical Board of Appeals (TBA). In August 2007, the TBA ruled, consistent with the decision of the OD, that Pharmexa was not entitled to the originally granted broad claims but was only entitled to the narrow claims limited to the five small peptides. KAEL-GemVax was recently granted a further related European patent covering its telomerase peptide vaccine against which we have filed an opposition. That opposition is ongoing and we cannot predict the outcome.

In parallel, Pharmexa opposed a European patent held by us, the claims of which cover many facets of human telomerase, including the use of telomerase peptides in cancer vaccines. In June 2006, the OD of the EPO revoked three of the granted claims in our patent, specifically the three claims covering telomerase peptide cancer vaccines. The remaining 47 claims were upheld, and that decision was recently affirmed by the TBA. We have now been awarded a second European patent with claims to telomerase peptides, and this patent has also been opposed by KAEL-GemVax. We believe that GV1001 is covered by our telomerase patents and our goal in these proceedings is to maintain strong patent protection that will enable us to enter into a licensing arrangement with KAEL-GemVax that could result in commercial benefit for Geron if GV1001 is successfully commercialized. We cannot predict the outcome of this opposition or any subsequent appeal of the decision in the opposition.

European opposition and appeal proceedings can take several years to reach final decision. The oppositions discussed above reflect the complexity of the patent landscape in which we operate, and illustrate the risks and uncertainties. We are also currently involved in other patent opposition proceedings in Europe and Australia.

Under the AIA, effective in March 2013, U.S. patents will be subject to post-grant review procedures similar to European oppositions. Patents owned or licensed by us may therefore be subject to post-grant review procedures, as well as other forms of review and reexamination. A decision in such proceedings adverse to our interests could result in the loss of valuable patent rights and negatively impact our business.

As more groups become engaged in scientific research and product development in the areas of telomerase biology and peptide-drug conjugates for delivery of therapeutics across the BBB, the risk of our patents being challenged through patent interferences, oppositions, reexaminations, litigation or other means will likely increase. Challenges to our patents through these procedures can be extremely expensive and time-consuming, even if the outcome is favorable to us. An adverse outcome in a patent dispute could severely harm our business by:

- causing us to lose patent rights in the relevant jurisdiction(s);
- subjecting us to litigation, or otherwise preventing us from commercializing product candidates in the relevant jurisdiction(s);
- requiring us to obtain licenses to the disputed patents;
- forcing us to cease using the disputed technology; or
- requiring us to develop or obtain alternative technologies.

By way of example, an anonymous party has recently filed papers at the European Patent Office challenging the proposed issuance of a patent to Angiochem that is relevant to GRN1005. If such challenges to our patent rights covering our drug candidates are not resolved promptly in our favor, our existing business relationships may be jeopardized and we could be delayed or prevented from entering into new collaborations or from commercializing certain products, which could materially harm our business.

If we fail to meet our obligations under license agreements, we may lose our rights to key technologies on which our business depends.

Our business depends on several critical technologies that are based in part on patents licensed from third parties, including the exclusive worldwide license rights we obtained from Angiochem in December 2010. Those third-party license agreements impose obligations on us, such as payment obligations and obligations to diligently pursue development of commercial products under the licensed patents. If a licensor believes that we have failed to meet our obligations under a license agreement, the licensor could seek to limit or terminate our license rights, which could lead to costly and time-consuming litigation and, potentially, a loss of the licensed rights. During the

period of any such litigation our ability to carry out the development and commercialization of product candidates could be significantly and negatively affected. If our license rights were restricted or ultimately lost, our ability to continue our business based on the affected technology would be severely adversely affected.

We may be subject to infringement claims that are costly to defend, and which may limit our ability to use disputed technologies and prevent us from pursuing research and development or commercialization of product candidates.

Our commercial success depends significantly on our ability to operate without infringing patents and the proprietary rights of others. Our technologies may infringe the patents or proprietary rights of others. In addition, we may become aware of discoveries and technology controlled by third parties that are advantageous to our programs. In the event our technologies infringe the rights of others or we require the use of discoveries and technology controlled by third parties, we may be prevented from pursuing research, development or commercialization of product candidates or may be required to obtain licenses to those patents or other proprietary rights or develop or obtain alternative technologies. We have obtained licenses from several universities and companies for technologies that we anticipate incorporating into our product candidates, and we initiate negotiation for licenses to other technologies as the need or opportunity arises. We may not be able to obtain a license to patented technology on commercially favorable terms, or at all. If we do not obtain a necessary license, we may need to redesign our technologies or obtain rights to alternate technologies, the research and adoption of which could cause delays in our product development. In cases where we are unable to license necessary technologies, we could be prevented from developing certain product candidates. Our failure to obtain alternative technologies or a license to any technology that we may require to research, develop or commercialize our product candidates would significantly and negatively affect our business. By way of example, we are aware of at least one entity that is seeking to obtain patent claims that may, if granted, be argued to read on imetelstat. While such claims have not been issued, and may not be valid if they do issue, we expect that as our product candidates continue to progress in development, we will see more efforts by others to obtain patents that are positioned to cover our product candidates.

Much of the information and know-how that is critical to our business is not patentable, and we may not be able to prevent others from obtaining this information and establishing competitive enterprises.

We sometimes rely on trade secrets to protect our proprietary technology, especially in circumstances in which we believe patent protection is not appropriate or available. We attempt to protect our proprietary technology in part by confidentiality agreements with our employees, consultants, collaborators and contractors. We cannot provide assurance that these agreements will not be breached, that we would have adequate remedies for any breach, or that our trade secrets will not otherwise become known or be independently discovered by competitors, any of which would harm our business significantly.

Our ability to divest our stem cell programs, and the value that we receive from any such arrangements depends at least in part on the strength of our hESC-related intellectual property.

We developed an extensive portfolio of Geron-owned patent filings covering our prior development of hESC technologies, as well as patents that we licensed from other parties. This intellectual property is a substantial component of the stem cell assets that we are seeking to divest. Our ability to divest our hESC programs, and the value that we receive will depend in part on the strength, scope and term of the patents in our hESC portfolio, as well as our ability to maintain our license rights to the patents that we licensed from third parties. Legal developments and proceedings that may impact the value of our hESC patent portfolio include:

- *European court ruling:* In 2011, the European Court of Justice (ECJ) rendered a decision in a case known as Brüstle v. Greenpeace that is widely viewed to have effectively abolished the ability to enforce patents on hESC technologies in member states of the European Union (EU). This decision may reduce the value of our hESC patent portfolio in a partnering deal.
- *Patent interferences:* Two of our patent applications covering the production of endoderm from hESCs (part of the process for making pancreatic islet cells) are involved in interferences with patents held by ViaCyte, Inc. A number of outcomes are possible: (i) the claims may be awarded to ViaCyte; (ii) the claims may be awarded to us, or (iii) neither party may be found to be entitled to the claims. The decision from the Patent Office may also be subject to appeal. Since the interferences are still ongoing, we cannot predict what the outcome will be.

- *Reexaminations:* In July 2006, requests were filed on behalf of the Foundation for Taxpayer and Consumer Rights (now renamed as Consumer Watchdog) for reexamination of three issued U.S. patents owned by the Wisconsin Alumni Foundation (WARF). These three patents (U.S. Patent Nos. 5,843,780, 6,200,806 and 7,029,913) are licensed to us pursuant to a January 2002 license agreement which conveys exclusive rights to us under the WARF patents for the development and commercialization of therapeutics based on neural cells, cardiomyocytes and pancreatic islet cells, derived from hESCs, as well as non-exclusive rights for other product opportunities. After initially rejecting the patent claims, the Patent Office issued decisions in all three cases upholding the patentability of the claims as amended. The decisions to uphold the 5,843,780 and 6,200,806 patents are final and not subject to further appeal. Consumer Watchdog appealed the decision on the 7,029,913 patent and, in April 2010, the Board of Patent Appeals and Interferences reversed the earlier decision of the Patent Office on the 7,029,913 patent and remanded the case back to the Patent Office for further prosecution. In November, 2011, the Patent Office again upheld the patentability of the claims. The case could be subject to further appeal.

RISKS RELATED TO COMPETITIVE FACTORS

The loss of key personnel could slow our ability to conduct research and develop product candidates.

Our future success depends to a significant extent on the skills, experience and efforts of our executive officers and key members of our clinical and scientific staff. We face intense competition for qualified individuals from numerous pharmaceutical, biopharmaceutical and biotechnology companies, as well as academic and other research institutions. We may be unable to retain our current personnel or attract or assimilate other highly qualified management and scientific personnel in the future on acceptable terms. The loss of any or all of these individuals could harm our business and might significantly delay or prevent the achievement of research, development or business objectives.

Some of our competitors may develop technologies that are superior to or more cost-effective than ours, which may significantly impact the commercial viability of our technologies and damage our ability to sustain operations.

The pharmaceutical and biotechnology industries are intensely competitive. Other pharmaceutical and biotechnology companies and research organizations currently engage in or have in the past engaged in efforts related to the biological mechanisms that are the focus of our programs in oncology therapies, including the study of telomeres, telomerase and receptor-targeting peptides crossing the BBB. In addition, other products and therapies that could directly compete with the product candidates that we are seeking to develop and market currently exist or are being developed by pharmaceutical and biopharmaceutical companies and by academic and other research organizations.

Many companies are developing alternative therapies to treat cancer and, in this regard, are competitors of ours. There are more than 200 approved anti-cancer products on the market in the United States, and several thousand in clinical development. Many of the pharmaceutical companies developing and marketing these competing products (e.g., GlaxoSmithKline, Bristol-Myers Squibb Company and Novartis AG) have significantly greater financial resources and expertise than we do in:

- research and development;
- manufacturing;
- preclinical and clinical testing;
- obtaining regulatory approvals; and
- marketing, sales and distribution.

Smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. Academic institutions, government agencies and other public and private research organizations may also conduct research, seek patent protection and establish collaborative arrangements for research, clinical development and marketing of products similar to ours. These companies and institutions compete with us in recruiting and retaining qualified scientific and management personnel as well as in acquiring technologies complementary to our programs.

In addition to the above factors, we expect to face competition in the following areas:

- product efficacy and safety;
- the timing and scope of regulatory consents;
- availability of resources;
- reimbursement coverage;
- price; and
- patent position, including potentially dominant patent positions of others.

As a result of the foregoing, our competitors may develop more effective or more affordable products, or achieve earlier patent protection or product commercialization than we do. Most significantly, competitive products may render any product candidates that we develop obsolete, which would negatively impact our business and ability to sustain operations.

To be successful, our product candidates must be accepted by the health care community, which can be very slow to adopt or unreceptive to new technologies and products.

Our product candidates and those developed by our collaborators, if approved for marketing, may not achieve market acceptance since hospitals, physicians, patients or the medical community in general may decide not to accept and utilize these products. The product candidates that we are attempting to develop will compete with a number of conventional drugs and therapies manufactured and marketed by major pharmaceutical companies. The degree of market acceptance of any of our developed product candidates will depend on a number of factors, including:

- our establishment and demonstration to the medical community of the clinical efficacy and safety of our product candidates;
- our ability to create products that are superior to alternatives currently on the market;
- our ability to establish in the medical community the potential advantage of our treatments over alternative treatment methods; and
- reimbursement policies of government and third-party payers.

If the health care community does not accept our product candidates for any of the foregoing reasons, or for any other reason, our business would be materially harmed.

If we fail to obtain acceptable prices or adequate reimbursement for our product candidates, the use of our product candidates could be severely limited.

Our ability to successfully commercialize our product candidates will depend significantly on our ability to obtain acceptable prices and the availability of reimbursement to the patient from third-party payers. In March 2010, the Patient Protection and Affordability Care Act, as amended by the Health Care and Education Affordability Reconciliation Act (collectively, the PPACA) became law. The PPACA contains numerous initiatives that impact the pharmaceutical industry. These include, among other things:

- increasing existing price rebates in federally funded health care programs;
- expanding rebates, or other pharmaceutical company discounts, into new programs;
- imposing a new non-deductible excise tax on sales of certain prescription pharmaceutical products by prescription drug manufacturers and importers;
- reducing incentives for employer-sponsored health care;
- creating an independent commission to propose changes to Medicare with a particular focus on the cost of biopharmaceuticals in Medicare Part D;
- providing a government-run public option with biopharmaceutical price-setting capabilities;

- allowing the Secretary of Health and Human Services to negotiate drug prices within Medicare Part D directly with pharmaceutical manufacturers;
- reducing the number of years of data exclusivity for innovative biological products potentially leading to earlier biosimilar competition; and
- increasing oversight by the FDA of pharmaceutical research and development processes and commercialization tactics.

While the PPACA may increase the number of patients who have insurance coverage for our product candidates, its cost containment measures could also adversely affect reimbursement for our product candidates. Cost control initiatives could decrease the price that we receive for any product candidate we may develop in the future. If our product candidates are not considered cost-effective or if we fail to generate adequate third-party reimbursement for the users of our product candidates and treatments, then we may be unable to maintain price levels sufficient to realize an appropriate return on our investment for product candidates currently in development, which could have an adverse impact on our business.

RISKS RELATED TO ENVIRONMENTAL AND PRODUCT LIABILITY

Our activities involve hazardous materials, and improper handling of these materials by our employees, contractors, or agents could expose us to significant legal and financial penalties.

Our research and development activities involve the controlled use of hazardous materials, chemicals and various radioactive compounds. As a consequence, we, our contractors and agents are subject to numerous environmental and safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of biohazardous materials. As an example, one of the components of GRN1005, paclitaxel, is considered a cytotoxic agent, which makes the manufacturing of GRN1005 subject to additional regulations, and limits the number of manufacturing facilities in which GRN1005 can be made. We, our contractors or agents may be required to incur significant costs to comply with current or future environmental laws and regulations and may be adversely affected by the cost of compliance with these laws and regulations.

Although we believe that our safety procedures for using, handling, storing and disposing of hazardous materials comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. In the event of such an accident, state or federal authorities could curtail our use of these materials and we, our contractors or agents could be liable for any civil damages that result, the cost of which could be substantial. Further, any failure by us to control the use, disposal, removal or storage, or to adequately restrict the discharge, or assist in the clean up, of hazardous chemicals or hazardous, infectious or toxic substances could subject us to significant liabilities, including joint and several liability under certain statutes. Any such liability could exceed our resources and could have a material adverse effect on our business, financial condition and results of operations. Additionally, an accident could damage our research and manufacturing facilities and operations.

Additional federal, state and local laws and regulations affecting us may be adopted in the future. We, our contractors and agents may incur substantial costs to comply with these laws and regulations and substantial fines or penalties if we violate any of these laws or regulations, which would adversely affect our business.

We may not be able to obtain or maintain sufficient insurance on commercially reasonable terms or with adequate coverage against potential liabilities in order to protect ourselves against product liability claims.

Our business exposes us to potential product liability risks that are inherent in the testing, manufacturing and marketing of human therapeutic and diagnostic products. We may become subject to product liability claims if the use of our product candidates is alleged to have injured subjects or patients. This risk exists for our product candidates currently being tested in human clinical trials as well as product candidates that are sold commercially in the future. We currently have limited clinical trial liability insurance and we may not be able to maintain this type of insurance for any of our clinical trials. In addition, product liability insurance is becoming increasingly expensive. Being unable to obtain or maintain product liability insurance in the future on acceptable terms or with adequate coverage against potential liabilities could have a material adverse effect on our business.

Provisions of Delaware law may also inhibit potential acquisition bids for us or prevent us from engaging in business combinations. In addition, we have severance agreements with several employees and a change of control severance plan which could require an acquiror to pay a higher price. Either collectively or individually, these provisions may prevent holders of our common stock from benefiting from what they may believe are the positive aspects of acquisitions and takeovers, including the potential realization of a higher rate of return on their investment from these types of transactions.

We do not intend to pay cash dividends on our common stock in the foreseeable future.

We do not anticipate paying cash dividends on our common stock in the foreseeable future. Any payment of cash dividends will depend upon our financial condition, results of operations, capital requirements and other factors and will be at the discretion of our Board of Directors.

Failure to achieve and maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act of 2002 could have a material adverse effect on our business and stock price.

Section 404 of the Sarbanes-Oxley Act of 2002 (the Sarbanes-Oxley Act) requires that we establish and maintain an adequate internal control structure and procedures for financial reporting. Our annual report on Form 10-K must contain an assessment by management of the effectiveness of our internal control over financial reporting and must include disclosure of any material weaknesses in internal control over financial reporting that we have identified. In addition, our independent registered public accounting firm must annually provide an opinion on the effectiveness of our internal control over financial reporting.

The requirements of Section 404 of the Sarbanes-Oxley Act are ongoing and also apply to future years. We expect that our internal control over financial reporting will continue to evolve as our business develops. Although we are committed to continue to improve our internal control processes and we will continue to diligently and vigorously review our internal control over financial reporting in order to ensure compliance with Section 404 requirements, any control system, regardless of how well designed, operated and evaluated, can provide only reasonable, not absolute, assurance that its objectives will be met. Therefore, we cannot be certain that in the future material weaknesses or significant deficiencies will not exist or otherwise be discovered. If material weaknesses or other significant deficiencies occur, these weaknesses or deficiencies could result in misstatements of our results of operations, restatements of our consolidated financial statements, a decline in our stock price, or other material adverse effects on our business, reputation, results of operations, financial condition or liquidity.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We currently lease approximately 41,000 square feet of office space at 200 and 230 Constitution Drive, and 14,500 square feet of office space at 149 Commonwealth Drive, all in Menlo Park, California. The leases for 200 and 230 Constitution Drive and 149 Commonwealth Drive expire in July 2012. We have an option to extend the leases at 200 and 230 Constitution Drive for one additional period of four years. We plan to extend our lease at 200 Constitution Drive, but we do not plan to extend our lease at 230 Constitution Drive. In March 2008, as payment of the total rent due for the premises at 200 and 230 Constitution Drive, we issued 742,158 shares of our common stock to the lessor of those premises. In January 2010 and April 2010, as payment for the total rent due for the premises at 149 Commonwealth Drive, we issued an aggregate of 187,999 shares of our common stock to the lessor of those premises. As a result, we have no cash rental obligation for our existing facilities through July 31, 2012. In February 2012, we entered into a new lease agreement at 149 Commonwealth Drive which expands the current space from 14,500 square feet to approximately 30,000 square feet of office space. Our new lease at 149 Commonwealth Drive includes an option to extend the lease for one additional period of two years. The new lease at 149 Commonwealth Drive commences in July 2012 and expires in July 2014. We believe that our proposed facilities are adequate to meet our requirements for the near term.

ITEM 3. LEGAL PROCEEDINGS

None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

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

Market Information

Our common stock is quoted on the Nasdaq Global Select Market under the symbol GERN. The high and low closing sales prices as reported by the Nasdaq Global Select Market of our common stock for each of the quarters in the years ended December 31, 2011 and 2010 were as follows:

	High	Low
Year ended December 31, 2011		
First quarter	$ 5.36	$ 4.70
Second quarter	$ 5.18	$ 3.86
Third quarter	$ 4.39	$ 2.11
Fourth quarter	$ 2.58	$ 1.37
Year ended December 31, 2010		
First quarter	$ 6.57	$ 5.26
Second quarter	$ 6.15	$ 4.94
Third quarter	$ 6.07	$ 4.54
Fourth quarter	$ 6.37	$ 4.72

As of February 22, 2012, there were approximately 743 stockholders of record of our common stock. This number does not include "street name" or beneficial holders, whose shares are held of record by banks, brokers and other financial institutions. We are engaged in a highly dynamic industry, which often results in significant volatility of our common stock price. On February 22, 2012, the closing sales price for our common stock was $1.96 per share.

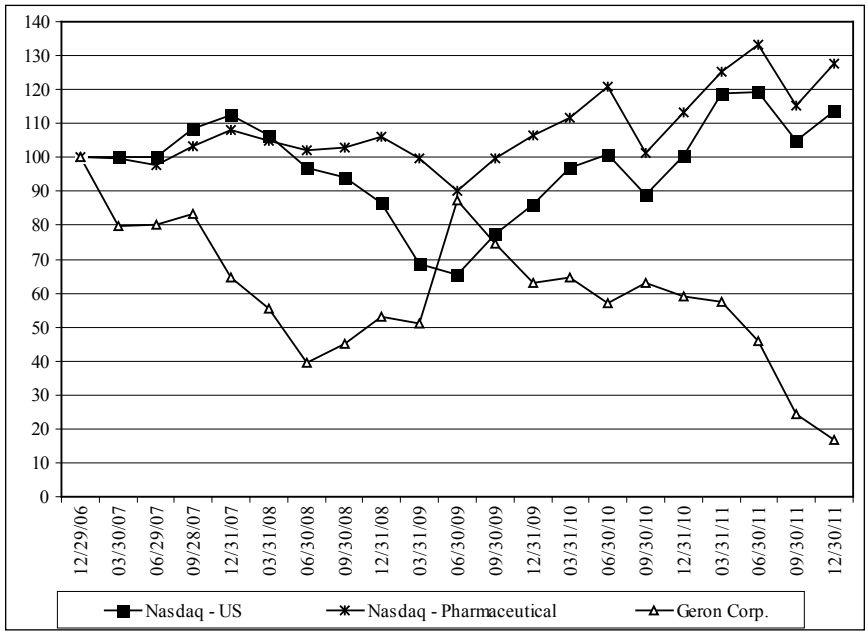
Dividend Policy

We have never paid cash dividends on our capital stock and do not anticipate paying cash dividends in the foreseeable future, but intend to retain our capital resources for reinvestment in our business. Any future determination to pay cash dividends will be at the discretion of the Board of Directors and will be dependent upon our financial condition, results of operations, capital requirements and other factors the Board of Directors deems relevant.

Performance Measurement Comparison [1]

The following graph compares total stockholder returns of Geron Corporation for the last five fiscal years beginning December 29, 2006 to two indices: the Nasdaq CRSP Total Return Index for the Nasdaq Stock Market-U.S. Companies (the Nasdaq-US) and the Nasdaq Pharmaceutical Index (the Nasdaq-Pharmaceutical). The total return for our stock and for each index assumes the reinvestment of dividends, although we have never declared dividends on Geron stock, and is based on the returns of the component companies weighted according to their capitalizations as of the end of each quarterly period. The Nasdaq-US tracks the aggregate price performance of equity securities of U.S. companies traded on the Nasdaq Global Select Market (NGSM). The Nasdaq-Pharmaceutical, which is calculated and supplied by Nasdaq, represents pharmaceutical companies, including biotechnology companies, trading on Nasdaq under the Standard Industrial Classification (SIC) Code No. 283 Drugs main category (2833 — Medicinals & Botanicals, 2834 — Pharmaceutical Preparations, 2835 — Diagnostic Substances, 2836 — Biological Products). Geron common stock trades on the NGSM and is a component of both the Nasdaq-US and the Nasdaq-Pharmaceutical.

Comparison of Five Year Cumulative Total Return on Investment Among Geron Corporation, the Nasdaq-US Index and the Nasdaq-Pharmaceutical Index[2]



(1) This Section is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference in any filing of the Company under the Securities Act, or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

(2) Shows the cumulative total return on investment assuming an investment of $100 in each of Geron, the Nasdaq-US and the Nasdaq-Pharmaceutical on December 29, 2006. The cumulative total return on Geron stock has been computed based on a price of $8.78 per share, the price at which Geron's shares closed on December 29, 2006.

Recent Sales of Unregistered Securities

Pursuant to our Loan Agreement with the California Institute for Regenerative Medicine (CIRM), we were obligated to issue to CIRM a warrant to purchase our common stock in connection with each disbursement thereunder. In connection with the last disbursement received from CIRM on November 1, 2011, we issued to CIRM a warrant to purchase 461,382 shares of our common stock at an exercise price of $2.32 per share, the average closing sales prices of our common stock as reported by the Nasdaq Global Select Market for the ten consecutive trading days immediately preceding the disbursement. As of December 31, 2011, we have issued to CIRM warrants to purchase an aggregate of 999,275 shares of our common stock, and we have no further obligations to issue any additional warrants to CIRM. The issuances of warrants to CIRM were made in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

ITEM 6. SELECTED FINANCIAL DATA

	Year Ended December 31,				
	2011	2010	2009	2008	2007
	(In thousands, except share and per share data)				
Consolidated Statements of Operations Data:					
Revenues from collaborative agreements	$ 300	$ 925	$ 450	$ 294	$ 672
License fees and royalties	2,138	2,638	1,276	2,509	6,950
Total revenues	2,438	3,563	1,726	2,803	7,622
Operating expenses:					
Research and development	69,316	61,687	57,617	53,664	54,624
Acquired in-process research and development [1]	—	35,000	—	—	—
Restructuring charges [2]	5,449	—	—	—	—
General and administrative	23,789	18,043	14,343	16,183	15,837
Total operating expenses	98,554	114,730	71,960	69,847	70,461
Loss from operations	(96,116)	(111,167)	(70,234)	(67,044)	(62,839)
Unrealized gain on fair value of derivatives	643	190	157	418	15,453
Interest and other income	1,024	2,045	1,374	5,542	10,791
Losses recognized under equity method investment	(503)	(2,347)	(1,338)	(844)	—
Losses recognized from debt extinguishment [3]	(1,664)	—	—	—	—
Interest and other expense	(237)	(98)	(143)	(93)	(102)
Net loss	(96,853)	(111,377)	(70,184)	(62,021)	(36,697)
Deemed dividend on derivatives [4]	—	—	(190)	—	(9,081)
Net loss applicable to common stockholders	$ (96,853)	$ (111,377)	$ (70,374)	$ (62,021)	$ (45,778)
Basic and diluted net loss per share applicable to common stockholders:					
Net loss per share applicable to common stockholders	$ (0.78)	$ (1.14)	$ (0.80)	$ (0.79)	$ (0.62)
Shares used in computing net loss per share applicable to common stockholders	124,506,763	97,601,520	88,078,557	78,187,795	74,206,249

(1) On December 6, 2010, we and Angiochem, Inc. (Angiochem) entered into an Exclusive License Agreement that provides us with a worldwide exclusive license, with the right to grant sublicenses, to Angiochem's proprietary peptide technology that facilitates the transfer of anti-cancer compounds across the BBB to be used with tubulin disassembly inhibitors to enable the treatment of primary brain cancers and cancers that have metastasized to the brain. As consideration for the license rights, we paid Angiochem an upfront payment of $7.5 million in cash and issued to Angiochem 5,261,144 shares of common stock on January 5, 2011.

We acquired the license rights for Angiochem's proprietary receptor-targeting peptides for the clinical development of ANG1005 (now GRN1005), a novel taxane derivative for which Angiochem has performed two Phase 1 clinical trials in brain metastases and glioblastoma multiforme. We currently are conducting two Phase 2 clinical trials of GRN1005. Further clinical and process development of GRN1005 is required before any viable commercial application can be identified or utilized. We have concluded that this technology has no alternative future use, and accordingly, expensed the upfront payment of $35.0 million as acquired in-process research and development at the time of acquisition. See Note 11 on License Agreements in Notes to Consolidated Financial Statements of this Form 10-K.

(2) On November 14, 2011, we announced the decision to focus exclusively on the development of our oncology programs and consequently, we discontinued further development of our stem cell programs. With this decision, a total of 66 full-time positions were eliminated, representing approximately 38% of our workforce. In connection with the restructuring, we recorded aggregate restructuring charges of approximately $5.4 million, of which $4.6 million related to one-time termination benefits and $874,000 related to write-downs of excess lab equipment and leasehold improvements and other charges. See Note 7 on Restructuring in Notes to Consolidated Financial Statements of this Form 10-K.

(3) On November 14, 2011, we repaid the outstanding principal balance, including accrued interest, or Loan Balance, to the California Institute for Regenerative Medicine (CIRM), representing our entire Loan Balance under our Loan Agreement from CIRM. In addition, we relinquished our right to future disbursements from CIRM under the Loan Agreement and gave notice of termination. With the repayment of the entire outstanding Loan Balance, we have no further amounts owed to CIRM. In connection with the early termination of the CIRM Loan Agreement, we recognized a debt extinguishment charge of $1.7 million for the unamortized debt discount associated with the loan. See Note 8 on Long-Term Debt in Notes to Consolidated Financial Statements of this Form 10-K.

(4) In April 2009, in connection with our continued collaboration with an investor and licensee and the data received under the collaboration relevant to our therapeutic programs, we modified the terms of certain outstanding warrants held by this investor by extending the exercise term and reducing the exercise price. The exercise term of warrants to purchase 200,000 shares of common stock was extended to March 9, 2012 from March 9, 2010 and the exercise price was modified to $17.50 per share from $67.09 per share. The exercise term of warrants to purchase 100,000 shares of common stock was extended to March 9, 2012 from March 9, 2010 and the exercise price was unchanged at $12.50 per share. In connection with the modifications, we recognized a deemed dividend of approximately $190,000 for the incremental fair value of the modified warrants.

In February 2007, in exchange for the exercise of certain warrants, we issued new warrants to the same institutional investors. The aggregate fair value of $3.7 million for the new warrants was recognized as a deemed dividend. In December 2007, we modified the terms of certain outstanding warrants by extending the exercise term and reducing the exercise price. In connection with the modifications, we received $3.6 million in cash consideration from the institutional investors holding the outstanding warrants. We recognized a deemed dividend of $5.4 million for the incremental fair value of the modified warrants, net of the cash consideration received from the institutional investors for the modifications.

	December 31,				
	2011	2010	2009	2008	2007
			(In thousands)		
Consolidated Balance Sheet Data:					
Cash, restricted cash, cash equivalents and marketable securities	$ 154,239	$ 221,274	$ 167,070	$ 163,655	$ 208,444
Working capital	112,181	154,168	110,324	160,535	200,655
Total assets	160,047	233,584	180,382	176,218	218,896
Long-term obligations	—	—	—	—	427
Accumulated deficit	(785,503)	(688,650)	(577,267)	(506,893)	(444,872)
Total stockholders' equity	146,603	192,735	172,577	168,455	205,674

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

Overview

The following discussion should be read in conjunction with the audited consolidated financial statements and notes thereto included in Part II, Item 8 of this Annual Report on Form 10-K.

Geron is a biopharmaceutical company developing first-in-class therapies for cancer. Imetelstat, a telomerase inhibitor, is currently being evaluated in four Phase 2 clinical trials for the following indications: metastatic breast cancer, advanced non-small cell lung cancer, essential thrombocythemia and multiple myeloma. GRN1005, an LRP-directed peptide-drug conjugate, is being evaluated in two Phase 2 clinical trials: brain metastases arising from breast cancer and brain metastases arising from non-small cell lung cancer.

Critical Accounting Policies and Estimates

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Note 1 of Notes to Consolidated Financial Statements describes the significant accounting policies used in the preparation of the consolidated financial statements. Certain of these significant accounting policies are considered to be critical accounting policies, as defined below.

A critical accounting policy is defined as one that is both material to the presentation of our financial statements and requires management to make difficult, subjective or complex judgments that could have a material effect on our financial condition and results of operations. Specifically, critical accounting estimates have the following attributes: (i) we are required to make assumptions about matters that are highly uncertain at the time of the estimate; and (ii) different estimates we could reasonably have used, or changes in the estimate that are reasonably likely to occur, would have a material effect on our financial condition or results of operations.

Estimates and assumptions about future events and their effects cannot be determined with certainty. We base our estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as our operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they became known. Based on a critical assessment of our accounting policies and the underlying judgments and uncertainties affecting the application of those policies, management believes that our consolidated financial statements are fairly stated in accordance with accounting principles generally accepted in the United States, and meaningfully present our financial condition and results of operations.

We believe the following critical accounting policies reflect our more significant estimates and assumptions used in the preparation of our consolidated financial statements:

Revenue Recognition

Since our inception, a substantial portion of our revenues has been generated from research and licensing agreements. Revenue under such agreements typically includes upfront signing or license fees, cost reimbursements, milestone payments and royalties on future product sales.

We recognize nonrefundable signing, license or non-exclusive option fees as revenue when rights to use the intellectual property related to the license have been delivered and over the term of the agreement if we have continuing performance obligations. We recognize milestone payments, which are subject to substantive contingencies, upon completion of specified milestones, which represents the culmination of an earnings process, according to contract terms. Royalties are generally recognized as revenue upon the receipt of the related royalty payment. We recognize cost reimbursement revenue under collaborative agreements as the related research and development costs for services are rendered. We recognize related party revenue under collaborative agreements as the related party research and development costs for services are rendered and when the source of funds has not been derived from our contributions to the related party. Deferred revenue represents the portion of research or license payments received which has not been earned. When payments are received in equity securities, we do not recognize any revenue unless such securities are determined to be realizable in cash.

We estimate the projected future term of license agreements over which we recognize revenue. Our estimates are based on contractual terms, historical experience and general industry practice. Revisions in the estimated terms of these license agreements have the effect of increasing or decreasing license fee revenue in the period of revision. As of December 31, 2011, no revisions to the estimated future terms of license agreements have been made and we do not expect revisions to the currently active agreements in the future.

Valuation of Stock-Based Compensation

We measure and recognize compensation expense for all stock-based awards to our employees and directors, including stock options, restricted stock awards and employee stock purchases related to our Employee Stock Purchase Plan (ESPP) based on estimated fair values. We use the Black Scholes option-pricing valuation model to estimate the grant-date fair value of our stock options and employee stock plan purchases. Option-pricing model assumptions such as expected volatility, risk-free interest rate and expected term impact the fair value estimate.

Further, the estimated forfeiture rate impacts the amount of aggregate compensation recognized during the period. The fair value of stock options and employee stock purchases is amortized over the vesting period of the awards using a straight-line method.

Expected volatilities are based on historical volatilities of our stock since traded options on Geron stock do not correspond to option terms and trading volume of options is limited. The expected term of options represents the period of time that options granted are expected to be outstanding. In deriving this assumption, we reviewed actual historical exercise and cancellation data and the remaining outstanding options not yet exercised or cancelled. The expected term of employees' purchase rights, under our ESPP, is equal to the purchase period. The risk-free interest rate is based on the U.S. Zero Coupon Treasury Strip Yields for the expected term in effect on the date of grant. Forfeiture rate was estimated based on historical experience and will be adjusted over the requisite service period based on the extent to which actual forfeitures differ, or are expected to differ, from their estimate.

We grant restricted stock awards to employees and non-employee directors with three types of vesting schedules: (i) service-based, (ii) performance-based or (iii) market-based. Service-based restricted stock awards (RSAs) generally vest annually over four years. Performance-based stock awards (PSAs) vest only upon achievement of discrete strategic goals within a specified performance period, generally three years. Market-based stock awards (MSAs) vest only upon achievement of certain market price thresholds of our common stock within a specified performance period, generally three years.

The fair value for service-based RSAs is determined using the fair value of our common stock on the date of grant and reduced for estimated forfeitures, as applicable. The fair value is amortized as compensation expense over the requisite service period of the award on a straight-line basis.

The fair value for PSAs is determined using the fair value of our common stock on the date of grant and reduced for estimated forfeitures, as applicable. Compensation expense for PSAs is recognized over the period from the date the performance condition is determined to be probable of occurring through the date the applicable condition is expected to be met. If the performance condition is not considered probable of being achieved, no expense is recognized until such time as the performance condition is considered probable of being met, if ever. We evaluate whether performance conditions are probable of occurring, as well as the expected performance period, on a quarterly basis.

The fair value for MSAs is determined using a lattice valuation model with a Monte Carlo simulation. The model takes into consideration the historical volatility of our stock and the risk-free interest rate at the date of grant. In addition, the model is used to estimate the derived service period for the MSAs. The derived service period is the estimated period of time that would be required to satisfy the market condition, assuming the market condition will be satisfied. Compensation expense is recognized over the derived service period for the MSAs using the straight-line method, but is accelerated if the market condition is achieved earlier than estimated.

We annually evaluate the assumptions used in estimating fair values of our stock-based awards by reviewing current trends in comparison to historical data. We have not revised the methods by which we derive assumptions in order to estimate fair values of our stock-based awards. If factors change and we employ different assumptions in future periods, the stock-based compensation expense that we record for awards to employees and directors may differ significantly from what we have recorded in the current period.

Non-cash compensation expense recognized for stock-based awards to employees and directors was $15.2 million, $13.7 million and $10.6 million for the years ended December 31, 2011, 2010 and 2009, respectively. As of December 31, 2011, total compensation cost related to unvested stock awards not yet recognized, net of estimated forfeitures and assuming no probability of achievement for outstanding PSAs, was $13.1 million, which is expected to be recognized over the next 34 months on a weighted-average basis.

For our non-employee stock-based awards, the measurement date on which the fair value of the stock-based award is calculated is equal to the earlier of (i) the date at which a commitment for performance by the counterparty to earn the equity instrument is reached or (ii) the date at which the counterparty's performance is complete. We recognized non-cash stock-based compensation expense of $114,000, $463,000 and $190,000 for the fair value of the vested portion of non-employee options, restricted stock awards and warrants in our consolidated statements of operations for the years ended December 31, 2011, 2010 and 2009, respectively.

Fair Value of Financial Instruments

We categorize assets and liabilities recorded at fair value on our consolidated balance sheet based upon the level of judgment associated with inputs used to measure their fair value. The categories are as follows:

Level 1 – Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date. An active market for the asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 – Inputs (other than quoted market prices included in Level 1) are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

Level 3 – Inputs reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

A financial instrument's categorization is based upon the lowest level of input that is significant to the fair value measurement. Following is a description of the valuation methodologies used for instruments measured at fair value on our consolidated balance sheet, including the category for such instruments.

We classify inputs to derive fair values for marketable debt securities available-for-sale and marketable investments in licensees as Level 1 and 2. Instruments classified as Level 1 include money market funds and certificates of deposit, representing 9% of total financial assets measured at fair value as of December 31, 2011. Instruments classified as Level 2 include U.S. government-sponsored enterprise securities, commercial paper and corporate notes, representing 91% of total financial assets measured at fair value as of December 31, 2011. The price for each security at the measurement date is derived from various sources. Periodically, we assess the reasonableness of these sourced prices by comparing them to the prices provided by our portfolio managers from broker quotes as well as reviewing the pricing methodologies used by our portfolio managers. Historically, we have not experienced significant deviation between the sourced prices and our portfolio manager's prices.

Warrants to purchase common stock and non-employee options are normally traded less actively, have trade activity that is one way, and/or traded in less-developed markets and are therefore valued based upon models with significant unobservable market parameters, resulting in Level 3 categorization. The fair value for these instruments is calculated using the Black Scholes option-pricing model. The model's inputs reflect assumptions that market participants would use in pricing the instrument in a current period transaction. Inputs to the model include stock volatility, dividend yields, expected term of the derivatives and risk-free interest rates. See the following discussion, "Fair Value of Derivatives," for information on the derivation of inputs to the model. Changes to the model's inputs are not changes to valuation methodologies, but instead reflect direct or indirect impacts from changes in market conditions. Accordingly, results from the valuation model in one period may not be indicative of future period measurements. Instruments classified as Level 3 include derivative liabilities, representing all of total financial liabilities measured at fair value as of December 31, 2011.

For a further discussion regarding fair value measurements, see Note 2 on Fair Value Measurements in Notes to Consolidated Financial Statements of this Form 10-K.

Clinical Trial Accruals

Substantial portions of our preclinical studies and all of our clinical trials have been performed by third-party contract research organizations, or CROs, and other vendors. We accrue expenses for preclinical studies performed by our vendors based on certain estimates over the term of the service period and adjust our estimates as required. We accrue expenses for clinical trial activities performed by CROs based upon the estimated amount of work completed on each study. For clinical trial expenses, the significant factors used in estimating accruals include the number of patients enrolled, the number of active clinical sites, and the duration for which the patients will be enrolled in the study. We monitor patient enrollment levels and related activities to the extent possible through internal reviews, review of contractual terms and correspondence with CROs. We base our estimates on the best information available at the time. However, additional information may become available to us which will allow us to make a more accurate estimate in future periods. In this event, we may be required to record adjustments to research and development expenses in future periods when the actual level of activity becomes more certain.

Fair Value of Derivatives

For warrants and non-employee options classified as assets or liabilities, the fair value of these instruments is recorded on the consolidated balance sheet at inception of such classification and marked to fair value at each financial reporting date. The change in fair value of the warrants and non-employee options is recorded in the consolidated statements of operations as an unrealized gain (loss) on fair value of derivatives. The warrants and non-employee options continue to be reported as an asset or liability until such time as the instruments are exercised or expire or are otherwise modified to remove the provisions which require this treatment, at which time these instruments are marked to fair value and reclassified from assets or liabilities to stockholders' equity. For warrants and non-employee options classified as permanent equity, the fair value of the warrants and non-employee options is recorded in stockholders' equity and no further adjustments are made.

Fair value of warrants and non-employee options is estimated using the Black Scholes option-pricing model. Use of this model requires us to make assumptions regarding stock volatility, dividend yields, expected term of the warrants and non-employee options and risk-free interest rates. Expected volatilities are based on historical volatilities of our stock. The expected term of warrants and non-employee options represent the remaining contractual term of the instruments. The risk-free interest rate is based on the U.S. Zero Coupon Treasury Strip Yields for the remaining term of the instrument. If factors change and we employ different assumptions in future periods, the fair value of these warrants and non-employee options reflected as of each balance sheet date and the resulting change in fair value that we record may differ significantly from what we have recorded in previous periods. As of December 31, 2011, we have not revised the method in which we derive assumptions in order to estimate fair values of warrants and non-employee options classified as assets or liabilities, and we do not expect revisions in the future.

Consolidation and Accounting for Variable Interest Entities (VIEs)

Under applicable accounting guidance, an entity is considered to be a VIE if it has one of the following characteristics: (i) the entity is thinly capitalized; (ii) residual equity holders do not control the entity; (iii) equity holders are shielded from economic losses or do not participate fully in the entity's residual economics; or (iv) the entity was established with non-substantive voting. Investors that finance a VIE through debt or equity interests are variable interest holders in the entity. Since January 1, 2010, the variable interest holder, if any, exposed to the majority of the risks and rewards associated with a VIE is considered the VIE's primary beneficiary and must consolidate the entity.

We must evaluate our involvement in a VIE and understand the purpose and design of the entity, the role we have in the entity's design and our involvement in its ongoing activities. We then must evaluate which activities most significantly impact the economic performance of the VIE and who has the power to direct such activities. This evaluation involves a variety of qualitative and quantitative assumptions.

When we determine that we have the power to direct the activities that most significantly impact a VIE's economic performance, we then must evaluate our economic interests, if any, and determine whether we could absorb losses or receive benefits that could potentially be significant to the VIE. When evaluating whether we have an obligation to absorb losses that could be potentially significant, we consider the maximum exposure to such loss without consideration of probability. Such obligations could be in various forms, including but not limited to, debt and equity investments, guarantees, liquidity agreements and certain derivative contracts.

As certain events occur, we reconsider which parties will absorb variability and whether we have become or are no longer the primary beneficiary. The consolidation status of a VIE may change as a result of such reconsideration events, which occur when VIEs acquire additional assets, issue new variable interests or enter into new or modified contractual arrangements. A reconsideration event may also occur when we acquire new or additional interests in a VIE.

For a further discussion regarding VIEs, see Note 3 on Joint Venture and Related Party Transactions in Notes to Consolidated Financial Statements of this Form 10-K.

Results of Operations

Our results of operations have fluctuated from period to period and may continue to fluctuate in the future, based upon the progress of our research and development efforts and variations in the level of expenses related to developmental efforts during any given period. Results of operations for any period may be unrelated to results of operations for any other period. In addition, historical results should not be viewed as indicative of future operating results. We are subject to risks common to companies in our industry and at our stage of development, including risks inherent in our research and development efforts, reliance upon our collaborative partners, enforcement of our patent and proprietary rights, need for future capital, potential competition and uncertainty of preclinical and clinical trial results or regulatory approvals or clearances. In order for a product candidate to be commercialized based on our research, we and our collaborators must conduct preclinical tests and clinical trials, demonstrate the efficacy and safety of our product candidates, obtain regulatory approvals or clearances and enter into manufacturing, distribution and marketing arrangements, as well as obtain market acceptance. We do not expect to receive revenues or royalties based on therapeutic products for a period of years, if at all.

Revenues

We recognized $300,000 of revenues from collaborative agreements in 2011 compared to $925,000 in 2010 and $450,000 in 2009. Revenues in 2011, 2010 and 2009 primarily reflected revenue recognized under our collaboration with GE Healthcare UK, Ltd. (GE Healthcare). The collaboration with GE Healthcare began in July 2009 and concluded in June 2011.

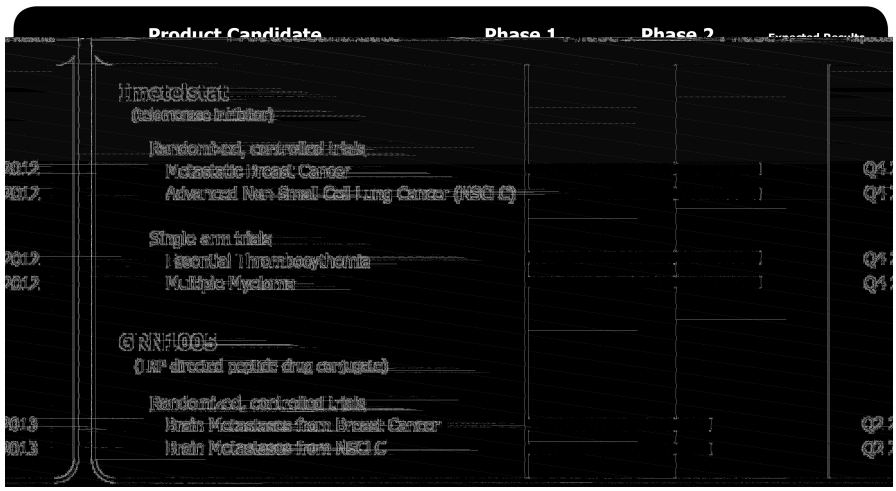
We have entered into license and option agreements with companies involved with oncology, diagnostics, research tools, agriculture and biologics production. In each of these agreements, we have granted certain rights to our technologies. In connection with the agreements, we are entitled to receive license fees, option fees, milestone payments and royalties on future product sales, or any combination thereof. We recognized license fee revenues of $1.3 million, $2.0 million and $1.1 million in 2011, 2010 and 2009, respectively, related to our various agreements. Current revenues may not be predictive of future revenues.

We recognized royalty revenues of $855,000, $642,000 and $160,000 in 2011, 2010 and 2009, respectively, on product sales of telomerase detection and telomere measurement kits to the research-use-only market, cell-based research products and nutritional products. License and royalty revenues are dependent upon additional agreements being signed and future product sales.

Research and Development Expenses

Research and development expenses were $69.3 million, $61.7 million and $57.6 million for the years ended December 31, 2011, 2010 and 2009, respectively. The increase in 2011 compared to 2010 was primarily the net result of increased clinical trial costs of $6.3 million for the enrollment of four Phase 2 clinical trials of imetelstat and the Phase 1 clinical trial of GRNOPC1 and higher clinical drug product purchases and manufacturing costs of $3.2 million related to imetelstat and GRN1005, partially offset by reduced costs for scientific supplies of $1.5 million primarily resulting from the discontinued development of our stem cell programs and lower non-cash compensation expense in connection with equity-based awards of $826,000. The increase in 2010 compared to 2009 was primarily the net result of higher clinical drug product purchases of $2.9 million for imetelstat, increased clinical trial costs of $2.0 million as a result of opening four Phase 2 clinical trials of imetelstat and reinitiating the Phase 1 clinical trial of GRNOPC1 and higher non-cash compensation expense in connection with equity-based awards of $1.3 million, partially offset by reduced contract manufacturing costs of $2.3 million primarily resulting from completion of patient enrollment in our Phase 2 clinical trial of GRNVAC1. Overall, we expect research and development expenses to decrease as a result of our decision to focus exclusively on the development of our oncology programs and discontinue further development of our stem cell programs.

Using innovative technologies and unique approaches, we are developing novel therapeutics to treat cancer. The following table briefly describes our current clinical development product candidates and their stage of development as of December 31, 2011:



Imetelstat, a potent and specific inhibitor of telomerase, is the product of Geron's internal research and development capability, including pioneering work in telomerase and its role in cell proliferation. Expression and activity of telomerase are increased in bulk tumor cells and cancer progenitor cells in a broad range of cancer types. We are evaluating imetelstat in two randomized, controlled Phase 2 trials in solid tumors, one in metastatic breast cancer and the other in advanced non-small cell lung cancer (NSCLC). Both are diseases in which the prognosis for patients remains poor, and there is evidence that disease progression, relapse and metastasis are driven in part by cancer progenitor cells. We are also studying imetelstat in two single-arm Phase 2 trials in hematologic (blood-based) cancers, one in essential thrombocythemia and the other in multiple myeloma, where the effect of the drug on the malignant progenitor cells responsible for the disease can be more directly observed than is the case in solid tumors. We expect to have top-line data from our Phase 2 trials of imetelstat by the end of 2012.

GRN1005 is a peptide-drug conjugate designed to utilize a physiologic molecular transport mechanism known as lipoprotein receptor-related protein-1, or LRP-1, to deliver paclitaxel across the blood-brain barrier (BBB) and into tumors in the brain. The BBB prevents most drugs, including oncology drugs, from reaching the brain at levels that are clinically effective. GRN1005 is designed to overcome this challenge by linking paclitaxel to a proprietary peptide, Angiopep-2, that is actively transported across the BBB by LRP-1. Angiopep-2 also facilitates uptake of the conjugate into tumor cells inside and outside the brain. The bond linking Angiopep-2 peptide and paclitaxel is cleaved when it is taken up into cells, including tumor cells both inside and outside the brain, releasing active paclitaxel. GRN1005 was in-licensed from Angiochem in 2010 on an exclusive basis under a conventional milestone and royalty structure. We are conducting two single-arm Phase 2 trials, one in patients with brain metastases associated with breast cancer and the other in brain metastases associated with non-small cell lung cancer. We selected these indications because in Phase 1 trials clinical activity was observed in patients with these tumor types. We expect to have top-line data from these two Phase 2 trials of GRN1005 by the end of the second quarter of 2013.

In November 2011, we announced that we will exclusively focus on our oncology programs and consequently, we discontinued development of our stem cell programs. We continue to accrue data on the patients already enrolled in the Phase 1 trial of GRNOPC1 for spinal cord injury. We intend to divest our stem cell programs in 2012, which include GRNOPC1 for spinal cord injury, currently in a Phase 1 clinical trial, as well as programs in cardiomyocytes for heart disease, pancreatic islet cells for diabetes, dendritic cells as an immunotherapy vehicle and chondrocytes for cartilage repair.

Research and development expenses incurred under our programs were as follows (in thousands):

	Year Ended December 31,		
	2011	2010	2009
Oncology	$ 41,001	$ 30,603	$ 29,543
hESC Therapies	28,315	31,084	28,074
Total	$ 69,316	$ 61,687	$ 57,617

At this time, we cannot provide reliable estimates of how much time or investment will be necessary to commercialize products from the programs currently in progress. For a more complete discussion of the risks and uncertainties associated with completing development of our product candidates, see the sub-sections titled "Risks Related to Our Business" and "Risks Related to Clinical and Commercialization Activities" in Part I, Item 1A entitled "Risk Factors" and elsewhere in this Form 10-K.

Acquired In-Process Research and Development

As consideration for the license rights to Angiochem's proprietary peptide technology for the clinical development of ANG1005 (now GRN1005), we paid Angiochem an upfront payment of $7.5 million in cash in December 2010 and on January 5, 2011, issued 5,261,144 shares of common stock to Angiochem as payment of our obligation to issue $27.5 million in stock.

Further clinical and process development of GRN1005 is required before any viable commercial application can be identified or utilized. We have concluded that this technology has no alternative future use, and accordingly, expensed the total upfront payment of $35.0 million in connection with the license agreement as acquired in-process research and development expense at the time of acquisition. See Note 11 on License Agreements in Notes to Consolidated Financial Statements of this Form 10-K for further discussion of the Exclusive License Agreement with Angiochem.

Restructuring Charges

On November 14, 2011, we announced the decision to focus exclusively on the development of our oncology programs and consequently, we discontinued further development of our stem cell programs. With this decision, a total of 66 full-time positions were eliminated, of which as of February 1, 2012, 14 employees are continuing to provide services and are discontinuing employment with us through various dates in the first half of 2012. In connection with the restructuring, we recorded aggregate restructuring charges of approximately $5.4 million, of which $4.6 million related to one-time termination benefits, including $174,000 of non-cash stock-based compensation expense relating to the extension of the post-termination exercise period for certain stock options previously granted to terminated employees to June 30, 2013 and December 31, 2013, and $874,000 related to write-downs of excess lab equipment and leasehold improvements and other charges.

We may incur additional charges as a result of the restructuring as we exit one of the three buildings in which we lease space in Menlo Park, California, which will be recorded as they are determined. We also plan to sell any excess equipment, the net proceeds of which may offset some of these future charges. We expect the restructuring will result in aggregate cash expenditures of approximately $4.4 million, of which $671,000 related to one-time termination benefits was paid as of December 31, 2011 and approximately $3.7 million related to one-time termination benefits is expected to be paid during 2012. Without the restructuring, we estimated that we would have incurred approximately $25.0 million in research and development expenses in connection with our stem cell programs in 2012. See Note 7 on Restructuring in Notes to Consolidated Financial Statements of this Form 10-K for further discussion of the restructuring charges.

General and Administrative Expenses

General and administrative expenses were $23.8 million, $18.0 million and $14.3 million for the years ended December 31, 2011, 2010 and 2009, respectively. The increase in 2011 from 2010 was primarily the result of higher non-cash stock-based compensation expense of $2.2 million related to stock options and restricted stock awards to employees, severance expenses of $1.6 million related to separation agreements executed with our former Chief Executive Officer (CEO) and Chief Financial Officer (CFO) and higher corporate legal and consulting fees of $1.0 million. The increase in 2010 from 2009 was primarily due to higher non-cash stock-based compensation expense of $1.9 million related to stock options and restricted stock awards to employees, increased consulting and legal costs of $916,000 and higher costs associated with managing our intellectual property portfolio of $405,000.

Unrealized Gain on Fair Value of Derivatives

Unrealized gain on fair value of derivatives reflects a non-cash adjustment for changes in fair value of warrants to purchase common stock and options held by non-employees that are classified as current liabilities. Derivatives classified as assets or liabilities are marked to fair value at each financial reporting date with any resulting unrealized gain (loss) recorded in the consolidated statements of operations. The derivatives continue to be reported as an asset or liability until such time as the instruments are exercised or expire or are otherwise modified to remove the provisions which require them to be recorded as assets or liabilities, at which time these instruments are marked to fair value and reclassified from assets or liabilities to stockholders' equity. We incurred unrealized gains of $643,000, $190,000 and $157,000 for the years ended December 31,

Losses Recognized from Debt Extinguishment

On November 14, 2011, we repaid the outstanding principal balance, including accrued interest, or Loan Balance, to the California Institute for Regenerative Medicine (CIRM), representing our entire Loan Balance under our Loan Agreement from CIRM. In addition, we relinquished our right to future disbursements from CIRM under the Loan Agreement and gave notice of termination. With the repayment of the entire outstanding Loan Balance, we have no further amounts owed to CIRM. In connection with the early termination of the CIRM Loan Agreement, we recognized a debt extinguishment charge of $1.7 million for the unamortized debt discount associated with the loan. See Note 8 on Long-Term Debt in Notes to Consolidated Financial Statements of this Form 10-K for a further discussion of the CIRM Loan.

Interest and Other Expense

Interest and other expense was $237,000, $98,000 and $143,000 for the years ended December 31, 2011, 2010 and 2009, respectively. The increase in interest and other expense for 2011 compared to 2010 primarily reflects $88,000 in interest expense resulting from the amortization of the debt discount and accrual of interest on the CIRM loan and increased bank charges as a result of higher cash and investment balances for the majority of 2011. The decrease in interest and other expense for 2010 compared to 2009 was primarily due to reduced bank charges as a result of lower cash and investment balances for the majority of 2010.

Deemed Dividend on Derivatives

In April 2009, we modified the terms of certain outstanding warrants held by an investor by extending the exercise term and, for certain of these warrants, reducing the exercise price. In connection with the modifications, we recognized a deemed dividend of approximately $190,000 for the incremental fair value of the modified warrants, as calculated using the Black Scholes option-pricing model as of the modification date.

Net Loss Applicable to Common Stockholders

Net loss applicable to common stockholders was $96.9 million, $111.4 million and $70.4 million for the years ended December 31, 2011, 2010 and 2009, respectively. Overall net loss for 2011 decreased compared to 2010 primarily due to recognition of acquired in-process research and development expense related to the in-license from Angiochem in December 2010, partially offset by increased research and development expenses resulting from costs incurred to support the initiation and enrollment of our Phase 2 clinical trials of imetelstat and GRN1005 and Phase 1 clinical trial of GRNOPC1, higher general and administrative expenses related to non-cash stock-based compensation expense and severance expense for our former CEO and CFO and charges incurred for the November 2011 restructuring and early termination of the CIRM Loan Agreement. Overall net loss for 2010 increased compared to 2009 primarily due to recognition of acquired in-process research and development expense related to the in-license from Angiochem in December 2010 and increased research and development expenses resulting from costs incurred to support the initiation and enrollment of our Phase 2 clinical trials of imetelstat and Phase 1 clinical trial of GRNOPC1.

Liquidity and Capital Resources

Cash, restricted cash, cash equivalents and marketable securities at December 31, 2011 were $154.2 million, compared to $221.3 million at December 31, 2010 and $167.1 million at December 31, 2009. We have an investment policy to invest these funds in liquid, investment grade securities, such as interest-bearing money market funds, certificates of deposit, municipal securities, U.S. government and agency securities, corporate notes, commercial paper and asset-backed securities. Our investment portfolio does not contain securities with exposure to sub-prime mortgages, collateralized debt obligations or auction rate securities and, to date, we have not recognized an other-than-temporary impairment on our marketable securities or any significant changes in aggregate fair value that would impact our cash resources or liquidity. To date, we have not experienced lack of access to our invested cash and cash equivalents; however, we cannot provide assurances that access to our invested cash and cash equivalents will not be impacted by adverse conditions in the financial markets. The decrease in cash, restricted cash, cash equivalents and marketable securities in 2011 was the result of cash being used for operations. The increase in cash, restricted cash, cash equivalents and marketable securities in 2010 was the net result of the receipt of $93.7 million in net proceeds in December 2010 from an underwritten public offering of our common stock and the receipt of $10.0 million in net proceeds in January 2010 from the sale of shares of our common stock and warrants to purchase additional shares of our common stock to institutional investors, partially offset by the use of cash for operations.

We estimate that our existing capital resources, interest income and amounts available to us under our equipment financing facility will be sufficient to fund our current level of operations through at least the next 12 months. However, our future capital requirements will be substantial. Changes in our research and development plans or other changes affecting our operating expenses or cash balances may result in the unexpected expenditure of available resources. Factors that may require us to use our available capital resources sooner than we anticipate include:

- the accuracy of the assumptions underlying our estimates for our capital needs for 2012 and beyond;
- changes in our clinical development plans for our product candidates, imetelstat and GRN1005;
- our ability to meaningfully reduce manufacturing costs of current product candidates;
- the magnitude and scope of our research and development programs, including the number and type of product candidates we intend to pursue;
- the progress we make in our research and development programs, preclinical development and clinical trials;
- our ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- the time and costs involved in obtaining regulatory approvals and clearances; and
- the costs involved in preparing, filing, prosecuting, defending and enforcing patent claims.

If our capital resources are insufficient to meet future capital requirements, we will need to raise additional capital to fund our operations. We anticipate that we would need to seek additional funding through strategic collaborations, public or private equity financings, equipment loans or other financing sources that may be available. However, we may be unable to raise sufficient additional capital when we need it, on favorable terms or at all. Our ability to raise additional funds may be severely impaired if any of our product candidates fails to show adequate safety or efficacy in clinical testing. If we are unable to obtain adequate funds on reasonable terms, we may be required to curtail operations significantly or obtain funds by entering into financing, supply or collaboration agreements on unattractive terms or we may be required to relinquish rights to technology or product candidates or to grant licenses on terms that are unfavorable to us.

Cash Flows from Operating Activities

Net cash used in operations was $62.4 million, $44.3 million and $43.4 million in 2011, 2010 and 2009, respectively. The increase in net cash used in operations in 2011 compared to 2010 was primarily the result of increased research and development expenses associated with our clinical operations and reduced issuances of our common stock in exchange for research and development services. The increase in net cash used in operations in 2010 compared to 2009 was primarily the result of increased research and development expenses associated with our clinical operations and reduced interest income.

Cash Flows from Investing Activities

Net cash provided by investing activities was $32.1 million in 2011. Net cash used in investing activities was $48.5 million and $83.0 million for 2010 and 2009, respectively. The change in cash flows from investing activities in 2011 compared to 2010 and 2010 compared to 2009 was primarily the result of lower purchases of marketable securities and higher marketable securities maturities in those respective years.

For the three years ended December 31, 2011, we have purchased approximately $2.9 million in property and equipment, net of disposals, none of which was financed through equipment financing arrangements. As of December 31, 2011, no payments were due under our equipment financing facility. As of December 31, 2011, we had approximately $500,000 available for borrowing under our equipment financing facility. If we are unable to renew the commitment, we will use our cash resources for capital expenditures.

Cash Flows from Financing Activities

Net cash provided by financing activities in 2011, 2010 and 2009 was $386,000, $104.1 million and $51.6 million, respectively. Net cash provided by financing activities in 2011 reflected receipt of $386,000 from the issuance of common stock under our employee equity plans. Net cash provided by financing activities in 2010

primarily reflected receipt of approximately $93.7 million in net proceeds from an underwritten public offering of 20,000,000 shares of our common stock at a public offering price of $5.00 per share after deducting underwriting discounts and commissions and offering expenses and the receipt of approximately $10.0 million in net proceeds from the sale of 1,481,481 shares of our common stock and warrants to purchase an additional 740,741 shares of our common stock to certain institutional investors in connection with the exchange of warrants held by those investors for shares of our common stock. Net cash provided by financing activities in 2009 primarily reflected receipt of approximately $45.9 million in net proceeds from an underwritten public offering of 7,250,000 shares of our common stock at a public offering price of $6.60 per share after deducting underwriting discounts and commissions and offering expenses and receipt of net proceeds of $3.6 million from the sale of 550,000 shares of our common stock and warrants to purchase an additional 150,000 shares of our common stock with an exercise price of $9.00 per share to certain institutional investors.

Significant Cash and Contractual Obligations

As of December 31, 2011 our contractual obligations for the next five years, and thereafter were as follows:

	Principal Payments Due by Period				
Contractual Obligations [1]	Total	Less Than 1 Year	1-3 Years	4-5 Years	After 5 Years
			(In thousands)		
Equipment lease	$ 25	$ 19	$ 6	$ —	$ —
Operating leases [2]	—	—	—	—	—
Research funding [3]	2,714	1,455	384	350	525
Total contractual cash obligations	$ 2,739	$ 1,474	$ 390	$ 350	$ 525

(1) This table does not include any milestone payments under research collaborations or license agreements as the timing and likelihood of such payments are not known. In addition, this table does not include payments under our severance plan if there were a change in control of Geron or severance payments to key employees under involuntary termination.

(2) In March 2008, we issued 742,158 shares of our common stock to the lessor of our premises at 200 and 230 Constitution Drive in payment of our monthly rental obligation from August 1, 2008 through July 31, 2012. In January 2010 and April 2010, we issued an aggregate of 187,999 shares of our common stock to the lessor of our premises at 149 Commonwealth Drive in payment of our monthly rental obligation from May 1, 2010 through July 31, 2012. The fair value of the common stock issuances has been recorded as a prepaid asset and is being amortized to rent expense on a straight-line basis over the lease periods. Future minimum payments under non-cancelable operating leases are zero through July 31, 2012, as a result of the prepayments of rent with our common stock.

(3) Research funding is comprised of sponsored research commitments at various laboratories around the world.

Off-Balance Sheet Arrangements

None.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The following discussion about our market risk disclosures contains forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements. We are exposed to market risk related to changes in interest rates and foreign currency exchange rates. We do not use derivative financial instruments for speculative or trading purposes.

Credit Risk. We place our cash, restricted cash, cash equivalents and marketable securities with six financial institutions in the United States and Scotland. Deposits with banks may exceed the amount of insurance provided on such deposits. While we monitor the cash balances in our operating accounts and adjust the cash balances as appropriate, these cash balances could be impacted if the underlying financial institutions fail or could be subject to other adverse conditions in the financial markets. Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash equivalents and marketable securities. Cash equivalents and marketable securities currently consist of money market funds, certificates of deposit, U.S. government-sponsored

enterprise securities, commercial paper and corporate notes. Our investment policy, approved by our Board of Directors, limits the amount we may invest in any one type of investment issuer, thereby reducing credit risk concentrations. We limit our credit and liquidity risks through our investment policy and through regular reviews of our portfolio against our policy. To date, we have not experienced any loss or lack of access to cash in our operating accounts or to our cash equivalents and marketable securities in our investment portfolio.

Interest Rate Risk. The primary objective of our investment activities is to manage our marketable securities portfolio to preserve principal and liquidity while maximizing the return on the investment portfolio through the full investment of available funds without significantly increasing risk. To achieve this objective, we invest in widely diversified investments consisting of both fixed rate and floating rate interest earning instruments, which both carry a degree of interest rate risk. Fixed rate securities may have their fair value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Due in part to these factors, our future interest income may fall short of expectations due to changes in market conditions and in interest rates or we may suffer losses in principal if forced to sell securities which may have declined in fair value due to changes in interest rates.

The fair value of our cash equivalents and marketable securities at December 31, 2011 was $150.2 million. These investments include $12.9 million of cash equivalents which are due in less than 90 days, $105.2 million of short-term investments which are due in less than one year and $32.1 million of long-term investments which are due in one to two years. We primarily invest our marketable securities portfolio in securities with at least an investment grade rating to minimize interest rate and credit risk as well as to provide for an immediate source of funds. Although changes in interest rates may affect the fair value of the marketable securities portfolio and cause unrealized gains or losses, such gains or losses would not be realized unless the investments are sold. Due to the nature of our investments, which are primarily money market funds, certificates of deposit, U.S. government-sponsored enterprise securities, commercial paper and corporate notes, we have concluded that there is no material interest rate risk exposure.

Foreign Currency Exchange Risk. Because we translate foreign currencies into U.S. dollars for reporting purposes, currency fluctuations can have an impact, though generally immaterial, on our operating results. We believe that our exposure to currency exchange fluctuation risk is insignificant primarily because our wholly-owned international subsidiary, Geron Bio-Med Ltd., satisfies its financial obligations almost exclusively in its local currency. As of December 31, 2011, there was an immaterial currency exchange impact from our intercompany transactions. As of December 31, 2011, we did not engage in foreign currency hedging activities.

ITEM 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The following consolidated financial statements and the related notes thereto, of Geron Corporation and the Report of Independent Registered Public Accounting Firm, Ernst & Young LLP, are filed as a part of this Form 10-K.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Geron Corporation

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

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Geron Corporation at December 31, 2011 and 2010, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2011, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Geron Corporation's internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 7, 2012 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Redwood City, California
March 7, 2012

GERON CORPORATION

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2011	2010
	(In thousands, except share and per share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 16,105	$ 45,972
Restricted cash	793	792
Current portion of marketable securities	105,208	140,599
Interest and other receivables	1,398	1,799
Current portion of prepaid assets	2,121	5,855
Total current assets	125,625	195,017
Noncurrent portion of marketable securities	32,133	33,911
Noncurrent portion of prepaid assets	—	854
Investments in licensees	—	504
Property and equipment, net	1,241	3,088
Deposits and other assets	1,048	210
	$ 160,047	$ 233,584
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 2,980	$ 3,462
Accrued compensation and benefits	3,029	6,186
Accrued restructuring charges	3,730	—
Accrued liabilities	3,641	2,644
Stock issuance obligation	—	27,500
Current portion of deferred revenue	—	350
Fair value of derivatives	64	707
Total current liabilities	13,444	40,849
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.001 par value; 3,000,000 shares authorized; no shares issued and outstanding at December 31, 2011 and 2010	—	—
Common stock, $0.001 par value; 200,000,000 shares authorized; 131,443,148 and 122,616,729 shares issued and outstanding at December 31, 2011 and 2010, respectively	131	123
Additional paid-in capital	932,066	881,358
Accumulated deficit	(785,503)	(688,650)
Accumulated other comprehensive loss	(91)	(96)
Total stockholders' equity	146,603	192,735
	$ 160,047	$ 233,584

See accompanying notes.

GERON CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2011	2010	2009
	(In thousands, except share and per share data)		
Revenues from collaborative agreements	$ 300	$ 925	$ 450
License fees and royalties	2,138	2,638	1,276
Total revenues	2,438	3,563	1,726
Operating expenses:			
Research and development (including amounts for related parties: 2011-none, 2010-$697, 2009-$1,755)	69,316	61,687	57,617
Acquired in-process research and development	—	35,000	—
Restructuring charges	5,449	—	—
General and administrative	23,789	18,043	14,343
Total operating expenses	98,554	114,730	71,960
Loss from operations	(96,116)	(111,167)	(70,234)
Unrealized gain on fair value of derivatives	643	190	157
Interest and other income	1,024	2,045	1,374
Losses recognized under equity method investment	(503)	(2,347)	(1,338)
Losses recognized from debt extinguishment	(1,664)	—	—
Interest and other expense	(237)	(98)	(143)
Net loss	(96,853)	(111,377)	(70,184)
Deemed dividend on derivatives	—	—	(190)
Net loss applicable to common stockholders	$ (96,853)	$ (111,377)	$ (70,374)
Basic and diluted net loss per share applicable to common stockholders:			
Net loss per share applicable to common stockholders	$ (0.78)	$ (1.14)	$ (0.80)
Shares used in computing net loss per share applicable to common stockholders	124,506,763	97,601,520	88,078,557

See accompanying notes.

GERON CORPORATION

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Common Stock		Additional Paid-In	Accumulated	Accumulated Other Comprehensive	Total Stockholders'
	Shares	Amount	Capital	Deficit	Income (Loss)	Equity
	(In thousands, except share data)					
Balances at December 31, 2008	81,070,464	$ 81	$ 675,227	$ (506,893)	$ 40	$ 168,455
Net loss	—	—	—	(70,184)	—	(70,184)
Net change in unrealized gain (loss) on marketable securities and investments in licensees	—	—	—	—	(445)	(445)
Cumulative translation adjustment	—	—	—	—	(1)	(1)
Comprehensive loss						(70,630)
Issuance of common stock in connection with public offering, net of issuance costs of $1,916	7,250,000	7	45,926	—	—	45,933
Issuance of common stock in connection with private offering, net of issuance costs of $18	550,000	1	3,584	—	—	3,585
Reclassification of fair value of derivatives, net	—	—	130	—	—	130
Deemed dividend in connection with amendments to warrants to purchase common stock	—	—	190	(190)	—	—
Stock-based compensation related to issuance of common stock and options in exchange for services	1,272,438	1	8,114	—	—	8,115
Issuance of common stock under employee stock plans, net	2,110,418	2	5,253	—	—	5,255
Stock-based compensation for equity-based awards to employees and directors	—	—	10,575	—	—	10,575
401(k) contribution	268,626	—	1,159	—	—	1,159
Balances at December 31, 2009	92,521,946	92	750,158	(577,267)	(406)	172,577
Net loss	—	—	—	(111,377)	—	(111,377)
Net change in unrealized gain (loss) on marketable securities and investments in licensees	—	—	—	—	306	306
Cumulative translation adjustment	—	—	—	—	4	4
Comprehensive loss						(111,067)
Issuance of common stock in connection with public offering, net of issuance costs of $6,300	20,000,000	20	93,680	—	—	93,700
Issuance of common stock in connection with private offering, net of issuance costs of $44	4,181,481	4	9,952	—	—	9,956
Stock-based compensation related to issuance of common stock and options in exchange for services	1,994,993	2	11,685	—	—	11,687
Issuance of common stock under employee stock plans, net	3,654,057	4	547	—	—	551
Stock-based compensation for equity-based awards to employees and directors	—	—	13,718	—	—	13,718
Distribution to TA Therapeutics, Ltd. shareholder	—	—	—	(6)	—	(6)
401(k) contribution	264,252	1	1,618	—	—	1,619
Balances at December 31, 2010	122,616,729	123	881,358	(688,650)	(96)	192,735
Net loss	—	—	—	(96,853)	—	(96,853)
Net change in unrealized gain (loss) on marketable securities and investments in licensees	—	—	—	—	6	6
Cumulative translation adjustment	—	—	—	—	(1)	(1)
Comprehensive loss						(96,848)
Issuance of common stock in connection with acquired in-process research technology	5,261,144	5	28,089	—	—	28,094
Stock-based compensation related to issuance of common stock and options in exchange for services	180,954	—	715	—	—	715
Issuance of common stock under employee stock plans, net	3,031,121	3	3,260	—	—	3,263
Stock-based compensation for equity-based awards to employees and directors	—	—	15,249	—	—	15,249
Debt discount in connection with warrant issuances	—	—	1,715	—	—	1,715
401(k) contribution	353,200	—	1,680	—	—	1,680
Balances at December 31, 2011	131,443,148	$ 131	$ 932,066	$ (785,503)	$ (91)	$ 146,603

See accompanying notes.

GERON CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2011	2010	2009
		(In thousands)	
Cash flows from operating activities			
Net loss	$ (96,853)	$ (111,377)	$ (70,184)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,580	1,609	1,753
Accretion and amortization on investments, net	4,422	3,568	926
Accretion of discount on long-term debt	51	—	—
Loss on debt extinguishment	1,664	—	—
Loss on retirement/sale of property and equipment	5	75	130
Loss on impairment of excess equipment	874	—	—
Loss on sale of marketable securities	2	—	—
Issuance of common stock in connection with acquired in-process research technology	594	27,500	—
Issuance of common stock and warrants in exchange for services by non-employees	744	8,673	4,866
Stock-based compensation for employees and directors	15,249	13,718	10,575
Amortization related to 401(k) contributions	709	647	494
Loss on investments in licensees	503	2,347	1,364
Unrealized gain on fair value of derivatives	(643)	(190)	(157)
Changes in assets and liabilities:			
Interest and other receivables	401	(479)	(436)
Prepaid assets	4,085	2,866	3,019
Deposits and other assets	(658)	(45)	(99)
Accounts payable	(482)	1,288	(56)
Accrued compensation and benefits	944	5,401	4,166
Accrued restructuring charges	3,730	—	—
Accrued liabilities	1,038	803	(265)
Deferred revenue	(350)	(700)	971
Advance payment from related party for research and development	—	—	(440)
Translation adjustment	(1)	4	(1)
Net cash used in operating activities	(62,392)	(44,292)	(43,374)
Cash flows from investing activities			
Restricted cash transfer	(1)	(1)	25
Loan to related party	—	(1,500)	—
Investment in licensee, net	—	(23)	(2,009)
Proceeds from sale of property and equipment	—	2	—
Purchases of property and equipment	(612)	(836)	(1,435)
Purchases of marketable securities	(144,890)	(183,414)	(200,109)
Proceeds from sales of marketable securities	809	—	—
Proceeds from maturities of marketable securities	176,832	137,320	120,524
Proceeds from sale of investment in licensees	1	—	1
Net cash provided by (used in) investing activities	32,139	(48,452)	(83,003)
Cash flows from financing activities			
Proceeds from issuance of long-term debt	6,422	—	—
Repayment of long-term debt	(6,422)	—	—
Distribution to TA Therapeutics, Ltd. shareholder	—	(6)	—
Proceeds from issuance of common stock and warrants, net of issuance costs	386	104,121	51,630
Net cash provided by financing activities	386	104,115	51,630
Net (decrease) increase in cash and cash equivalents	(29,867)	11,371	(74,747)
Cash and cash equivalents, at beginning of year	45,972	34,601	109,348
Cash and cash equivalents, at end of year	$ 16,105	$ 45,972	$ 34,601
Supplemental disclosure of cash flow information			
Cash paid for interest	$ 37	$ —	$ —

See accompanying notes.

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization

Geron Corporation ("we" or "Geron") was incorporated in the State of Delaware on November 28, 1990. We are a biopharmaceutical company developing first-in-class therapies for cancer. Imetelstat, a telomerase inhibitor, is currently being evaluated in four Phase 2 clinical trials for the following indications: metastatic breast cancer, advanced non-small cell lung cancer, essential thrombocythemia and multiple myeloma. GRN1005, an LRP-directed peptide-drug conjugate, is being evaluated in two Phase 2 clinical trials: brain metastases arising from breast cancer and brain metastases arising from non-small cell lung cancer. These product candidates are based on our core expertise in telomerase and the rights we have in-licensed from third parties. Principal activities to date have included obtaining financing, securing operating facilities and conducting research and development. We have no therapeutic products currently available for sale and do not expect to have any therapeutic products commercially available for sale for a period of years, if at all. These factors indicate that our ability to continue research and development activities is dependent upon the ability of our management to obtain additional financing as required.

Principles of Consolidation

The consolidated financial statements include the accounts of Geron, our wholly-owned subsidiary, Geron Bio-Med Ltd. (Geron Bio-Med), a United Kingdom company, and our majority-owned subsidiary, TA Therapeutics, Ltd. (TAT), a Hong Kong company. We have eliminated intercompany accounts and transactions. We prepare the financial statements of Geron Bio-Med using the local currency as the functional currency. We translate the assets and liabilities of Geron Bio-Med at rates of exchange at the balance sheet date and translate income and expense items at average monthly rates of exchange. The resultant translation adjustments are included in accumulated other comprehensive income (loss), a separate component of stockholders' equity. The functional currency for TAT was U.S. dollars. In July 2010, the board of directors and shareholders of TAT approved actions to commence a voluntary winding up of the company. The full wind up of TAT was completed in March 2011.

We evaluate whether significant transactions require consideration of the variable interest consolidation model. For those entities in which we have a variable interest, we consider whether we are the primary beneficiary. Variable interest entities (VIEs) for which we are the primary beneficiary are required to be consolidated. We currently are not the primary beneficiary of any VIE. See Note 3 on Joint Venture and Related Party Transactions.

Net Loss Per Share

Basic earnings (loss) per share is calculated based on the weighted average number of shares of common stock outstanding during the period. Diluted earnings (loss) per share is calculated based on the weighted average number of shares of common stock and dilutive securities outstanding during the period. Potential dilutive securities primarily consist of outstanding employee stock options, restricted stock and warrants to purchase common stock and are determined using the treasury stock method at an average market price during the period.

Because we are in a net loss position, diluted earnings (loss) per share excludes the effects of potential dilutive securities. Had we been in a net income position, diluted earnings per share would have included the shares used in the computation of basic net loss per share as well as an additional 294,426, 1,204,692 and 1,260,417 shares for 2011, 2010 and 2009, respectively, related to outstanding options, restricted stock and warrants (as determined using the treasury stock method at the estimated average market value).

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On a regular basis, management evaluates these estimates and assumptions. Actual results could differ from those estimates.

Fair Value of Financial Instruments

Cash Equivalents and Marketable Securities

We consider all highly liquid investments with an original maturity of three months or less to be cash equivalents. We are subject to credit risk related to our cash equivalents and marketable securities. We place our cash and cash equivalents in money market funds and cash operating accounts. Our investments include U.S. government-sponsored enterprise securities, certificates of deposit, commercial paper and corporate notes with original maturities ranging from four to 24 months.

We classify our marketable securities as available-for-sale. We record available-for-sale securities at fair value with unrealized gains and losses reported in accumulated other comprehensive income (loss) in stockholders' equity. Realized gains and losses are included in interest and other income and are derived using the specific identification method for determining the cost of securities sold and have been insignificant to date. Dividend and interest income are recognized when earned and included in interest and other income in our consolidated statements of operations. We recognize a charge when the declines in the fair values below the amortized cost basis of our available-for-sale securities are judged to be other-than-temporary. We consider various factors in determining whether to recognize an other-than-temporary charge, including whether we intend to sell the security or whether it is more likely than not that we would be required to sell the security. Declines in market

Fair Value of Derivatives

For warrants and non-employee options classified as assets or liabilities, the fair value of these instruments is recorded on the consolidated balance sheet at inception of such classification and adjusted to fair value at each financial reporting date. The change in fair value of the warrants and non-employee options is recorded in the consolidated statements of operations as unrealized gain (loss) on derivatives. Fair value of warrants and non-employee options is estimated using the Black Scholes option-pricing model. The warrants and non-employee options continue to be reported as an asset or liability until such time as the instruments are exercised or expire or are otherwise modified to remove the provisions which require this treatment, at which time these instruments are marked to fair value and reclassified from assets or liabilities to stockholders' equity. For warrants and non-employee options classified as permanent equity, the fair value of the warrants and non-employee options is recorded in stockholders' equity as of their respective vesting dates and no further adjustments are made. See Note 2 on Fair Value Measurements.

Revenue Recognition

We have several license agreements with various oncology, diagnostics, research tools, agriculture and biologics production companies. With certain of these agreements, we receive nonrefundable license payments in cash or equity securities, option payments in cash or equity securities, royalties on future sales of products, milestone payments, or any combination of these items. Upfront nonrefundable signing, license or non-exclusive option fees are recognized as revenue when rights to use the intellectual property related to the license have been delivered and over the term of the agreement if we have continuing performance obligations. Milestone payments, which are subject to substantive contingencies, are recognized upon completion of specified milestones, representing the culmination of the earnings process, according to contract terms. Royalties are generally recognized upon receipt of the related royalty payment. Deferred revenue represents the portion of research and license payments received which has not been earned. When payments are received in equity securities, we do not recognize any revenue unless such securities are determined to be realizable in cash.

We recognize revenue under collaborative agreements as the related research and development costs for services are rendered. We recognize related party revenue under collaborative agreements as the related research and development costs for services are rendered and when the source of funds has not been derived from our contributions to the related party.

Restricted Cash

The components of restricted cash are as follows:

	December 31,	
	2011	2010
	(In thousands)	
Certificate of deposit for unused equipment line of credit	$ 530	$ 530
Certificate of deposit for credit card purchases	263	262
	$ 793	$ 792

Research and Development Expenses

Research and development expenses consist of expenses incurred in identifying, developing and testing our product candidates resulting from our independent efforts as well as efforts associated with collaborations. These expenses include, but are not limited to, acquired in-process research and development deemed to have no alternative future use, payroll and personnel expense, lab supplies, preclinical studies, clinical trials, raw materials to manufacture clinical trial drugs, manufacturing costs for research and clinical trial materials, sponsored research at other labs, consulting, costs to maintain technology licenses and research-related overhead. Research and development costs are expensed as incurred, including payments made under our license agreements.

Clinical Trial Costs

A significant component of our research and development expenses is clinical trial costs. Substantial portions of our preclinical studies and all of our clinical trials have been performed by third-party contract research organizations, or CROs, and other vendors. We accrue expenses for preclinical studies performed by our vendors

based on certain estimates over the term of the service period and adjust our estimates as required. We accrue expenses for clinical trial activities performed by CROs based upon the estimated amount of work completed on each study. For clinical trial expenses, the significant factors used in estimating accruals include the number of patients enrolled, the number of active clinical sites, and the duration for which the patients will be enrolled in the study. We monitor patient enrollment levels and related activities to the extent possible through internal reviews, review of contractual terms and correspondence with CROs. We base our estimates on the best information available at the time. However, additional information may become available to us which will allow us to make a more accurate estimate in future periods. In this event, we may be required to record adjustments to research and development expenses in future periods when the actual level of activity becomes more certain.

Depreciation and Amortization

We record property and equipment at cost and calculate depreciation using the straight-line method over the estimated useful lives of the assets, generally four years. Leasehold improvements are amortized over the shorter of the estimated useful life or remaining term of the lease.

Stock-Based Compensation

We maintain various stock incentive plans under which stock options and restricted stock awards are granted to employees, non-employee members of the Board of Directors and consultants. We also have an employee stock purchase plan for all eligible employees. We recognize compensation expense on a straight-line basis over the requisite service period, which is generally the vesting period, for stock-based awards granted after January 1, 2006, plus unvested awards granted prior to January 1, 2006 based on the grant-date fair value estimated using accounting guidance in effect at that time and following the straight-line attribution method. For additional information, see Note 10 on Stockholders' Equity.

Stock Options and Employee Stock Purchase Plan

We use the Black Scholes option-pricing valuation model to estimate the grant-date fair value of our stock options and employee stock plan purchases. The determination of fair value for these stock-based awards on the date of grant using an option-pricing model is affected by our stock price as well as assumptions regarding a number of complex and subjective variables. These variables include, but are not limited to, our expected stock price volatility over the term of the awards and actual and projected employee exercise behaviors. We grant service-based stock options under our equity plans to employees, non-employee directors and consultants, for whom the vesting period is generally four years.

Restricted Stock Awards

We grant restricted stock awards to employees and non-employee directors with three types of vesting schedules: (i) service-based, (ii) performance-based or (iii) market-based. Service-based awards generally vest annually over four years. Performance-based awards vest only upon achievement of discrete strategic corporate goals within a specified performance period, generally three years. Market-based awards vest only upon achievement of certain market price thresholds of our common stock within a specified performance period, generally three years.

The fair value for service-based restricted stock awards is determined using the fair value of our common stock on the date of grant. The fair value is amortized as compensation expense over the requisite service period of the award on a straight-line basis and is reduced for estimated forfeitures, as applicable.

The fair value for performance-based restricted stock awards is determined using the fair value of our common stock on the date of grant. Compensation expense for awards with performance conditions is recognized over the period from the date the performance condition is determined to be probable of occurring through the date the applicable condition is expected to be met and is reduced for estimated forfeitures, as applicable. If the performance condition is not considered probable of being achieved, no expense is recognized until such time as the performance condition is considered probable of being met, if ever. If performance-based restricted stock awards are modified such that no continuing service is required for the award to vest and achievement of the performance condition is not considered probable on the date of modification, then no compensation cost is recognized until it becomes probable that the performance condition will be met. If that assessment of the probability of the performance condition

being met changes, the impact of the change in estimate would be recognized in the period of the change. If the requisite service has been provided prior to the change in estimate, the effect of the change in estimate would be immediately recognized.

The fair value for market-based restricted stock awards is determined using a lattice valuation model with a Monte Carlo simulation. The model takes into consideration the historical volatility of our stock and the risk-free interest rate at the date of grant. In addition, the model is used to estimate the derived service period for the awards. The derived service period is the estimated period of time that would be required to satisfy the market condition, assuming the market condition will be satisfied. Compensation expense is recognized over the derived service period for the awards using the straight-line method and is reduced for estimated forfeitures, as applicable, but is accelerated if the market condition is achieved earlier than estimated.

Non-Employee Stock-Based Awards

For our non-employee stock-based awards, the measurement date on which the fair value of the stock-based award is calculated is equal to the earlier of (i) the date at which a commitment for performance by the counterparty to earn the equity instrument is reached or (ii) the date at which the counterparty's performance is complete. We recognize stock-based compensation expense for the fair value of the vested portion of non-employee awards in our consolidated statements of operations.

Comprehensive Loss

Comprehensive loss is comprised of net loss and other comprehensive income (loss). Other comprehensive income (loss) includes certain changes in stockholders' equity which are excluded from net loss.

The components of accumulated other comprehensive income (loss) are as follows:

	December 31,	
	2011	2010
	(In thousands)	
Unrealized gain on available-for-sale securities and marketable investments in licensees	$ 78	$ 72
Foreign currency translation adjustments	(169)	(168)
	$ (91)	$ (96)

In 2011, 2010 and 2009, we did not recognize any other-than-temporary impairment charges related to our investments in licensees. In 2009, $26,000 of previously unrecognized unrealized loss was eliminated from accumulated other comprehensive income (loss). See Note 2 on Fair Value Measurements.

Income Taxes

We maintain deferred tax assets and liabilities that reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and are subject to tests of recoverability. Our deferred tax assets include net operating loss carryforwards, research credits and capitalized research and development. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Our net deferred tax asset has been fully offset by a valuation allowance because of our history of losses. Any potential accrued interest and penalties related to unrecognized tax benefits within operations would be recorded as income tax expense. To date, there have been no interest or penalties charged to us related to the underpayment of income taxes.

Concentrations of Customers and Suppliers

The majority of our revenues was earned in the United States. Two existing customers accounted for approximately 51% of our 2011 revenues and 69% of our 2010 revenues and one existing customer accounted for 46% of our 2009 revenues.

We contract third-party manufacturers to produce GMP-grade drugs for preclinical and clinical studies. We also contract for starting materials to supply those manufacturers and us. Certain development and clinical activities may be delayed if we are unable to obtain sufficient quantities of starting materials or GMP-grade drugs from our third-party suppliers or other third-party sources.

Recently Issued Accounting Standards

In May 2011, the Financial Accounting Standards Board (FASB) issued a new accounting standard on fair value measurements that clarifies the application of existing guidance and disclosure requirements, changes certain fair value measurement principles and requires additional disclosures about fair value measurements that are estimated using significant unobservable (Level 3) inputs. This new guidance is to be applied prospectively. We are required to adopt this standard in January 2012. We do not expect that this adoption will have a material impact on our financial statements.

In June 2011, the FASB issued a new accounting standard on the presentation of comprehensive income. The new standard requires the presentation of comprehensive income, the components of net income and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The new standard also requires presentation of adjustments for items that are reclassified from other comprehensive income to net income in the statement where the components of net income and the components of other comprehensive income are presented. We are required to adopt this standard in January 2012 and apply it retrospectively. We do not expect that this adoption will have a material impact on our financial statements.

2. FAIR VALUE MEASUREMENTS

We categorize assets and liabilities recorded at fair value on our consolidated balance sheet based upon the level of judgment associated with inputs used to measure their fair value. The categories are as follows:

Level 1 – Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date. An active market for the asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 – Inputs (other than quoted market prices included in Level 1) are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

Level 3 – Inputs reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Following is a description of the valuation methodologies used for instruments measured at fair value on our consolidated balance sheet, including the category for such instruments.

Cash Equivalents and Marketable Securities Available-for-Sale

Where quoted prices are available in an active market, securities are categorized as Level 1. Examples of such Level 1 securities include certificates of deposit and money market funds. If quoted market prices are not available for the specific security, then fair values are estimated by using pricing models, quoted prices of securities with similar characteristics or discounted cash flows. Examples of such Level 2 instruments include U.S. Treasury securities, U.S. government-sponsored enterprise securities, municipal securities, asset-backed securities, corporate notes and commercial paper.

Marketable securities by security type at December 31, 2011 were as follows:

	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
		(In thousands)		
Included in cash and cash equivalents:				
Money market funds	$ 12,885	$ —	$ —	$ 12,885
Restricted cash:				
Certificates of deposit	$ 793	$ —	$ —	$ 793
Marketable securities:				
Certificate of deposit (due in less than 1 year)	$ 329	$ —	$ —	$ 329
Government-sponsored enterprise securities (due in less than 1 year)	15,061	25	(1)	15,085
Government-sponsored enterprise securities (due in 1 to 2 years)	6,998	18	(12)	7,004
Commercial paper (due in less than 1 year)	39,206	41	—	39,247
Corporate notes (due in less than 1 year)	50,556	19	(28)	50,547
Corporate notes (due in 1 to 2 years)	25,113	30	(14)	25,129
	$ 137,263	$ 133	$ (55)	$ 137,341

Marketable securities by security type at December 31, 2010 were as follows:

	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
		(In thousands)		
Included in cash and cash equivalents:				
Money market funds	$ 21,076	$ —	$ —	$ 21,076
Municipal securities (due in less than 1 year)	18,450	—	—	18,450
Commercial paper (due in less than 1 year)	3,499	—	—	3,499
Corporate notes (due in less than 1 year)	1,856	—	(1)	1,855
	$ 44,881	$ —	$ (1)	$ 44,880
Restricted cash:				
Certificates of deposit	$ 792	$ —	$ —	$ 792
Marketable securities:				
Certificate of deposit (due in less than 1 year)	$ 325	$ —	$ —	$ 325
Government-sponsored enterprise securities (due in less than 1 year)	11,288	—	(1)	11,287
Government-sponsored enterprise securities (due in 1 to 2 years)	27,270	9	(11)	27,268
Commercial paper (due in less than 1 year)	12,087	7	—	12,094
Corporate notes (due in less than 1 year)	116,822	127	(56)	116,893
Corporate notes (due in 1 to 2 years)	6,645	1	(3)	6,643
Investments in licensees	1	—	—	1
	$ 174,438	$ 144	$ (71)	$ 174,511

Marketable securities with unrealized losses at December 31, 2011 and 2010 were as follows:

	Less Than 12 Months		12 Months or Greater		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
	(In thousands)					
As of December 31, 2011:						
Government-sponsored enterprise securities (due in less than 1 year)	$ 5,021	$ (1)	$ —	$ —	$ 5,021	$ (1)
Government-sponsored enterprise securities (due in 1 to 2 years)	3,988	(12)	—	—	3,988	(12)
Corporate notes (due in less than 1 year)	33,847	(28)	—	—	33,847	(28)
Corporate notes (due in 1 to 2 years)	13,096	(14)	—	—	13,096	(14)
	$ 55,952	$ (55)	$ —	$ —	$ 55,952	$ (55)
As of December 31, 2010:						
Government-sponsored enterprise securities (due in less than 1 year)	$ 7,287	$ (1)	$ —	$ —	$ 7,287	$ (1)
Government-sponsored enterprise securities (due in 1 to 2 years)	15,287	(11)	—	—	15,287	(11)
Corporate notes (due in less than 1 year)	61,354	(56)	3,019	(1)	64,373	(57)
Corporate notes (due in 1 to 2 years)	4,313	(3)	—	—	4,313	(3)
	$ 88,241	$ (71)	$ 3,019	$ (1)	$ 91,260	$ (72)

The gross unrealized losses related to U.S. government-sponsored enterprise securities and corporate notes as of December 31, 2011 and 2010 were due to changes in interest rates. We determined that the gross unrealized losses on our marketable securities as of December 31, 2011 and 2010 were temporary in nature. We review our investments quarterly to identify and evaluate whether any investments have indications of possible impairment. Factors considered in determining whether a loss is temporary include the length of time and extent to which the fair value has been less than the cost basis, the financial condition and near-term prospects of the investee, and whether we intend to sell the security or whether it is more likely than not that we would be required to sell the security. We currently do not intend to sell these securities before recovery of their amortized cost basis.

In 2011, we received proceeds of $809,000 from the sale of a corporate note. In connection with the sale, we recognized a realized loss of $2,000.

Marketable and Non-Marketable Investments in Licensees

Where quoted prices are available in an active market, securities are categorized as Level 1. Level 1 securities include publicly traded equities. Significant investments in licensees accounted for using the equity method of accounting or equity securities in non-marketable companies are not measured at fair value and are not assigned a category level.

We recognized no charges in 2011, 2010 and 2009, related to other-than-temporary declines in the fair values of our investments in licensees. As of December 31, 2011 and 2010, the carrying values of our investments in non-marketable nonpublic companies were zero and $503,000, respectively. In 2011, we received proceeds of $1,000 on the sale of investment in licensees, which approximated the cost basis of the securities. In 2009 we recognized net realized losses of $26,000 related to sales of investments in licensees. In connection with the sales, $26,000 of previously unrecognized unrealized loss was eliminated from accumulated other comprehensive income (loss). See Note 3 on Joint Venture and Related Party Transactions for further discussion of investments in licensees.

Derivatives

Warrants to purchase common stock and non-employee options are normally traded less actively, have trade activity that is one way, and/or traded in less-developed markets and are therefore valued based upon models with significant unobservable market parameters, resulting in Level 3 categorization.

The fair value of derivatives has been calculated at each reporting date using the Black Scholes option-pricing model with the following assumptions:

	December 31,	
	2011	2010
Dividend yield	None	None
Expected volatility	0.714	0.668
Risk-free interest rate	0.36%	2.01%
Expected term	3 yrs	4 yrs

Dividend yield is based on historical cash dividend payments, which have been none to date. The expected volatility is based on historical volatilities of our stock since traded options on Geron stock do not correspond to derivatives' terms and trading volume of Geron options is limited. The risk-free interest rate is based on the U.S. Zero Coupon Treasury Strip Yields for the expected term in effect on the reporting date. The expected term of derivatives is equal to the remaining contractual term of the instrument.

As of December 31, 2011 and 2010, the following non-employee options to purchase our common stock were considered derivatives and classified as current liabilities:

Issuance Date	Exercise Price	Number of Shares at December 31, 2011	Number of Shares at December 31, 2010	Exercisable Date	Expiration Date	Fair Value at December 31, 2011	Fair Value at December 31, 2010
						(In thousands)	
March 2005	$ 6.39	284,600	284,600	January 2007	March 2015	$ 64	$ 707

Non-employee options whose performance obligations are complete are classified as derivative liabilities on our consolidated balance sheet. Upon the exercise of these options, the instruments are marked to fair value and reclassified from derivative liabilities to stockholders' equity. There were no reclassifications from current liabilities to stockholders' equity for non-employee option exercises in 2011 and 2010.

Fair Value on a Recurring Basis

The following table presents information about our financial assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2011, and indicate the fair value category assigned.

	Fair Value Measurements at Reporting Date Using			
(In thousands)	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	Total
Assets				
Money market funds [1]	$ 12,885	$ —	$ —	$ 12,885
Certificate of deposit [2]	329	—	—	329
Government-sponsored enterprise securities [2][3]	—	22,089	—	22,089
Commercial paper [2]	—	39,247	—	39,247
Corporate notes [2][3]	—	75,676	—	75,676
Total	$ 13,214	$ 137,012	$ —	$ 150,226

	Fair Value Measurements at Reporting Date Using			
(In thousands)	Quoted Prices in Active Markets for Identical Liabilities Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	Total
Liabilities				
Derivatives [4]	$ —	$ —	$ 64	$ 64

(1) Included in cash and cash equivalents on our consolidated balance sheet.

(2) Included in current marketable securities on our consolidated balance sheet.

(3) Included in noncurrent marketable securities on our consolidated balance sheet.

(4) Included in fair value of derivatives on our consolidated balance sheet.

Changes in Level 3 Recurring Fair Value Measurements

The table below includes a rollforward of the balance sheet amounts for the year ended December 31, 2011 (including the change in fair value), for financial instruments in the Level 3 category. When a determination is made to classify a financial instrument within Level 3, the determination is based upon the significance of the unobservable parameters to the overall fair value measurement. However, Level 3 financial instruments typically include, in addition to the unobservable components, observable components (that is, components that are actively quoted and can be validated to external sources). Accordingly, the gains and losses in the table below include changes in fair value due in part to observable factors that are part of the methodology.

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3) Year Ended December 31, 2011					
(In thousands)	Fair Value at December 31, 2010	Total Unrealized Gains Included in Earnings, net (1)	Purchases, Sales, Issuances, Settlements, net	Transfers In and/or Out of Level 3	Fair Value at December 31, 2011	Change in Unrealized Gains Related to Financial Instruments Held at December 31, 2011 (1)
Derivative liabilities	$ 707	$ (643)	$ —	$ —	$ 64	$ (643)

(1) Reported as unrealized gain on fair value of derivatives in our consolidated statements of operations.

Credit Risk

We place our cash, restricted cash, cash equivalents and marketable securities with six financial institutions in the United States and Scotland. Generally, these deposits may be redeemed upon demand and therefore, bear minimal risk. Deposits with banks may exceed the amount of insurance provided on such deposits. Included in marketable securities as of December 31, 2011, is a certificate of deposit of $329,000 at the Bank of Scotland that matures in January 2012. Financial instruments that potentially subject us to concentrations of credit risk consist primarily of marketable securities. Marketable securities currently consist of a certificate of deposit and investment grade U.S. government-sponsored enterprise securities, commercial paper and corporate notes. Our investment policy, approved by the Board of Directors, limits the amount we may invest in any one type of investment issuer, thereby reducing credit risk concentrations.

3. JOINT VENTURE AND RELATED PARTY TRANSACTIONS

TA Therapeutics, Ltd.

In March 2005, we and the Biotechnology Research Corporation (BRC), a subsidiary of Hong Kong University of Science and Technology, established a joint venture company in Hong Kong called TA Therapeutics, Ltd. (TAT). TAT conducted research and was established to commercially develop products that utilize telomerase activator drugs to restore the regenerative and functional capacity of cells in various organ systems that have been impacted by senescence, injury or chronic disease. On June 15, 2007, we and BRC entered into an agreement to restructure the TAT joint venture. Under the amended agreements, we directed the preclinical and drug development activities, owned a 75% voting interest and exercised control over the company.

In July 2010, the board of directors and shareholders of TAT approved actions to commence a voluntary winding up of the company. In connection with the winding up of TAT, all intellectual property owned by TAT has been assigned to Geron. BRC is entitled to receive royalty payments for future sales of products covered by the intellectual property owned by TAT up to an amount equal to 150% of BRC's original capital contributions to TAT. In November 2010, the net remaining assets of TAT were distributed to its shareholders, resulting in a payment of $6,000 to BRC and $17,000 to Geron. The full wind up of TAT was completed in March 2011.

We incurred related party research and development costs of zero, $697,000 and $1,755,000 for the years ended December 31, 2011, 2010 and 2009, respectively, in connection with TAT.

Start Licensing and ViaGen, Inc.

In April 2005, Geron and Exeter Life Sciences, Inc. (Exeter) established Start Licensing, Inc. (Start), a joint venture to manage and license a broad portfolio of intellectual property rights related to animal reproductive technologies. We and Exeter owned 49.9% and 50.1% of Start, respectively. In connection with the establishment of Start, we granted a worldwide, exclusive, non-transferable license to our patent rights to nuclear transfer technology for use in animal cloning, with the right to sublicense such patent rights. Since there was no net book value associated with the patent rights at the execution of the joint venture, no initial value was recognized for our investment in Start. We suspended the equity method of accounting since our proportionate share of net losses in Start exceeded our original carrying value of the investment and we had no commitments to provide financial support or obligations to perform services or other activities for Start.

In August 2008, Geron and Exeter entered into Contribution Agreements whereby we and Exeter exchanged our equity interests in Start for equity interests in ViaGen, Inc. (ViaGen). As a result of the exchange, Start became a wholly-owned subsidiary of ViaGen. Ownership of ViaGen immediately following the transaction was as follows: Exeter– 69%; Geron – 27%; and Smithfield Foods – 4%. Since no value had been recorded for our investment in Start, the same zero carrying value was applied to our investment in ViaGen. Geron's share of equity method losses from Start that were not recognized during the period the equity method was suspended was carried over to the investment in ViaGen.

In September 2008, we provided a $1,500,000 loan to ViaGen in connection with ViaGen's acquisition of an interest in an unrelated company. The loan bore an interest rate of 6% per annum and was convertible into ViaGen equity at Geron's option at the then current market value. Since the proceeds of the loan did not fund prior ViaGen losses and represented additional financial support to ViaGen, we applied the equity method of accounting to the basis of the loan and recognized losses for our proportionate share of ViaGen's operating losses. The loan basis was reduced to zero as of March 31, 2009, and since we had no commitments to provide financial support or obligations to perform services or other activities for ViaGen, we suspended the equity method of accounting.

In September 2009, we purchased $3,603,000 in equity from ViaGen and simultaneously Exeter converted its outstanding debt with ViaGen into equity. The new equity purchase did not fund prior ViaGen losses and represented additional financial support to ViaGen. Ownership of ViaGen upon consummation of the transactions was as follows: Exeter – 70%; Geron – 28%; and Smithfield Foods – 2%. Subsequent to our equity purchase, Geron received $1,593,000 from ViaGen in repayment of the 2008 loan, including accrued interest. As the source of funds to repay the loan and accrued interest was derived from our equity purchase, the equity investment in ViaGen was recorded net of the loan and interest payment. With the new investment in 2009, we resumed applying the equity method of accounting by increasing (decreasing) the carrying value of our investment by our proportionate share of ViaGen's earnings (losses).

In November 2010, we provided a new loan of $1,500,000 to ViaGen to fund its operations. Also in November 2010, we agreed to appoint one of our ViaGen board member representatives as executive chairman of the ViaGen board and purchased $23,000 in ViaGen equity directly from another shareholder, Moral Compass Corporation (MCC, previously referred to as Exeter). As of December 31, 2011, ownership of ViaGen was as follows: MCC – 58%; Geron – 40%; and Smithfield Foods – 2%.

Since ViaGen does not have sufficient equity to finance its own activities without additional subordinated financial support, it meets the definition of a VIE. By providing financial support to ViaGen, we are a variable interest holder. However as of December 31, 2011, we lack the power to direct activities that most significantly impact ViaGen's economic performance. Although one of our ViaGen board representatives serves as executive chairman of the ViaGen board, he has no additional rights or obligations to direct ViaGen's activities. Control

of the post-termination exercise period for certain stock options previously granted to terminated employees to June 30, 2013 and December 31, 2013, and $874,000 related to write-downs of excess lab equipment and leasehold improvements and other charges.

We may incur additional charges as a result of the restructuring as we exit one of the three buildings in which we lease space in Menlo Park, California, which will be recorded as they are determined. We also plan to sell any excess equipment, the net proceeds of which may offset some of these future charges. We expect the restructuring will result in aggregate cash expenditures of approximately $4,401,000, of which $671,000 related to one-time termination benefits was paid as of December 31, 2011 and approximately $3,730,000 related to one-time termination benefits is expected to be paid during 2012.

The components relating to the restructuring charges in our consolidated statements of operations are summarized in the following table (in thousands):

	Employee Severance And Other Benefits	Excess Equipment	Stock-Based Compensation	Total
Restructuring charge	$ 4,401	$ 874	$ 174	$ 5,449
Cash payments	(671)	—	—	(671)
Adjustments or non-cash credits	—	(874)	(174)	(1,048)
Ending accrual balance as of December 31, 2011	$ 3,730	$ —	$ —	$ 3,730

8. LONG-TERM DEBT

Effective August 1, 2011, we entered into a Loan Agreement with the California Institute for Regenerative Medicine (CIRM) solely to support development of our human embryonic stem-cell derived oligodendrocyte progenitor therapy (GRNOPC1) for the treatment of spinal cord injury. Under the Loan Agreement, CIRM was scheduled to disburse an aggregate of approximately $24,847,000 to us over a period of three years commencing on August 1, 2011 and ending on July 31, 2014. In certain cases, the disbursements were conditioned upon the achievement of project milestones. The interest rate for each quarterly disbursement of the loan was equal to the one-year London Interbank Offered Rate (LIBOR) plus 2%. Interest was compounded annually on the principal amount from the date of the applicable disbursement. Repayment of the principal and any accrued interest was due and payable at the end of the initial term of five years (August 1, 2016). Repayment of principal and interest could have been suspended if the supported project was abandoned for any reason. Any principal or interest amount that had not been due and payable for 15 years after the granting of a suspension of repayment automatically would have been forgiven by CIRM.

In 2011 we received an aggregate total of $6,422,000 in disbursements under the Loan Agreement with CIRM. On November 14, 2011, in connection with our decision to focus exclusively on the development of our oncology programs, we repaid $6,459,000 to CIRM, representing the entire amount of the outstanding principal balance under the Loan Agreement with CIRM, including accrued interest of $37,000. In addition, we relinquished our right to future disbursements under the Loan Agreement and gave notice of termination. With the repayment of the entire outstanding balance to CIRM, we have no further amounts owed to CIRM.

In connection with each disbursement under the Loan Agreement, we were obligated to issue to CIRM a warrant to purchase Geron common stock. The number of shares underlying each of the warrants was equal to 50% of the applicable disbursement amount divided by the average of the closing sales prices of Geron common stock as reported by the Nasdaq Global Select Market for the ten consecutive trading days immediately preceding the corresponding disbursement (Average Closing Price). The exercise price of each warrant was equal to the Average Closing Price preceding the issuance of the warrant. Each of the warrants and the underlying common stock were unregistered and each warrant has a term of ten years from the respective date of issuance. As of December 31, 2011, warrants to purchase an aggregate of 999,275 shares of Geron common stock have been issued to CIRM in accordance with the terms of the Loan Agreement, and we have no further obligations to issue any additional warrants to CIRM.

The carrying value of the CIRM loan was determined by allocating the proceeds between the fair value of the debt and the warrants issued to CIRM using the relative fair value method. The fair value of the warrants was estimated using the Black Scholes option-pricing model at the time of issuance. The discount resulting from the allocation of proceeds between the fair values of the debt and warrants was being amortized to interest expense and accreted to the principal face value of the debt using the effective interest rate method. In 2011 we recognized $88,000 of interest expense related to the CIRM loan, which included amortized debt discount of $51,000 and accrued interest of $37,000. With full repayment of the CIRM loan in November 2011, we recognized $1,664,000 as a loss from debt extinguishment in our consolidated statements of operations for the remaining unamortized debt discount on the loan.

9. COMMITMENTS AND CONTINGENCIES

Operating Lease Commitment

In March 2008, as payment of the total rent due for our premises at 200 Constitution Drive and 230 Constitution Drive in Menlo Park, California, for the period from August 1, 2008 through July 31, 2012, we issued to the lessor of those premises 742,158 shares of our common stock. The fair value of the common stock of $3,191,000 was recorded as a prepaid asset and is being amortized to rent expense on a straight-line basis over the lease period.

In January 2010, we extended the lease at our premises at 149 Commonwealth Drive. In January 2010 and April 2010, we issued an aggregate of 187,999 shares of our common stock to the lessor of those premises in payment of our monthly rental obligation from May 1, 2010 through July 31, 2012. The fair value of the common stock issuances of $1,129,000 was recorded as a prepaid asset and is being amortized to rent expense on a straight-line basis over the lease period.

Future minimum payments under non-cancelable operating leases are zero through July 31, 2012, as a result of the prepayments of rent with our common stock. Rent expense under operating leases was approximately $1,311,000, $1,323,000 and $1,324,000 for the years ended December 31, 2011, 2010 and 2009, respectively.

Severance Plan

We have a Change of Control Severance Plan (the Severance Plan) that applies to all employees, and provides for each employee to receive a severance payment upon a triggering event following a change of control. A triggering event is defined as an event where: (i) an employee is terminated by us without cause in connection with a change of control or within 12 months following a change of control; or (ii) an employee is not offered comparable employment (new or continuing) by us or our successor or acquirer within 30 days after the change of control or any employment offer is rejected; or (iii) after accepting (or continuing) employment with us after a change of control, an employee resigns within six months following a change of control due to a material change in the terms of employment. Severance payments range from two to 18 months of base salary, depending on the employee's position with us, payable in a lump sum payment. We have not made any payments under our Severance Plan.

Indemnifications to Officers and Directors

Our corporate bylaws require that we indemnify our officers and directors, as well as those who act as directors and officers of other entities at our request, against expenses, judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceedings arising out of their services to Geron. In addition, we have entered into separate indemnification agreements with each of our directors which provide for indemnification of these directors under similar circumstances and under additional circumstances. The indemnification obligations are more fully described in our bylaws and the indemnification agreements. We purchase standard insurance to cover claims or a portion of the claims made against our directors and officers. Since a maximum obligation is not explicitly stated in our bylaws or in our indemnification agreements and will depend on the facts and circumstances that arise out of any future claims, the overall maximum amount of the obligations cannot be reasonably estimated. The fair value of these obligations was zero on our consolidated balance sheets as of December 31, 2011 and 2010.

10. STOCKHOLDERS' EQUITY

Warrants

As of December 31, 2011, the following warrants to purchase our common stock were outstanding and classified as equity:

Issuance Date	Exercise Price	Number of Shares	Exercisable Date	Expiration Date
November 2011	$ 2.32	461,382	November 2011	November 2021
August 2011	$ 3.98	537,893	August 2011	August 2021
September 2009	$ 9.00	150,000	September 2009	September 2014
October 2007	$ 7.42	25,000	October 2007	October 2012
September 2007	$ 7.19	100,000	September 2007	September 2012
April 2005	$ 3.75	470,000	April 2005	April 2015
March 2000	$ 17.50	200,000	March 2000	March 2012
March 2000	$ 12.50	100,000	March 2000	March 2012
		2,044,275		

Pursuant to our Loan Agreement with CIRM, we were obligated to issue to CIRM warrants to purchase our common stock in connection with each disbursement. In connection with the disbursements received from CIRM in November 2011 and August 2011, we issued to CIRM warrants to purchase 461,382 and 537,893 shares of our common stock at an exercise price of $2.32 and $3.98 per share, respectively. The exercise price of each warrant was equal to the average closing sales prices of our common stock as reported by the Nasdaq Global Select Market for the ten consecutive trading days immediately preceding the corresponding disbursement. Each of the warrants and the underlying common stock were unregistered and each warrant has a term of ten years from the respective date of issuance. We have no further obligations to issue any additional warrants to CIRM. For further discussion regarding the CIRM loan and warrants, see Note 8 on Long-Term Debt.

In April 2009 in connection with our continued collaboration with an investor and licensee and the data received under the collaboration relevant to Geron's therapeutic programs, we modified the terms of certain outstanding warrants held by this investor by extending the exercise term and reducing the exercise price. The exercise term of warrants to purchase 200,000 shares of common stock was extended to March 9, 2012 from March 9, 2010 and the exercise price was modified to $17.50 per share from $67.09 per share. The exercise term of warrants to purchase 100,000 shares of common stock was extended to March 9, 2012 from March 9, 2010 and the exercise price was unchanged at $12.50 per share. In connection with the modifications, we recognized a deemed dividend of approximately $190,000 in our consolidated statements of operations for the incremental fair value of the modified warrants, as calculated using the Black Scholes option-pricing model as of the modification date.

Equity Plans

1992 Stock Option Plan

The 1992 Stock Option Plan (1992 Plan) expired in August 2002 and no further option grants can be made from the 1992 Plan. The options granted under the 1992 Plan were either incentive stock options or nonstatutory stock options. Options granted under the 1992 Plan expire no later than ten years from the date of grant. For incentive stock options and nonstatutory stock options, the option exercise price was at least 100% and 85%, respectively, of the fair market value of the underlying common stock on the date of grant. Options to purchase shares of common stock generally vested over a period of four or five years from the date of the option grant, with a portion vesting after six months and the remainder vesting ratably over the remaining period.

2002 Equity Incentive Plan

In May 2002, our stockholders approved the adoption of the 2002 Equity Incentive Plan (2002 Plan) to replace the 1992 Plan. In connection with the adoption of the 2011 Incentive Award Plan (see below), no further grants may be made from the 2002 Plan. Options granted under the 2002 Plan expire no later than ten years from the date of grant. For incentive stock options, the exercise price was equal to 100% of the fair market value of the underlying common stock on the date of grant. Exercise prices for all other stock options were determined by the Board of

Directors. Service-based stock options under our 2002 Plan generally vest over a period of four years from the date of the option grant, with a portion vesting after six months and the remainder vesting ratably over the remaining period. Stock purchase rights (restricted stock awards and restricted stock units) have variable vesting schedules and purchase prices were determined by our Board of Directors on the date of grant.

2011 Incentive Award Plan

In May 2011, our stockholders approved the adoption of the 2011 Incentive Award Plan (2011 Plan) to replace the 2002 Plan. Our Board of Directors administers the 2011 Plan. The 2011 Plan provides for grants to employees of us or of our subsidiary (including officers and employee directors) of either incentive stock or nonstatutory stock options and stock purchase rights to employees (including officers and employee directors) and consultants (including non-employee directors) of us or of our subsidiary. As of December 31, 2011, we had reserved an aggregate of approximately 18,286,000 shares of common stock for issuance under the 2011 Plan. Pursuant to the terms of the 2011 Plan, any shares subject to outstanding stock options originally granted under the 1992 Plan, 1996 Directors Plan or 2002 Plan, or outstanding unvested restricted stock awards originally granted under the 2002 Plan, that expire or terminate for any reason prior to exercise or settlement or are forfeited because of the failure to meet a contingency or condition required to vest such shares shall become available for issuance under the 2011 Plan. Options granted under the 2011 Plan expire no later than ten years from the date of grant. For incentive stock options, the exercise price shall be equal to 100% of the fair market value of the underlying common stock on the date of grant. Exercise prices for all other stock options are determined by the Board of Directors. If, at the time we grant an option, the optionee directly or by attribution owns stock possessing more than 10% of the total combined voting power of all classes of our stock, the option price shall be at least 110% of the fair market value of the underlying common stock and shall not be exercisable more than five years after the date of grant.

We grant service-based stock options under our 2011 Plan that generally vest over a period of four years from the date of the option grant, with a portion vesting after six months and the remainder vesting ratably over the remaining period. Stock purchase rights (restricted stock awards and restricted stock units) have variable vesting schedules and purchase prices as determined by the Board of Directors on the date of grant.

Under certain circumstances, options may be exercised prior to vesting, subject to our right to repurchase shares subject to such option at the exercise price paid per share. Our repurchase rights would generally terminate on a vesting schedule identical to the vesting schedule of the exercised option. In 2011, we did not repurchase any shares under the 2011 Plan. As of December 31, 2011, no shares outstanding were subject to repurchase.

1996 Directors' Stock Option Plan

The 1996 Directors' Stock Option Plan (1996 Directors Plan) expired in July 2006 and no further option grants can be made from the 1996 Directors Plan. The options granted under the 1996 Directors Plan were nonstatutory stock options and expired no later than ten years from the date of grant. The option exercise price was equal to the fair market value of the underlying common stock on the date of grant. Options to purchase shares of common stock generally were 100% vested upon grant, except for options granted upon first appointment to the Board of Directors (First Option). The First Option vested annually over three years upon each anniversary date of appointment to the Board. The options issued pursuant to the 1996 Directors Plan remain exercisable for up to 90 days following the optionee's termination of service as our director, unless such termination is a result of death or permanent and total disability, in which case the options (both those already exercisable and those that would have become exercisable had the director remained on our Board of Directors for an additional 36 months) remain exercisable for up to a 24 month period.

2006 Directors' Stock Option Plan

In May 2006, our stockholders approved the adoption of the 2006 Directors' Stock Option Plan (2006 Directors Plan) to replace the 1996 Directors Plan. As of December 31, 2011, we had reserved an aggregate of 2,500,000 shares of common stock for issuance under the 2006 Directors Plan. The 2006 Directors Plan provides for the automatic grant of the following types of equity awards.

First Option. Each person who becomes a non-employee director, whether by election by the Geron stockholders or by appointment by the Board of Directors to fill a vacancy, will automatically be granted an option to purchase 60,000 shares of common stock on the date such person first becomes a non-employee director (the First Option).

Subsequent Awards. Each non-employee director (other than the Chairman of the Board of Directors and any director receiving a First Option on the date of the annual meeting) will automatically be granted a subsequent option on the date of the Annual Meeting of Stockholders in each year during such director's service on the Board (a Subsequent Option) to purchase 10,000 shares of common stock and a restricted stock award (a Subsequent Stock Award) of 5,000 shares of common stock. In the case of the Chairman of the Board, the Subsequent Option will be for 20,000 shares of common stock and the Subsequent Stock Award shall be for 10,000 shares of common stock.

Committee Chair Service Awards. On the date of each Annual Meeting of Stockholders, the Chairman of the Audit Committee receives an option to purchase 8,000 shares of common stock (a Committee Chair Service Option), and a restricted stock award (a Committee Chair Service Stock Award) of 4,000 shares of common stock. The Committee Chair Service Option for the Compensation Committee Chairman and the Nominating and Corporate Governance Committee Chairman shall be for 4,000 shares of common stock and the Committee Chair Service Stock Award shall be for 2,000 shares of common stock.

Committee Service Awards. On the date of each Annual Meeting of Stockholders, each non-employee director who continues to serve on the Audit Committee, the Compensation Committee, Nominating and Corporate Governance Committee or another designated standing committee of the Board shall receive, an option to purchase 2,000 shares of common stock (a Committee Service Option) and a restricted stock award of 1,000 shares of common stock (a Committee Service Stock Award), other than the Chairman of such committee.

The 2006 Directors Plan provides that each First Option vests annually over three years upon each anniversary date of appointment to the Board. Each Subsequent Option, Committee Chair Service Option, and Committee Service Option is fully vested on the date of its grant. Each Subsequent Stock Award, Committee Chair Service Stock Award and Committee Service Stock Award vests annually in four equal installments over four years commencing on the date of grant and no payment shall be required from the non-employee director in order to receive the award. Options under the 2006 Directors Plan remain exercisable for up to three years following the optionee's termination of service as our director, unless such termination is a result of death or permanent and total disability, in which case the options (both those already exercisable and those that would have become exercisable had the director remained on our Board of Directors for an additional 36 months) remain exercisable for up to a 24 month period or unless there is a death of an optionee within 3 months following his or her termination of service, in which case the options will remain exercisable for an additional six month period from the date of death. Upon termination of service as our director, any unvested options and restricted stock awards shall return to the 2006 Directors Plan, unless such termination is a result of death or permanent and total disability, in which case any unvested restricted stock awards shall immediately vest.

The exercise price of all options granted under the 2006 Directors Plan is equal to 100% of the fair market value of the underlying common stock on the date of grant. Options granted under the 2006 Directors Plan have a term of ten years.

Aggregate option and award activity for the 1992 Plan, 2002 Plan, 2011 Plan, 1996 Directors Plan and 2006 Directors Plan is as follows:

		Outstanding Options			
	Shares Available For Grant	Number of Shares	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life (In years)	Aggregate Intrinsic Value (In thousands)
Balance at December 31, 2010	5,570,506	12,881,648	$ 6.68		$ 3,298
Additional shares authorized	14,000,000	—	$ —		
Options granted	(3,371,450)	3,371,450	$ 3.81		
Awards granted	(3,463,714)	—	$ —		
Options exercised	—	(46,655)	$ 3.94		
Options canceled/forfeited	1,850,895	(1,850,895)	$ 10.59		
Awards canceled/repurchased	404,636	—	$ —		
1992 Plan and 1996 Directors Plan options expired	(517,375)	—	$ 18.46		
Balance at December 31, 2011	14,473,498	14,355,548	$ 5.51	5.23	$ 1
Options exercisable at December 31, 2011		10,109,076	$ 6.02	3.84	$ —
Options fully vested and expected to vest at December 31, 2011		13,995,189	$ 5.55	5.14	$ 1

The aggregate intrinsic value in the preceding table represents the total intrinsic value, based on Geron's closing stock price of $1.48 per share as of December 31, 2011, which would have been received by the option holders had all the option holders exercised their options as of that date.

There were no options granted with an exercise price below fair market value of our common stock on the date of grant in 2011, 2010 or 2009. There were no options granted with an exercise price greater than fair market value of our common stock on the date of grant in 2011, 2010 or 2009. As of December 31, 2011, 2010 and 2009, there were 10,109,076, 9,706,299 and 8,003,110 exercisable options outstanding at weighted average exercise prices per share of $6.02, $6.99 and $7.33, respectively.

The total pretax intrinsic value of stock options exercised during 2011, 2010 and 2009 was $56,000, $110,000 and $747,000, respectively. Cash received from the exercise of options in 2011, 2010 and 2009 totaled approximately $184,000, $268,000 and $1,793,000, respectively. No income tax benefit was realized from stock options exercised in 2011 since we reported an operating loss.

Information about stock options outstanding as of December 31, 2011 is as follows:

	Options Outstanding		
Exercise Price Range	Number of Shares	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life (In years)
$ 1.37 – $ 4.30	3,506,713	$ 3.29	5.50
$ 4.31 – $ 5.23	2,812,022	$ 4.80	7.03
$ 5.24 – $ 6.40	2,907,347	$ 5.80	5.20
$ 6.41 – $ 11.07	5,129,466	$ 7.24	4.07
$ 1.37 – $ 11.07	14,355,548	$ 5.51	5.23

Aggregate restricted stock activity for the 2002 Plan, 2011 Plan and 2006 Directors Plan is as follows:

	Number of Shares	Weighted Average Grant Date Fair Value Per Share	Weighted Average Remaining Contractual Term (In years)
Non-vested restricted stock at December 31, 2010	4,710,715	$ 4.79	2.26
Granted [1]	3,463,714	$ 4.29	
Vested	(1,667,408)	$ 5.66	
Canceled/forfeited	(404,636)	$ 4.64	
Non-vested restricted stock at December 31, 2011 [2]	6,102,385	$ 4.28	1.70

(1) Includes 1,204,500 performance-based restricted stock awards (PSAs) that vest only upon achievement of certain strategic goals and 373,000 market-based restricted stock awards (MSAs) that vest only upon achievement of certain market price thresholds. None of the PSAs or MSAs vested during 2011.

(2) Includes 2,960,500 PSAs that have not achieved certain strategic goals and 1,331,000 MSAs that have not achieved certain market price thresholds.

The total fair value of restricted stock that vested during 2011, 2010 and 2009 was $7,402,000, $3,408,000 and $8,633,000, respectively.

Employee Stock Purchase Plan

In July 1996, we adopted the 1996 Employee Stock Purchase Plan (Purchase Plan) and as of December 31, 2011, we had reserved an aggregate of 1,200,000 shares of common stock for issuance under the Purchase Plan. Approximately 725,000 and 619,000 shares have been issued under the Purchase Plan as of December 31, 2011 and 2010, respectively. As of December 31, 2011, 474,544 shares were available for issuance under the Purchase Plan.

Under the terms of the Purchase Plan, employees can choose to have up to 10% of their annual salary withheld to purchase our common stock. An employee may not make additional payments into such account or increase the withholding percentage during the offering period.

The Purchase Plan is comprised of a series of offering periods, each with a maximum duration (not to exceed 12 months) with new offering periods commencing on January 1 and July 1 of each year. The date an employee enters the offering period will be designated his or her entry date for purposes of that offering period. An employee may only participate in one offering period at a time. Each offering period consists of two consecutive purchase periods of six months' duration, with the last day of such period designated a purchase date.

The purchase price per share at which common stock is purchased by the employee on each purchase date within the offering period is equal to 85% of the lower of (i) the fair market value per share of Geron common stock on the employee's entry date into that offering period or (ii) the fair market value per share of common stock on that purchase date. If the fair market value of Geron common stock on the purchase date is less than the fair market value at the beginning of the offering period, a new 12 month offering period will automatically begin on the first business day following the purchase date with a new fair market value.

Effective for the offering period beginning July 1, 2009 and subsequent offering periods, shares purchased under the Purchase Plan shall be registered and available for trading in an open market transaction one year from the date of purchase, and certificates evidencing such shares shall bear a restrictive legend.

Stock-Based Compensation Expense

We measure and recognize compensation expense for all share-based payment awards made to employees and directors, including employee stock options, restricted stock awards and employee stock purchases related to the Purchase Plan, based on estimated grant-date fair values.

Since July 2010, our Board of Directors have awarded to our employees and directors restricted stock awards with vesting schedules based on achievement of certain strategic goals (PSAs) and restricted stock awards with vesting schedules based on achievement of certain market price thresholds of our common stock (MSAs) over three-year performance periods. These restricted stock awards are included in the restricted stock activity table

above. Recognition of compensation expense for PSAs will commence only once the performance condition is probable of being achieved. We have not recognized any stock-based compensation expense for PSAs in our consolidated statements of operations for the years ended December 31, 2011 and 2010, since we did not believe that the achievement of the performance criteria was probable during that time. Compensation expense for MSAs is being recognized over the derived service periods for the awards using the straight-line method, but is accelerated if the market condition is achieved earlier than estimated. The market price thresholds for the MSAs were not achieved during the years ended December 31, 2011 and 2010.

The following table summarizes the stock-based compensation expense related to share-based payment awards for the years ended December 31, 2011, 2010 and 2009 which was allocated as follows:

	Year Ended December 31,		
	2011	2010	2009
	(In thousands)		
Research and development	$ 5,799	$ 6,625	$ 5,339
Restructuring charges	174	—	—
General and administrative	9,276	7,093	5,236
Stock-based compensation expense included in operating expenses	$ 15,249	$ 13,718	$ 10,575

Modifications to outstanding options and restricted stock awards held by our former Chief Executive Officer and Chief Financial Officer and certain members of our Board of Directors resulted in additional stock-based compensation expense in 2011 which has been reflected in the above table. In addition, stock-based compensation expense has been recognized for the modification of the post-termination exercise period for certain stock options previously granted to employees affected by the November 2011 restructuring. See Note 7 on Restructuring for further discussion of the restructuring.

The fair value of options granted in 2011, 2010 and 2009 has been estimated at the date of grant using the Black Scholes option-pricing model with the following assumptions:

	2011	2010	2009
Dividend yield	0%	0%	0%
Expected volatility range	0.629 to 0.660	0.625 to 0.635	0.630 to 0.633
Risk-free interest rate range	0.88% to 2.37%	1.11% to 2.65%	1.54% to 2.52%
Expected term	5 yrs	5 yrs	5 yrs

The fair value of employee stock purchases in 2011, 2010 and 2009 under the Purchase Plan has been estimated using the Black Scholes option-pricing model with the following assumptions:

	2011	2010	2009
Dividend yield	0%	0%	0%
Expected volatility range	0.278 to 0.584	0.468 to 0.995	0.536 to 1.016
Risk-free interest rate range	0.10% to 0.32%	0.18% to 0.54%	0.28% to 2.38%
Expected term range	6 mos to 12 mos	6 mos to 12 mos	6 mos to 12 mos

Dividend yield is based on historical cash dividend payments, which have been none to date. Expected volatility range is based on historical volatilities of our stock since traded options on Geron stock do not correspond to option terms and trading volume of options is limited. The risk-free interest rate range is based on the U.S. Zero Coupon Treasury Strip Yields for the expected term in effect on the date of grant for an award. The expected term of options is derived from actual historical exercise data and represents the period of time that options granted are expected to be outstanding. The expected term of employees' purchase rights under the Purchase Plan is equal to the purchase period. We grant options under our equity plans to employees, non-employee directors, and consultants for whom the vesting period is generally four years.

As stock-based compensation expense recognized in the consolidated statements of operations for the years ended December 31, 2011, 2010 and 2009 is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures but at a minimum, reflects the grant-date fair value of those awards that actually vested in the period. Forfeitures have been 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.

Based on the Black Scholes option-pricing model, the weighted average estimated fair value of employee stock options granted during the years ended December 31, 2011, 2010 and 2009 was $2.06, $2.87 and $3.55 per share, respectively. The weighted average estimated fair value of purchase rights under our Purchase Plan for the years ended December 31, 2011, 2010 and 2009 was $1.20, $1.92 and $3.17 per share, respectively. As of December 31, 2011, total compensation cost related to unvested stock awards not yet recognized, net of estimated forfeitures and assuming no probability of achievement for outstanding PSAs, was $13,138,000, which is expected to be recognized over the next 34 months on a weighted-average basis.

Stock-Based Compensation to Service Providers

We grant options, restricted stock and warrants to purchase common stock to consultants from time-to-time in exchange for services performed for us. In general, the options and restricted stock vest over the contractual period of the consulting arrangement and warrants are fully vested on the grant date. In 2011, we granted options to purchase 46,000 shares to consultants. No options or warrants were granted to consultants in 2010 or 2009. In September 2009, our Chief Scientific Officer for Telomerase Technologies retired and became an advisor to us. In connection with his advisory function, the options and restricted stock awards previously granted to him as an employee continued to vest under the same schedule as he provided services for us, and such awards were accounted for as consultant awards. The fair value of options, restricted stock awards and warrants granted to consultants is being amortized to expense over the vesting term of the respective equity award. In addition, we will record any additional increase in the fair value of the options, restricted stock awards or warrants as the respective equity award vests. We recorded stock-based compensation expense of $114,000, $463,000 and $190,000 for the vested portion of the fair value of options, restricted stock awards and warrants to consultants in 2011, 2010 and 2009, respectively.

We also grant common stock to consultants, vendors and research institutions in exchange for services either performed or to be performed for us. In 2011, 2010 and 2009, we issued 180,954, 1,994,993 and 1,272,438 shares of common stock, respectively, in exchange for goods or services. For these stock grants, we record a prepaid asset equal to the fair market value of the granted shares on the date of grant and amortize to expense on a pro-rata basis as services are performed or goods are received. In 2011, 2010 and 2009, we recognized approximately $4,736,000, $11,235,000 and $7,082,000, respectively, of expense in connection with stock grants to consultants, vendors and research institutions. As of December 31, 2011, $232,000 related to vendor stock grants remained as a prepaid asset which is being amortized to research and development expense on a pro-rata basis as services are incurred or goods are received. Also, we have prepaid our rental obligation for our facilities with common stock and as of December 31, 2011, have a prepaid balance of $758,000 which is being amortized to rent expense on a straight-line basis over the term of the leases until July 31, 2012.

Common Stock Reserved for Future Issuance

Common stock reserved for future issuance as of December 31, 2011 is as follows:

Outstanding stock options	14,355,548
Options and awards available for grant	14,473,498
Employee stock purchase plan	474,544
Warrants outstanding	2,044,275
Total	31,347,865

401(k) Plan

We sponsor a defined-contribution savings plan under Section 401(k) of the Internal Revenue Code covering all full-time U.S. employees (Geron 401K Plan). Participating employees may contribute up to the annual Internal Revenue Service contribution limit. The Geron 401K Plan also permits us to provide discretionary matching and profit sharing contributions. The Geron 401K Plan is intended to qualify under Section 401 of the Internal Revenue Code so that contributions by employees or by us, and income earned on the contributions, are not taxable to employees until withdrawn from the Geron 401K Plan. Our contributions, if any, will be deductible by us when made.

In December 2011, 2010 and 2009, our Board of Directors approved a matching contribution equal to 100% of each employee's 2011, 2010 and 2009 contributions, respectively. The matching contributions are invested in our common stock and vest ratably over four years for each year of service completed by the employee, commencing from the date of hire, until it is fully vested when the employee has completed four years of service. We provided the matching contribution in the month following Board approval.

For the vested portion of the 2011 match under this plan, we recorded $1,179,000 as research and development expense and $288,000 as general and administrative expense. For the vested portion of the 2010 match under this plan, we recorded $1,051,000 as research and development expense and $243,000 as general and administrative expense. For the vested portion of the 2009 match under this plan, we recorded $790,000 as research and development expense and $182,000 as general and administrative expense. As of December 31, 2011, approximately $397,000 remained unvested for the 2010,0 as research and -11(s)-4(e)-10(a)-20(r)-6(c)4(1]15(3(ev)2(d)-3(e)-11(d $))2(x)-8(p)-10(
$391(4(1)53F>>>)-21(0)-21(0)]TJ[(r)-6(e)-11(m)-9(a)-8(i)-22(ne)-10(d u)-27(n)10(v)16(e)-11(s)-3(t)-12(e)-10(d f)16(or t)-18(h
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We adopted the provision of the standard for accounting for uncertainties in income taxes on January 1, 2007. Upon adoption, we recognized no material adjustment in the liability for unrecognized tax benefits. At December 31, 2011, we had approximately $10,200,000 of unrecognized tax benefits, none of which would currently affect our effective tax rate if recognized due to our deferred tax assets being fully offset by a valuation allowance.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits is as follows (in thousands):

Balance as of December 31, 2010	$ —
Increase (decrease) related to prior year tax positions	—
Increase (decrease) related to current year tax positions	10,200
Settlements	—
Reductions due to lapse of applicable statute of limitations	—
Balance as of December 31, 2011	$ 10,200

If applicable, we would classify interest and penalties related to uncertain tax positions in income tax expense. Through December 31, 2011, there has been no interest expense or penalties related to unrecognized tax benefits.

We do not currently expect any significant changes to unrecognized tax benefits during the fiscal year ended December 31, 2012. In certain cases, our uncertain tax positions are related to tax years that remain subject to examination by the relevant tax authorities. Tax years for which we have carryforward net operating loss and credit attributes remain subject to examination by federal and most state tax authorities. In significant foreign jurisdictions, primarily Scotland, the 2004 through 2011 tax years generally remain subject to examination by the respective tax authority.

13. SEGMENT INFORMATION

Our executive management team represents our chief decision maker. We view our operations as one segment, the discovery and development of therapeutic and diagnostic products for oncology As a result, the financial information disclosed herein materially represents all of the financial information related to our principal operating segment.

14. CONSOLIDATED STATEMENTS OF CASH FLOWS DATA

	Year Ended December 31,		
	2011	2010	2009
	(In thousands)		
Supplemental operating activities:			
Cash in transit	$ —	$ 2	$ —
Issuance of common stock and warrants to purchase common stock for services rendered to date or to be received in future periods	$ 41	$ 3,098	$ 3,350
Issuance of common stock in payment of stock issuance obligation	$ 27,500	$ —	$ —
Unrealized gain on investments in licensees	$ —	$ —	$ 27
Reclassification between derivative liabilities and equity, net	$ —	$ —	$ 130
Issuance of common stock for 401(k) contributions and year-end bonuses	$ 3,778	$ 972	$ 3,707
Reclassification between deposits and other current assets	$ (180)	$ 131	$ 496
Supplemental investing activities:			
Net unrealized gain (loss) on available-for-sale securities	$ 6	$ 306	$ (472)
Supplemental financing activities:			
Deemed dividend on derivatives	$ —	$ —	$ 190

Cash paid for interest for the years ended December 31, 2011, 2010 and 2009 was $37,000, zero and zero, respectively. There was no cash paid for taxes for the years ended December 31, 2011, 2010 and 2009.

15. SELECTED QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(In thousands, except per share amounts)			
Year Ended December 31, 2011				
Revenues	$ 1,505	$ 462	$ 220	$ 251
Operating expenses [1]	25,861	21,878	20,156	30,659
Net loss applicable to common stockholders	(24,389)	(21,088)	(19,522)	(31,854)
Basic and diluted net loss per share applicable to common stockholders	$ (0.20)	$ (0.17)	$ (0.16)	$ (0.25)
Year Ended December 31, 2010				
Revenues	$ 918	$ 1,001	$ 546	$ 1,098
Operating expenses [2]	17,395	17,877	18,749	60,709
Net loss applicable to common stockholders	(16,640)	(17,031)	(18,344)	(59,362)
Basic and diluted net loss per share applicable to common stockholders	$ (0.18)	$ (0.18)	$ (0.19)	$ (0.59)

(1) The fourth quarter of 2011 includes approximately $5,449,000 in restructuring charges in connection with the decision to focus exclusively on the development of our oncology programs and discontinue further development of our stem cell programs. See Note 7 on Restructuring.

(2) The fourth quarter of 2010 includes $35,000,000 in acquired in-process research and development expense in connection with the exclusive license agreement with Angiochem. See Note 11 on License Agreements.

Basic and diluted net losses per share are computed independently for each of the quarters presented. Therefore, the sum of the quarters may not be equal to the full year net loss per share amounts.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

(I) Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures to ensure that information we are required to disclose in reports that we file or submit under the Securities Exchange Act of 1934, as amended, (Exchange Act) is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission's (SEC) rules and forms. Our management evaluated, with the participation of our chief executive officer (CEO) and our chief financial officer (CFO), the effectiveness of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) under the Exchange Act. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective, at a reasonable assurance level, as of December 31, 2011 and as of the date of this filing.

There have been no significant changes in Geron's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect internal control over financial reporting during the fiscal quarter ended December 31, 2011.

(II) Management's Report on Internal Control over Financial Reporting

Internal control over financial reporting refers to the process designed by, or under the supervision of, our CEO and CFO, and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, and includes those policies and procedures that:

(1) Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;

(2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and

(3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Management is responsible for establishing and maintaining an adequate internal control over financial reporting for the Company. Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

Under the supervision and with the participation of our management, including our principal executive officer, principal financial officer and principal accounting officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework set forth in "Internal Control — Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework set forth in "Internal Control — Integrated Framework," our management concluded that our internal control over financial reporting was effective as of December 31, 2011. The effectiveness of our internal control over financial reporting as of December 31, 2011 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included herein.

JOHN A. SCARLETT, M.D.
President and Chief Executive Officer

GRAHAM K. COOPER
Executive Vice President, Finance and Business Development, and Chief Financial Officer

(III) Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Geron Corporation

We have audited Geron Corporation's internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Geron Corporation's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

In our opinion, Geron Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Geron Corporation as of December 31, 2011 and 2010, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2011 of Geron Corporation and our report dated March 7, 2012 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Redwood City, California
March 7, 2012

ITEM 9B. OTHER INFORMATION

None.

PART III

Certain information required by Part III is omitted from this Annual Report on Form 10-K because the registrant will file with the U.S. Securities and Exchange Commission a definitive proxy statement pursuant to Regulation 14A in connection with the solicitation of proxies for the Company's Annual Meeting of Stockholders expected to be held in May 2012 (the Proxy Statement) not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, and certain information included therein is incorporated herein by reference.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Identification of Directors

The information required by this Item concerning our directors is incorporated by reference from the section captioned "Proposal 1: Election of Directors" contained in our Proxy Statement.

Identification of Executive Officers

The information required by this Item concerning our executive officers is set forth in Part I of this Annual Report on Form 10-K.

Code of Ethics

We have adopted a Code of Conduct with which every person who works for Geron is expected to comply. The Code of Conduct is publicly available on our website under the Investor Relations section at www.geron.com. This website address is intended to be an inactive, textual reference only; none of the material on this website is part of this Report. If any substantive amendments are made to the Code of Conduct or any waiver granted, including any implicit waiver, from a provision of the Code to our Chief Executive Officer, Chief Financial Officer or Corporate Controller, we will disclose the nature of such amendment or waiver on that website or in a report on Form 8-K.

Copies of the Code of Conduct will be furnished without charge to any person who submits a written request directed to the attention of our Corporate Secretary, at our offices located at 230 Constitution Drive, Menlo Park, California, 94025.

Section 16(a) Compliance

Information concerning Section 16(a) beneficial ownership reporting compliance is incorporated by reference from the section captioned "Section 16(a) Beneficial Ownership Reporting Compliance" contained in the Proxy Statement.

Audit Committee Report

The information required by this Item is incorporated by reference from the section captioned "Audit Committee Report" contained in the Proxy Statement.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated by reference from the sections captioned "Certain Transactions," "Compensation Discussion and Analysis," "Executive Compensation Tables" and "Compensation Committee Report" contained in the Proxy Statement.

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

The information required by this Item is incorporated by reference from the sections captioned "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plans" contained in the Proxy Statement.

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

The information required by this Item is incorporated by reference from the sections captioned "Proposal 1: Election of Directors," "Certain Transactions" and "Executive Compensation Tables" contained in the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item is incorporated by reference from the section captioned "Principal Accountant Fees and Services" contained in the Proxy Statement.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) (1) Consolidated Financial Statements

Included in Part II, Item 8 of this Report:

(2) Financial Statement Schedules

Financial statement schedules are omitted because they are not required or the information is disclosed in the financial statements listed in Item 15(a)(1) above.

(3) Exhibits

See Exhibit Index.

SIGNATURES

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

GERON CORPORATION

Date: March 7, 2012

By: /s/ GRAHAM K. COOPER
GRAHAM K. COOPER
Executive Vice President, Finance and Business Development, and Chief Financial Officer

POWER OF ATTORNEY

KNOW BY ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints, jointly and severally, John A. Scarlett, M.D., and Graham K. Cooper, and each one of them, attorneys-in-fact for the undersigned, each with the power of substitution, for the undersigned in any and all capacities, to sign any and all amendments to this annual report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitutes, may do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, each of the undersigned has executed this Power of Attorney as of the date indicated opposite his/her name.

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

Signature	Title	Date
/s/ JOHN A. SCARLETT JOHN A. SCARLETT	*President, Chief Executive Officer and Director (Principal Executive Officer)*	March 7, 2012
/s/ GRAHAM K. COOPER GRAHAM K. COOPER	*Executive Vice President, Finance and Business Development, and Chief Financial Officer (Principal Financial Officer)*	March 7, 2012
/s/ OLIVIA K. BLOOM OLIVIA K. BLOOM	*Vice President and Chief Accounting Officer (Principal Accounting Officer)*	March 7, 2012
/s/ KARIN EASTHAM KARIN EASTHAM	*Director*	March 7, 2012
/s/ EDWARD V. FRITZKY EDWARD V. FRITZKY	*Director*	March 7, 2012
/s/ THOMAS HOFSTAETTER THOMAS HOFSTAETTER	*Director*	March 7, 2012
/s/ HOYOUNG HUH HOYOUNG HUH	*Director*	March 7, 2012
/s/ THOMAS D. KILEY THOMAS D. KILEY	*Director*	March 7, 2012
/s/ ROBERT J. SPIEGEL ROBERT J. SPIEGEL	*Director*	March 7, 2012

EXHIBIT INDEX

Exhibit Number	Description	Incorporation by Reference		
		Exhibit Number	Filing	Filing Date
3.1	Amended and Restated Certificate of Incorporation of the Registrant	3.1	S-1	June 12, 1996
3.2	Certificate of Amendment of Restated Certificate of Incorporation of the Registrant	3.1	10-Q	July 31, 2006
3.3	Bylaws of Registrant	3.1	8-K	March 19, 2010
4.1	Form of Common Stock Certificate	4.1	S-1	June 12, 1996
4.2	Form of Senior Indenture, between the Registrant and one or more trustees to be named	4.5	S-3	July 9, 2009
4.3	Form of Subordinated Indenture, between the Registrant and one or more trustees to be named	4.6	S-3	July 9, 2009
4.4	Amended and Restated Warrant to purchase 100,000 shares of common stock issued by the Registrant to private investor, Eve M. Patton, dated April 13, 2009	4.1	10-Q	July 31, 2009
4.5	Amended and Restated Warrant to purchase 200,000 shares of common stock issued by the Registrant to private investor, Eve M. Patton, dated April 13, 2009	4.2	10-Q	July 31, 2009
4.6	Common Stock Warrant Agreement issued by the Registrant to University Technology Corporation, dated as of August 27, 2001	4.3	S-3	September 27, 2001
4.7	Form of Common Stock Purchase Warrant issued by the Registrant to certain Purchasers, dated September 9, 2009	4.2	8-K	September 10, 2009
4.8	Form of 2010 Warrant issued by the Registrant to Certain Purchasers, dated January 15, 2010	4.1	8-K	January 15, 2010
10.1	Form of Indemnification Agreement	10.1		
10.2	1992 Stock Option Plan, as amended *	Appendix A	Def 14A	April 9, 2001
10.3	Amended and Restated 1996 Employee Stock Purchase Plan *	10.2	10-Q	July 31, 2009
10.4	1996 Directors' Stock Option Plan, as amended *	Appendix B	Def 14A	April 15, 2003
10.5	Amended and Restated 2002 Equity Incentive Plan *	4.1	S-8	June 4, 2010
10.6	Amended and Restated 2006 Directors' Stock Option Plan *	10.2	10-Q	August 5, 2011
10.7	2011 Incentive Award Plan *	10.1	8-K	May 16, 2011
10.8†	Patent License Agreement between the Registrant and University of Texas Southwestern Medical Center at Dallas, dated September 8, 1992	10.7	S-1	June 12, 1996
10.9†	Intellectual Property License Agreement between the Registrant and University Technology Corporation, dated December 9, 1996	10.30	10-Q	May 13, 1997
10.10†	Exclusive License Agreement between the Registrant and the Regents of the University of California, dated February 2, 1994	10.9	S-1	June 12, 1996
10.11†	First Amendment to Intellectual Property License Agreement by the Registrant and University Technology Corporation, dated July 23, 2001	4.1	S-3	September 27, 2001

Exhibit Number	Description	Incorporation by Reference		
		Exhibit Number	Filing	Filing Date
10.12†	License Amendment Agreement between the Registrant and Transgenomic, Inc., dated June 2, 2003	10.1	10-Q	July 30, 2003
10.13†	License Agreement by and between the Registrant and Merix Bioscience, Inc., dated as of March 6, 2004	10.4	10-Q	July 30, 2004
10.14	Contribution Agreement between the Registrant and ViaGen, Inc., dated August 8, 2008	10.1	8-K	August 12, 2008
10.15†	Exclusive License and Alliance Agreement between the Registrant and GE Healthcare UK Limited, dated June 29, 2009	10.1	8-K	July 2, 2009
10.16	Series A Preferred Stock Purchase Agreement between ViaGen, Inc. and the Registrant, dated September 16, 2009	10.1	10-Q	October 30, 2009
10.17†	Exclusive License Agreement between the Registrant and Angiochem, Inc., dated December 6, 2010	10.22	10-K	February 25, 2011
10.18	Stock Purchase Agreement between the Registrant and Angiochem, Inc., dated January 5, 2011	10.1	8-K	January 7, 2011
10.19†	California Institute for Regenerative Medicine Notice of Loan Award	10.1	10-Q	November 3, 2011
10.20	Employment agreement between the Registrant and David Earp, dated January 21, 2003 *	10.3	10-Q	April 30, 2003
10.21	Employment agreement between the Registrant and Melissa Kelly, dated January 21, 2003 *	10.5	10-Q	April 30, 2003
10.22	Amendment to employment agreement between the Registrant and David Earp, dated December 19, 2008 *	10.23	10-K	February 27, 2009
10.23	Amendment to employment agreement between the Registrant and Melissa Kelly Behrs, dated December 19, 2008 *	10.25	10-K	February 27, 2009
10.24	Offer letter agreement between the Registrant and Stephen Kelsey, dated April 8, 2009 *	10.3	10-Q	July 31, 2009
10.25	Offer letter agreement between the Registrant and Melanie I. Nallicheri, dated February 1, 2011 *	10.3	10-Q	August 5, 2011
10.26	Employment agreement between the Registrant and John A. Scarlett, M.D., dated September 29, 2011 *	10.2	10-Q	November 3, 2011
10.27	Employment agreement between the Registrant and Graham Cooper, dated January 1, 2012 *			
10.28	Transition and Separation Agreement between the Registrant and Thomas B. Okarma, dated February 11, 2011 *	10.35	10-K	February 25, 2011
10.29	Transition and Separation Agreement between the Registrant and David L. Greenwood, dated February 7, 2012 *			
10.30	Separation Agreement between the Registrant and Jane S. Lebkowski, dated December 7, 2011 *			
10.31	Consulting Agreement between the Registrant and Jane S. Lebkowski, dated January 14, 2012 *			

Exhibit Number	Description	Incorporation by Reference		
		Exhibit Number	Filing	Filing Date
10.32	Employment agreement between the Registrant and Stephen N. Rosenfield, dated February 16, 2012 *			
10.33	Amended and Restated Severance Plan, effective December 19, 2008 *	10.27	10-K	February 27, 2009
10.34	Fifth Amendment to Lease by and between the Registrant and David D. Bohannon Organization, dated March 19, 2008	10.1	10-Q	April 30, 2008
10.35	Second Amendment to Lease by and between the Registrant and David D. Bohannon Organization, dated March 19, 2008	10.2	10-Q	April 30, 2008
10.36†	Office Lease Agreement by and between the Registrant and Exponent Realty, LLC, dated February 29, 2012			
14.1	Code of Conduct	14.1	10-K	February 27, 2004
21.1	List of Subsidiaries	21.1		
23.1	Consent of Independent Registered Public Accounting Firm			
24.1	Power of Attorney (see signature page)			
31.1	Certification of Chief Executive Officer pursuant to Form of Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated March 7, 2012			
31.2	Certification of Chief Financial Officer pursuant to Form of Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated March 7, 2012			
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated March 7, 2012 **			
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated March 7, 2012 **			
101	The following materials from the Registrant's Annual Report on Form 10-K for the year ended December 31, 2011, formatted in Extensible Business Reporting Language (XBRL) include: (i) Consolidated Balance Sheets as of December 31, 2011 and December 31, 2010, (ii) Consolidated Statements of Operations, Stockholders' Equity, and Cash Flows for each of the three years in the period ended December 31, 2011, and (iv) Notes to Consolidated Financial Statements. ***			

† Confidential treatment has been granted for certain portions of this exhibit. Omitted information has been filed separately with the Securities and Exchange Commission.

* Management contract or compensation plan or arrangement.

** The certifications attached as Exhibits 32.1 and 32.2 that accompany this Annual Report on Form 10-K, are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Geron Corporation under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Form 10-K, irrespective of any general incorporation language contained in such filing.

*** XBRL information is furnished and not filed or a part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Exchange Act of 1933, as amended, is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

1) Registration Statement (Form S-3 No. 333-171611) and in the related prospectuses and prospectus supplements;

EXHIBIT 32.1

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

Pursuant to 18 U.S.C. Section 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Geron Corporation (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying annual report on Form 10-K of the Company for the year ended December 31, 2011 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 7, 2012

/s/ JOHN A. SCARLETT

JOHN A. SCARLETT, M.D.
President and Chief Executive Officer

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

EXHIBIT 32.2

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

Pursuant to 18 U.S.C. Section 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Geron Corporation (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying annual report on Form 10-K of the Company for the year ended December 31, 2011 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 7, 2012

/S/ GRAHAM K. COOPER

GRAHAM K. COOPER
Executive Vice President, Finance and Business Development, and Chief Financial Officer

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

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

FORM 10-K/A
(Amendment No. 1)

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Fiscal Year Ended December 31, 2011
or
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ to _____.

Commission File Number: 0-20859

GERON CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**75-2287752**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
230 Constitution Drive, Menlo Park, CA	**94025**
(Address of principal executive offices)	*(Zip Code)*

Registrant's telephone number, including area code: (650) 473-7700

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

Title of each class	**Name of each exchange on which registered**
Common Stock, $0.001 par value	Nasdaq Global Select Market

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 ☒

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

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

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

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

The aggregate market value of voting and non-voting common equity held by non-affiliates of the registrant was approximately $508,641,000 based upon the closing price of the common stock on June 30, 2011 on the Nasdaq Global Select Market. Shares of common stock held by each officer, director and holder of five percent or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 22, 2012, there were 132,488,871 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

None.

GERON CORPORATION
FORM 10-K/A

Explanatory Note

This Amendment No. 1 on Form 10-K/A (the "Amendment") amends the Annual Report on Form 10-K (the "Original Annual Report") for the year ended December 31, 2011, which was originally filed with the Securities and Exchange Commission (the "SEC") on March 7, 2012. We are filing this Amendment in response to a comment letter received from the SEC (the "Comment Letter") in connection with its review of our confidential treatment request for certain omitted portions of Exhibit 10.36, our office lease agreement with Exponent Realty, LLC, dated February 29, 2012. We have modified Part IV Item 15, "Exhibits, Financial Statement Schedules," in this Amendment to reflect that confidential treatment for Exhibit 10.36 has been requested and re-filed Exhibit 10.36 in response to the Comment Letter to include Exhibits A – F of the lease agreement and disclose suite numbers, building rentable space, load factor and building percentage. We also have submitted a revised confidential treatment request in response to the Comment Letter. In addition, pursuant to Rule 12b-15 under the Securities Exchange Act of 1934, as amended, new certifications by our principal executive officer and principal financial officer are filed as Exhibits 31.3 and 31.4, respectively, to this Amendment.

Except as described above, no attempt has been made in this Amendment to modify or update other disclosures presented in the Original Annual Report. This Amendment does not reflect events occurring after the filing of the Original Annual Report or modify or update those disclosures, including the exhibits to the Original Annual Report affected by subsequent events. Accordingly, this Amendment should be read in conjunction with our filings with the SEC subsequent to the filing of the Original Annual Report, including any amendments to those filings.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) (1) Consolidated Financial Statements

See Part II, Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2011, which was originally filed with the SEC on March 7, 2012.

(2) Financial Statement Schedules

Financial statement schedules are omitted because they are not required or the information is disclosed in the financial statements listed in Item 15(a)(1) above.

(3) Exhibits

See Exhibit Index included herein.

SIGNATURE

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Amendment No. 1 to the Annual Report on Form 10-K/A to be signed on its behalf by the undersigned, thereunto duly authorized.

GERON CORPORATION

Date: March 27, 2012

By: /s/ GRAHAM K. COOPER
GRAHAM K. COOPER
Executive Vice President, Finance and Business Development, and Chief Financial Officer

EXHIBIT INDEX

Exhibit Number	Description	Incorporation by Reference		
		Exhibit Number	Filing	Filing Date
3.1	Amended and Restated Certificate of Incorporation of the Registrant	3.1	S-1	June 12, 1996
3.2	Certificate of Amendment of Restated Certificate of Incorporation of the Registrant	3.1	10-Q	July 31, 2006
3.3	Bylaws of Registrant	3.1	8-K	March 19, 2010
4.1	Form of Common Stock Certificate	4.1	S-1	June 12, 1996
4.2	Form of Senior Indenture, between the Registrant and one or more trustees to be named	4.5	S-3	July 9, 2009
4.3	Form of Subordinated Indenture, between the Registrant and one or more trustees to be named	4.6	S-3	July 9, 2009
4.4	Amended and Restated Warrant to purchase 100,000 shares of common stock issued by the Registrant to private investor, Eve M. Patton, dated April 13, 2009	4.1	10-Q	July 31, 2009
4.5	Amended and Restated Warrant to purchase 200,000 shares of common stock issued by the Registrant to private investor, Eve M. Patton, dated April 13, 2009	4.2	10-Q	July 31, 2009
4.6	Common Stock Warrant Agreement issued by the Registrant to University Technology Corporation, dated as of August 27, 2001	4.3	S-3	September 27, 2001
4.7	Form of Common Stock Purchase Warrant issued by the Registrant to certain Purchasers, dated September 9, 2009	4.2	8-K	September 10, 2009
4.8	Form of 2010 Warrant issued by the Registrant to Certain Purchasers, dated January 15, 2010	4.1	8-K	January 15, 2010
10.1	Form of Indemnification Agreement	10.1	10-K	March 7, 2012
10.2	1992 Stock Option Plan, as amended *	Appendix A	Def 14A	April 9, 2001
10.3	Amended and Restated 1996 Employee Stock Purchase Plan *	10.2	10-Q	July 31, 2009
10.4	1996 Directors' Stock Option Plan, as amended *	Appendix B	Def 14A	April 15, 2003
10.5	Amended and Restated 2002 Equity Incentive Plan *	4.1	S-8	June 4, 2010
10.6	Amended and Restated 2006 Directors' Stock Option Plan *	10.2	10-Q	August 5, 2011
10.7	2011 Incentive Award Plan *	10.1	8-K	May 16, 2011
10.8†	Patent License Agreement between the Registrant and University of Texas Southwestern Medical Center at Dallas, dated September 8, 1992	10.7	S-1	June 12, 1996
10.9†	Intellectual Property License Agreement between the Registrant and University Technology Corporation, dated December 9, 1996	10.30	10-Q	May 13, 1997
10.10†	Exclusive License Agreement between the Registrant and the Regents of the University of California, dated February 2, 1994	10.9	S-1	June 12, 1996

Exhibit Number	Description	Incorporation by Reference		
		Exhibit Number	Filing	Filing Date
10.11†	First Amendment to Intellectual Property License Agreement by the Registrant and University Technology Corporation, dated July 23, 2001	4.1	S-3	September 27, 2001
10.12†	License Amendment Agreement between the Registrant and Transgenomic, Inc., dated June 2, 2003	10.1	10-Q	July 30, 2003
10.13†	License Agreement by and between the Registrant and Merix Bioscience, Inc., dated as of March 6, 2004	10.4	10-Q	July 30, 2004
10.14	Contribution Agreement between the Registrant and ViaGen, Inc., dated August 8, 2008	10.1	8-K	August 12, 2008
10.15†	Exclusive License and Alliance Agreement between the Registrant and GE Healthcare UK Limited, dated June 29, 2009	10.1	8-K	July 2, 2009
10.16	Series A Preferred Stock Purchase Agreement between ViaGen, Inc. and the Registrant, dated September 16, 2009	10.1	10-Q	October 30, 2009
10.17†	Exclusive License Agreement between the Registrant and Angiochem, Inc., dated December 6, 2010	10.22	10-K	February 25, 2011
10.18	Stock Purchase Agreement between the Registrant and Angiochem, Inc., dated January 5, 2011	10.1	8-K	January 7, 2011
10.19†	California Institute for Regenerative Medicine Notice of Loan Award	10.1	10-Q	November 3, 2011
10.20	Employment agreement between the Registrant and David Earp, dated January 21, 2003 *	10.3	10-Q	April 30, 2003
10.21	Employment agreement between the Registrant and Melissa Kelly, dated January 21, 2003 *	10.5	10-Q	April 30, 2003
10.22	Amendment to employment agreement between the Registrant and David Earp, dated December 19, 2008 *	10.23	10-K	February 27, 2009
10.23	Amendment to employment agreement between the Registrant and Melissa Kelly Behrs, dated December 19, 2008 *	10.25	10-K	February 27, 2009
10.24	Offer letter agreement between the Registrant and Stephen Kelsey, dated April 8, 2009 *	10.3	10-Q	July 31, 2009
10.25	Offer letter agreement between the Registrant and Melanie I. Nallicheri, dated February 1, 2011 *	10.3	10-Q	August 5, 2011
10.26	Employment agreement between the Registrant and John A. Scarlett, M.D., dated September 29, 2011 *	10.2	10-Q	November 3, 2011
10.27	Employment agreement between the Registrant and Graham Cooper, dated January 1, 2012 *	10.27	10-K	March 7, 2012
10.28	Transition and Separation Agreement between the Registrant and Thomas B. Okarma, dated February 11, 2011 *	10.35	10-K	February 25, 2011
10.29	Transition and Separation Agreement between the Registrant and David L. Greenwood, dated February 7, 2012 *	10.29	10-K	March 7, 2012

Exhibit Number	Description	Incorporation by Reference		
		Exhibit Number	Filing	Filing Date
10.30	Separation Agreement between the Registrant and Jane S. Lebkowski, dated December 7, 2011 *	10.30	10-K	March 7, 2012
10.31	Consulting Agreement between the Registrant and Jane S. Lebkowski, dated January 14, 2012 *	10.31	10-K	March 7, 2012
10.32	Employment agreement between the Registrant and Stephen N. Rosenfield, dated February 16, 2012 *	10.32	10-K	March 7, 2012
10.33	Amended and Restated Severance Plan, effective December 19, 2008 *	10.27	10-K	February 27, 2009
10.34	Fifth Amendment to Lease by and between the Registrant and David D. Bohannon Organization, dated March 19, 2008	10.1	10-Q	April 30, 2008
10.35	Second Amendment to Lease by and between the Registrant and David D. Bohannon Organization, dated March 19, 2008	10.2	10-Q	April 30, 2008
10.36#	Office Lease Agreement by and between the Registrant and Exponent Realty, LLC, dated February 29, 2012			
14.1	Code of Conduct	14.1	10-K	February 27, 2004
21.1	List of Subsidiaries	21.1	10-K	March 7, 2012
23.1	Consent of Independent Registered Public Accounting Firm	23.1	10-K	March 7, 2012
24.1	Power of Attorney	Signature Page	10-K	March 7, 2012
31.1	Certification of Chief Executive Officer pursuant to Form of Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated March 7, 2012	31.1	10-K	March 7, 2012
31.2	Certification of Chief Financial Officer pursuant to Form of Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated March 7, 2012	31.2	10-K	March 7, 2012
31.3	Certification of Chief Executive Officer pursuant to Form of Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated March 27, 2012			
31.4	Certification of Chief Financial Officer pursuant to Form of Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated March 27, 2012			
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated March 7, 2012 **	32.1	10-K	March 7, 2012

Exhibit Number	Description	Incorporation by Reference		
		Exhibit Number	Filing	Filing Date
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated March 7, 2012 **	32.2	10-K	March 7, 2012
101	The following materials from the Registrant's Annual Report on Form 10-K for the year ended December 31, 2011, formatted in Extensible Business Reporting Language (XBRL) include: (i) Consolidated Balance Sheets as of December 31, 2011 and December 31, 2010, (ii) Consolidated Statements of Operations, Stockholders' Equity, and Cash Flows for each of the three years in the period ended December 31, 2011, and (iii) Notes to Consolidated Financial Statements. ***	101	10-K	March 7, 2012

† Confidential treatment has been granted for certain portions of this exhibit. Omitted information has been filed separately with the Securities and Exchange Commission.

Confidential treatment has been requested for certain portions of this exhibit. Omitted information has been filed separately with the Securities and Exchange Commission.

* Management contract or compensation plan or arrangement.

** The certifications filed as Exhibits 32.1 and 32.2 that accompanied the original Annual Report on Form 10-K for the year ended December 31, 2011 filed with the SEC on March 7, 2012, are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Geron Corporation under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of the original Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

*** XBRL information is furnished and not filed or a part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Exchange Act of 1933, as amended, is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

EXHIBIT 31.3

CERTIFICATION PURSUANT TO
FORM OF RULE 13A-14(A)
AS ADOPTED PURSUANT TO
SECTION 302(A) OF THE SARBANES-OXLEY ACT OF 2002

I, John A. Scarlett, M.D., President and Chief Executive Officer of Geron Corporation, certify that:

1. I have reviewed this Amendment No. 1 to the Annual Report on Form 10-K/A of Geron Corporation; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: March 27, 2012

/s/ JOHN A. SCARLETT
JOHN A. SCARLETT, M.D.
President and Chief Executive Officer

EXHIBIT 31.4

CERTIFICATION PURSUANT TO
FORM OF RULE 13A-14(A)
AS ADOPTED PURSUANT TO
SECTION 302(A) OF THE SARBANES-OXLEY ACT OF 2002

I, Graham K. Cooper, Executive Vice President, Finance and Business Development, and Chief Financial Officer of Geron Corporation, certify that:

1. I have reviewed this Amendment No. 1 to the Annual Report on Form 10-K/A of Geron Corporation; and
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: March 27, 2012

/s/ GRAHAM K. COOPER
GRAHAM K. COOPER
Executive Vice President, Finance and Business Development, and Chief Financial Officer

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Corporate Information

Board of Directors

Hoyoung Huh, M.D., PH.D.
Chairman of the Board
Chairman
CytomX Therapeutics, Inc.

Karin Eastham
Independent Director

Edward V. Fritzky
Former Chairman, CEO and President
Immunex Corporation

Thomas Hofstaetter, PH.D.
Former President, CEO and Director
VaxInnate Corporation

Thomas D. Kiley, Esq.
Attorney

V. Bryan Lawlis, PH.D.
Independent Director

John A. Scarlett, M.D.
President and CEO
Geron Corporation

Robert J. Spiegel, M.D., FACP
Former Senior Vice President and Chief Medical Officer
Schering-Plough

Officers

John A. Scarlett, M.D.
President, Chief Executive Officer and Director

Graham K. Cooper
Executive Vice President, Finance & Business Development, and Chief Financial Officer

Stephen M. Kelsey, M.D., F.R.C.P., F.R.C.PATH
Executive Vice President, Head of Research & Development and Chief Medical Officer

Stephen N. Rosenfield, J.D.
Executive Vice President, General Counsel and Corporate Secretary

David J. Earp, J.D., PH.D.
Senior Vice President, Corporate Transactions, and Chief Legal Officer

Melissa A. Kelly Behrs
Senior Vice President, Strategic Portfolio Management and Product Development & Manufacturing

Melanie I. Nallicheri
Senior Vice President, Corporate Development

Olivia K. Bloom
Vice President, Chief Accounting Officer and Treasurer

Stockholder Information

Company Offices

Geron Corporation
230 Constitution Drive
Menlo Park, CA 94025

(650) 473-7700 – tel
(650) 473-7750 – fax
info@geron.com – email
www.geron.com

Stock Listing

Geron Corporation common stock is traded on The Nasdaq Global Select Market® under the ticker symbol GERN.

Transfer Agent & Registrar

Computershare Trust Company, N.A.
250 Royall Street
Canton, MA 02021

(800) 962-4284 – tel
(303) 262-0700 – fax
www.computershare.com

Independent Auditors

Ernst & Young LLP
275 Shoreline Drive, Suite 600
Redwood City, CA 94065

Legal Counsel

Latham & Watkins LLP
140 Scott Drive
Menlo Park, CA 94025

Investor Relations

Anna Krassowska, PH.D.

(650) 473-7765 – tel
investor@geron.com – email