

GERON CORP
Form S-3
May 01, 2009

As filed with the Securities and Exchange Commission on May 1, 2009
Registration No. 333-

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

**FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

GERON CORPORATION
(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

75-2287752
(I.R.S. Employer
Identification No.)

**230 Constitution Drive
Menlo Park, California 94025
(650) 473-7700**
(Address, Including Zip Code and Telephone Number,
Including Area Code, of Registrant's Principal Executive Offices)

**Thomas B. Okarma
President and Chief Executive Officer
Geron Corporation
230 Constitution Drive
Menlo Park, California 94025
(650) 473-7700**
(Name, Address, Including Zip Code and Telephone Number,
Including Area Code, of Agent for Service)

Copies to:

Alan C. Mendelson, Esq.
Latham & Watkins LLP
140 Scott Drive
Menlo Park, California 94025
(650) 328-4600

Approximate date of commencement of proposed sale to the public: From time to time after this
Registration Statement becomes

Edgar Filing: GERON CORP - Form S-3

effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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 12b2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

CALCULATION OF REGISTRATION FEE

| Title of Securities to be Registered | Amount to be Registered(1) | Proposed Maximum Offering Price per share | Proposed Maximum Aggregate Offering Price | Amount of Registration Fee |
|---|-----------------------------------|--|--|-----------------------------------|
| Common Stock, par value \$.001 per share | 174,798 shares | \$4.96 (2) | \$866,998 | \$48.38 (3) |

- (1) In the event of a stock split, stock dividend, or similar transaction involving Geron's common stock, in order to prevent dilution, the number of shares registered shall automatically be increased to cover the additional shares in accordance with Rule 416(a) under the Securities Act.
- (2) The offering price is estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) and based upon the average of the high and low prices reported by Nasdaq Global Market on April 28, 2009.
- (3) Calculated in accordance with Rule 457(o) under the Securities Act of 1933.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL HEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SELLING STOCKHOLDER MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED MAY 1, 2009

UP TO 174,798 SHARES OF

GERON CORPORATION

COMMON STOCK

Our common stock is traded on the Nasdaq Global Market under the symbol "GERN." On April 28, 2009, the closing price of our common stock was \$5.04.

This prospectus relates to the sale of up to 174,798 shares of our common stock by MPI Research, Inc. We will not receive any of the proceeds from the sale of these shares covered by this prospectus.

INVESTING IN OUR COMMON STOCK INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 1.

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is May __, 2009.

TABLE OF CONTENTS

| | Page |
|--|------|
| ABOUT GERON | 1 |
| RISK FACTORS | 1 |
| FORWARD-LOOKING STATEMENTS | 16 |
| USE OF PROCEEDS | 16 |
| DESCRIPTION OF OUR COMMON STOCK | 16 |
| TRANSFER AGENT AND REGISTRAR | 16 |
| SELLING STOCKHOLDER | 17 |
| PLAN OF DISTRIBUTION | 18 |
| LEGAL MATTERS | 19 |
| EXPERTS | 19 |
| MATERIAL CHANGES | 19 |
| LIMITATION ON LIABILITY AND DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES | 19 |
| WHERE YOU CAN FIND MORE INFORMATION | 19 |
| DOCUMENTS WE HAVE INCORPORATED BY REFERENCE | 20 |

ABOUT GERON

Geron is developing first-in-class biopharmaceuticals for the treatment of cancer and chronic degenerative diseases, including spinal cord injury, heart failure and diabetes. The company is advancing an anti-cancer drug and a cancer vaccine that target the enzyme telomerase through multiple clinical trials. Geron is also believed to be the world leader in the development of human embryonic stem cell (hESC)-based therapeutics. The company has received clearance from the Food and Drug Administration (FDA) to begin the world's first human clinical trial of a hESC-based therapy: GRNOPC1 for acute spinal cord injury.

We were incorporated in 1990 under the laws of Delaware. Our principal executive offices are located at 230 Constitution Drive, Menlo Park, California 94025 and our telephone number is (650) 473-7700.

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 Registration Statement. 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.

Our business is at an early stage of development, in that we do not yet have product candidates in late-stage clinical trials or on the market. We have begun clinical testing of our lead anti-cancer drug, GRN163L, in patients with chronic lymphoproliferative diseases, solid tumor malignancies, non-small cell lung cancer, breast cancer and multiple myeloma. We have begun clinical testing of our telomerase cancer vaccine, GRNVAC1, in patients with acute myelogenous leukemia. We have no other product candidates in clinical testing. We have received FDA clearance to begin the world's first human clinical trial of a hESC-based therapy: GRNOPC1 for acute spinal cord injury. Our ability to develop product candidates that progress to and through clinical trials is subject to our ability to, among other things:

- succeed in our research and development efforts;
- select therapeutic compounds or cell therapies for development;
- obtain required regulatory approvals;
- manufacture product candidates; and
- collaborate successfully with clinical trial sites, academic institutions, physician investigators, clinical research organizations and other third parties.

Potential lead drug compounds or other product candidates and technologies require significant preclinical and clinical testing prior to regulatory approval in the United States and other countries. Our product candidates 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 commercial use. In addition, our product candidates may not prove to be more effective for treating disease or injury than current therapies. Accordingly, we may have to delay or abandon efforts to research, develop or obtain regulatory approvals to market our product candidates. In addition, we will need to determine whether any of our potential products can be manufactured in commercial quantities at an acceptable cost. Our research and development efforts may not result in a product that can be or will be approved by regulators or marketed successfully. Physicians may not prescribe our products, or patients or third party payors may not accept such products. Competitors may have proprietary rights which prevent us from marketing our products or they may sell similar, superior or lower-cost products. Because of the significant scientific, regulatory and commercial milestones that must be reached for any of our development programs or product candidates to be successful, any program or product candidate may be abandoned, even after we have expended significant resources, such as our investments in telomerase technology, human embryonic stem cells, GRN163L, GRNVAC1 and GRNOPC1, which could adversely affect our business and cause a sharp drop in our stock price.

The science and technology of telomere biology and telomerase, human embryonic stem cells and nuclear transfer are relatively new. There is no precedent for the successful commercialization of therapeutic product candidates based on our technologies. These development programs are therefore particularly risky. In addition, we, our licensees or our collaborators must undertake significant research and development activities to develop product candidates based on our technologies, which will require additional funding and may take years to accomplish, if ever.

Restrictions on the use of human embryonic stem cells, political commentary and the ethical and social implications of research involving human embryonic stem cells could prevent us from developing or gaining acceptance for commercially viable products based upon such stem cells and adversely affect the market price of our common stock.

Some of our most important programs involve the use of stem cells that are derived from human embryos. The use of human embryonic stem cells gives rise to ethical and social issues regarding the appropriate use of these cells. Our research related to human embryonic stem cells may become the subject of adverse commentary or publicity, which could significantly harm the market price for our common stock.

Some political and religious groups have voiced opposition to our technology and practices. We use stem cells derived from human embryos that have been created for *in vitro* fertilization procedures but are no longer desired or suitable for that use and are donated with appropriate informed consent. Many research institutions, including some of our scientific collaborators, have adopted policies regarding the ethical use of human embryonic tissue. These policies may have the effect of limiting the scope of research conducted using human embryonic stem cells, thereby impairing our ability to conduct research in this field.

Furthermore, on March 9, 2009, President Obama issued Executive Order 13505, entitled "Removing Barriers to Responsible Scientific Research Involving Human Stem Cells" (the Executive Order). As a result, the Secretary of Health and Human Services, through the Director of the National Institutes of Health (NIH), is required to review existing NIH guidelines as well as other widely-recognized guidelines relating to human stem cell research and issue new NIH guidance within 120 days of the date of the Executive Order. The new guidance will, among other things, state whether federal funding for research on new stem cell lines will be allowed. As of March 31, 2009, the new guidelines had not been issued. Certain states are considering enacting, or already have enacted, legislation relating to stem cell research, including California whose voters approved Proposition 71 to provide state funds for stem cell research in November 2004. In the United Kingdom and other countries, the use of embryonic or fetal tissue in research (including the derivation of human embryonic stem cells) is regulated by the government, whether or not the research involves government funding.

Government-imposed restrictions with respect to use of embryos or human embryonic stem cells in research and development could have a material adverse effect on us, including:

- harming our ability to establish critical partnerships and collaborations;
- delaying or preventing progress in our research, product development or clinical testing;
- preventing commercialization of therapies derived from human embryonic stem cells; and
- causing a decrease in the price of our stock.

**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 March 31, 2009, our accumulated deficit was approximately \$523.7 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 agreement that results 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 currently expect to receive sufficient royalty revenues from these licenses to 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, 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. 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 our current and 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 in 2009 and beyond;
- the magnitude and scope of our research and development programs;
- 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 number and type of product candidates that we pursue;
- 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.

We do not have any committed sources of capital. 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 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 or eliminate one or more of our programs, any of which could have a material adverse effect on our business.

RISKS RELATED TO CLINICAL AND COMMERCIALIZATION ACTIVITIES

Delays in the commencement of clinical testing of our current and potential product candidates could result in increased costs to us and delay our ability to generate revenues.

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

- demonstrating sufficient safety and efficacy to obtain regulatory clearance to commence a clinical trial;

- reaching agreement on acceptable terms with our collaborators on all aspects of the clinical trial, including the contract research organizations and the trial sites;

- reaching agreement on acceptable terms with prospective contract research organizations and trial sites;
- manufacturing sufficient quantities or producing drugs meeting our quality standards of a product candidate;
- obtaining approval of an Investigational New Drug (IND) application or proposed trial design from the Food and Drug Administration (FDA); and
- obtaining institutional review board approval to conduct a clinical trial at a prospective site.

In addition, clinical trials may be delayed due to insufficient patient enrollment, which is a function of many factors, including the size and nature of the patient population, the nature of the protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease, and the eligibility criteria for the clinical trial. Delays in commencing clinical testing of our product candidates could have a material adverse effect on our business.

We do not have experience as a company conducting large-scale clinical trials, or in other areas required for the successful commercialization and marketing of our product candidates.

Preliminary results from clinical trials of GRN163L and GRNVAC1 may not be indicative of successful outcomes in later stage trials. Negative or limited results from any current or future clinical trials could delay or prevent further development of our product candidates which would adversely affect our business.

We have no experience as a company in conducting large-scale, late stage clinical trials, and our experience with early-stage clinical trials with small numbers of patients is limited. In part because of this limited experience, we cannot be certain that planned clinical trials will begin or be completed on time, if at all. Large-scale trials would require either additional financial and management resources, or reliance on third-party clinical investigators, clinical research organizations (CROs) or consultants. Relying on third-party clinical investigators or CROs may force us to encounter delays that are outside of our control. Any such delays could have a material adverse effect on our business.

We also do not currently have marketing and distribution capabilities for our product candidates. Developing an internal sales and distribution capability would be an expensive and time-consuming process. We may enter into agreements with third parties that would be responsible for marketing and distribution. However, these third parties may not be capable of successfully selling any of our product candidates. The inability to commercialize and market our product candidates could materially affect our business.

Obtaining regulatory approvals to market our product candidates in the United States and other countries is a costly and lengthy process and we cannot predict whether or when we will be permitted to commercialize our product candidates.

Federal, state and local governments in the United States and governments in other countries have significant regulations in place that govern many of our activities and may prevent us from creating commercially viable products from our discoveries. The regulatory process, particularly for biopharmaceutical product candidates like ours, is uncertain, can take many years and requires the expenditure of substantial resources.

Our potential product candidates will require extensive preclinical and clinical testing prior to submission of any regulatory application for commercial sales. In particular, human pharmaceutical therapeutic product candidates are subject to rigorous requirements of the FDA in the United States and similar health authorities in other countries in order to demonstrate safety and efficacy. Data obtained from preclinical and clinical activities is susceptible to varying interpretations that could delay, limit or prevent regulatory agency approvals. In addition, delays or rejections may be encountered as a result of changes in regulatory agency policy during the

period of product development and/or the period of review of any application for regulatory agency approval for a product candidate.

Any product candidate that we or our collaborators develop must receive all relevant regulatory agency approvals before it may be marketed in the United States or other countries. Obtaining regulatory approval is a lengthy, expensive and uncertain process. Because certain of our product candidates involve the application of new technologies or are based upon a new therapeutic approach, they may be subject to substantial additional review by various government regulatory authorities, and, as a result, the process of obtaining regulatory approvals for them may proceed more slowly than for product candidates based upon more conventional technologies.

4

Delays in obtaining regulatory agency approvals could:

- significantly harm the marketing of any products that we or our collaborators develop;
- impose costly procedures upon our activities or the activities of our collaborators;
- diminish any competitive advantages that we or our collaborators may attain; or
- adversely affect our ability to receive royalties and generate revenues and profits.

Even if we commit the necessary time and resources, the required regulatory agency approvals may not be obtained for any product candidates developed by us or in collaboration with us. If we obtain regulatory agency approval for a new product, this approval may entail limitations on the indicated uses for which it can be marketed that could limit the potential commercial use of the product.

Failure to achieve continued compliance with government regulation over approved products could delay or halt commercialization of our products.

Approved products and their manufacturers are subject to continual review, and discovery of previously unknown problems with a product or its manufacturer may result in restrictions on the product or manufacturer, including withdrawal of the product from the market. The sale by us or our collaborators of any commercially viable product will be subject to government regulation from several standpoints, including the processes of:

- manufacturing;
- advertising and promoting;
- selling and marketing;
- labeling; and
- distribution.

If, and to the extent that, we are unable to comply with these regulations, our ability to earn revenues will be materially and negatively impacted.

Failure to comply with regulatory requirements can result in severe civil and criminal penalties, including but not limited to:

- recall or seizure of products;
- injunction against manufacture, distribution, sales and marketing; and
- criminal prosecution.

The imposition of any of these penalties or other commercial limitations could significantly impair our business, financial condition and results of operations.

RISKS RELATED TO PROTECTING OUR INTELLECTUAL PROPERTY

Impairment of our intellectual property rights may adversely affect the value of our technologies and product candidates and limit our ability to pursue their development.

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. 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 are unsuccessful in obtaining and enforcing patents, our business would be negatively impacted.

5

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 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. In the United States, recent court decisions in patent cases as well as proposed legislative changes to the patent system only exacerbate this uncertainty. Furthermore, significant amendments to the regulations governing the process of obtaining patents were recently proposed by the United States Patent and Trademark Office (the Patent Office). These amendments were widely regarded as detrimental to the interests of biotechnology and pharmaceutical companies. The implementation of the amendments was blocked by a court injunction requested by a pharmaceutical company. At this time, the Patent Office is challenging the court decision through an appeals process, and we do not know if the appeal will be successful or whether or when the Patent Office might seek to reintroduce the amendments in a modified form.

In Europe, the European Patent Convention prohibits the granting of European patents for inventions that concern "[u]ses of human embryos for industrial or commercial purposes." The European Patent Office (EPO) is presently interpreting this prohibition broadly, and is applying it to reject patent claims that pertain to hESCs. In a recent decision of the EPO Enlarged Board of Appeals, a patent application owned by the Wisconsin Alumni Research Foundation (WARF) and containing broad claims to human embryonic stem cells as compositions of matter was held to be unpatentable. Geron holds a worldwide license under this patent family; the decision does mean that this WARF patent family will not afford protection to Geron's products in Europe. However, the reason given by the EPO for the decision was narrowly focused: the EPO found the claims objectionable on the basis that at the time that WARF filed the patent application it was necessary to use a human embryo to obtain hESCs since no cell lines were available. In contrast, the hESCs that we use, and which we employed in the technologies claimed in our own European patent applications, were sourced from established hESC lines. Consequently, the decision in the WARF case does not directly address the patentability of the subject matter in our filings. However, at this time we cannot predict what view the EPO will take on our applications and therefore we do not yet know whether or to what extent we will be able to obtain patent protection for our hESC technologies in Europe. If we are unable to protect our inventions related to hESCs in Europe, our business would be negatively impacted.

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.

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

Where several parties seek 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. Moreover, parties that receive an adverse decision in an interference can lose important patent rights. 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. As more groups become engaged in scientific research and product development in the areas of telomerase biology and embryonic stem cells, the risk of our patents being challenged through patent interferences, oppositions, reexaminations or other means will likely increase.

The interference process can also be used to challenge a patent that has been issued to another party. For example, in 2004 we were party to two interferences declared by the Patent Office at our request. These interferences involved two of our pending applications relating to nuclear transfer technology and two issued patents, held by the University of Massachusetts (U. Mass) and licensed to Advanced Cell Technology, Inc. (ACT) of Worcester, Massachusetts. We requested these interferences in order to clarify our patent rights to this technology and to facilitate licensing to companies wishing to utilize this technology in animal cloning. The Board of Patent Appeals and Interferences issued final judgments in each of these cases, finding in both instances that all of the claims in the U. Mass patents in question were unpatentable, and upholding the patentability of Geron's pending claims. These judgments were appealed by U. Mass and ACT, but the appeals have now been dismissed as part of a settlement agreement, resulting in invalidation of the U. Mass patents involved.

6

Outside of the United States, certain jurisdictions, such as Europe, New Zealand and Australia, permit oppositions to be filed against the granting of patents. 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 recently been involved in two patent oppositions before the European Patent Office (EPO) with a Danish company, Pharmexa. Pharmexa (which acquired the Norwegian company GemVax in 2005) was developing a cancer vaccine that employs a short telomerase peptide to induce an immune response against telomerase and was conducting a Phase III clinical trial. Pharmexa obtained a European patent with broad claims to the use of telomerase vaccines for the treatment of cancer, and Geron 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.

In parallel, Pharmexa opposed a European patent held by Geron, 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 Geron's patent, specifically the three claims covering telomerase peptide cancer vaccines. We have appealed that decision to the TBA, and that appeal is still pending. Because this appeal is ongoing, the outcome cannot be determined at this time. We are also seeking to obtain patent coverage in Europe for telomerase peptides through a European divisional patent application. If those patent claims are issued, they too may be subject to an opposition proceeding. In late 2008, Pharmexa reported that it sold its telomerase vaccine program to a Korean company, KAEL Co. Ltd.

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.

Patent opposition proceedings are not currently available in the U.S. patent system, but legislation has been proposed to introduce them. However, issued U.S. patents can be reexamined by the Patent Office at the request of a third party. Patents owned or licensed by Geron may therefore be subject to reexamination. As in any legal proceeding, the outcome of patent reexaminations is uncertain, and a decision adverse to our interests could result in the loss of valuable patent rights.

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 WARF and relating to human embryonic stem cells. These three patents (U.S. Patent Nos. 5,843,780, 6,200,806 and 7,029,913), which are the U.S. equivalents of the European WARF case discussed above, are licensed to Geron pursuant to a

January 2002 license agreement with WARF. The license agreement conveys exclusive rights to Geron under the WARF patents for the development and commercialization of therapeutics based on neural cells, cardiomyocytes and pancreatic islet cells, derived from human embryonic stem cells, as well as nonexclusive rights for other product opportunities. In October 2006, the Patent Office initiated the reexamination proceedings. After initially rejecting the patent claims, the Patent Office recently issued decisions in all three cases upholding the patentability of the claims. The decisions to uphold the 5,843,780 and 6,200,806 patents are final and not subject to further appeal. Consumer Watchdog has filed a notice of appeal against the decision on the 7,029,913 patent. We cooperated with WARF in these reexamination actions and expect that WARF will continue to vigorously defend its patent position in this appeal. While the decisions in these reexamination proceedings to date have all been favorable to our patent position, the outcome of the appeal or of any future reexamination proceedings cannot be determined at this time. Reduction or loss of claim scope in these WARF embryonic stem cell patents would negatively impact Geron's proprietary position in this technology.

Successful challenges to our patents through interferences, oppositions or reexamination proceedings could result in a loss of patent rights in the relevant jurisdiction(s). If we are unsuccessful in actions we bring against the patents of other parties, we may be subject to litigation, or otherwise prevented from commercializing potential products in the relevant jurisdiction, or may be required to obtain licenses to those patents or develop or obtain alternative technologies, any of which could harm our business. Furthermore, if such challenges to our patent rights 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.

7

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. 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 potential products 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 platform would be severely adversely affected.

We may be subject to litigation that will be costly to defend or pursue and uncertain in its outcome.

Our business may bring us into conflict with our licensees, licensors, or others with whom we have contractual or other business relationships, or with our competitors or others whose interests differ from ours. If we are unable to resolve those conflicts on terms that are satisfactory to all parties, we may become involved in litigation brought by or against us. That litigation is likely to be expensive and may require a significant amount of management's time and attention, at the expense of other aspects of our business. The outcome of litigation is always uncertain, and in some cases could include judgments against us that require us to pay damages, enjoin us from certain activities, or otherwise affect our legal or contractual rights, which could have a significant adverse effect on our business.

Patent litigation may also be necessary to enforce patents issued or licensed to us or to determine the scope and validity of our proprietary rights or the proprietary rights of others. We may not be successful in any patent litigation. Patent litigation can be extremely expensive and time-consuming, even if the outcome is favorable to us. An adverse outcome in a patent litigation, patent opposition, patent interference, or any other proceeding in a court or patent office could subject our business to significant liabilities to other parties, require disputed rights to be licensed from other parties or require us to cease using the disputed technology, any of which could severely harm our business.

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 potential products.

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 potential products 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 potential products, 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 product development. In cases where we are unable to license necessary technologies, we could be prevented from developing certain potential products. 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.

8

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 assure you 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.

RISKS RELATED TO OUR RELATIONSHIPS WITH THIRD PARTIES

We depend on other parties to help us develop, manufacture and test our product candidates, and our ability to develop and commercialize potential products may be impaired or delayed if collaborations are unsuccessful.

Our strategy for the development, clinical testing and commercialization of our product candidates requires that we enter into collaborations with corporate partners, licensors, licensees and others. We are dependent upon the subsequent success of these other parties in performing their respective responsibilities and the continued cooperation of our partners. By way of examples: Merck is developing cancer vaccines targeted to telomerase other than the dendritic cell-based vaccines that we are developing and Sienna is developing cancer diagnostics using our telomerase technology. Our collaborators may not cooperate with us or perform their obligations under our agreements with them. We cannot control the amount and timing of our collaborators' resources that will be devoted to activities related to our collaborative agreements with them. Our collaborators may choose to pursue existing or alternative technologies in preference to those being developed in collaboration with us.

Under agreements with other parties, we may rely significantly on them to, among other activities:

- conduct research and development activities in conjunction with us;
- design and conduct advanced clinical trials in the event that we reach clinical trials;
- fund research and development activities with us;
- manage and license certain patent rights;
- pay us fees upon the achievement of milestones; and
- market with us any commercial products that result from our collaborations.

The development and commercialization of potential products will be delayed if collaborators or other partners fail to conduct these activities in a timely manner or at all. In addition, our collaborators could terminate their agreements with us and we may not receive any development or milestone payments. If we do not achieve milestones set forth in the agreements, or if our collaborators breach or terminate their collaborative agreements with us, our business may be materially harmed.

We also rely on other companies for certain process development, manufacturing or other technical scientific work, especially with respect to our GRN163L, GRNVAC1, GRNOPC1 and GRNCM1 programs. We have contracts with these companies that specify the work to be done and results to be achieved, but we do not have direct control over their personnel or operations. If these companies do not perform the work which they were assigned, our ability to develop or manufacture our product candidates could be significantly harmed.

Our reliance on the activities of our non-employee 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 at academic and other institutions, some of whom conduct research at our request, and other consultants who assist us in formulating our research and development and clinical strategy or other matters. These consultants 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, except as otherwise required by our collaboration and consulting agreements, can expect only limited amounts of their time to be dedicated to our activities.

9

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 non-commercial 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 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 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.

Our products are likely to be expensive to manufacture, and they may not be profitable if we are unable to significantly reduce the costs to manufacture them.

Our telomerase inhibitor compound, GRN163L, our telomerase cancer vaccine, GRNVAC1, and our hESC-based products are likely to be more expensive to manufacture than most other drugs currently on the market today. Oligonucleotides are relatively large molecules with complex chemistry, and the cost of manufacturing an oligonucleotide like GRN163L is greater than the cost of making most small-molecule drugs. Our present manufacturing processes are conducted at a modest scale and we hope to substantially reduce manufacturing costs through process improvements, as well as through scale increases. If we are not able to do so, however, and, depending on the pricing of the potential product, the profit margin on the telomerase inhibitor may be significantly less than that of most drugs on the market today.

GRNVAC1 is an autologous therapy that is produced from a patient's blood using a unique process that generates highly activated dendritic cells that contain RNA coding for the protein component of telomerase. Since the treatment is patient-specific, the manufacturing costs are higher than under a scalable production environment. We are developing procedures to differentiate hESCs to dendritic cells as an alternative to isolating dendritic cells from each patient. The hESC-derived dendritic cells could be produced scalably and could serve as a widely useful vaccine delivery vehicle. If we are unable to scalably produce dendritic cells at a lower manufacturing cost, the cost for GRNVAC1 may reduce the affordability of the therapy for patients and reduce our potential profitability.

Our manufacturing processes for differentiated cells from hESCs are conducted at a small scale and at a high cost per unit measure. The cell-based therapies we are developing based on hESCs will probably require large quantities of cells. We continue to develop processes to scale up production of the cells in a cost-effective way. We may not be able to charge a high enough price for any cell therapy product we develop, even if it is safe and effective, to make a profit. If we are unable to realize significant profits from our potential product candidates, our business would be materially harmed.

Some of our competitors may develop technologies that are superior to or more cost-effective than ours, which may impact the commercial viability of our technologies and which may significantly 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 and human embryonic stem cell therapies, including the study of telomeres, telomerase, human embryonic stem cells, and nuclear transfer. In addition, other products and therapies that could compete directly 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.

10

Many companies are developing alternative therapies to treat cancer and, in this regard, are competitors of ours. According to public data from the FDA and NIH, 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 (including GlaxoSmithKline, Bristol-Myers Squibb Company and Novartis AG, among others) have significantly greater financial resources and expertise than we do in:

- research and development;
- manufacturing;
- preclinical and clinical testing;
- obtaining regulatory approvals; and
- marketing 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 represent substantial departures from established treatment methods and 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 potential products 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 payors.

If the health care community does not accept our potential products 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 potential products 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 payors. Significant uncertainty exists as to the reimbursement status of newly-approved health care products, including pharmaceuticals. If our potential products are not considered cost-effective or if we fail to generate adequate third-party reimbursement for the users of our potential products and treatments, then we may be unable to maintain price levels sufficient to realize an appropriate return on our investment for potential products currently in development. In both U.S. and other markets, sales of our potential products, if any, will depend in part on the availability of reimbursement from third-party payors, examples of which include:

- government health administration authorities;
- private health insurers;

- health maintenance organizations; and
- pharmacy benefit management companies.

Both federal and state governments in the United States and governments in other countries continue to propose and pass legislation designed to contain or reduce the cost of health care. Legislation and regulations affecting the pricing of pharmaceuticals and other medical products may be adopted before any of our potential products are approved for marketing. Cost control initiatives could decrease the price that we receive for any product candidate we may develop in the future. In addition, third-party payors are increasingly challenging the price and cost-effectiveness of medical products and services and any of our potential products may ultimately not be considered cost-effective by these third parties. Any of these initiatives or developments could materially harm our business.

RISKS RELATED TO ENVIRONMENTAL AND PRODUCT LIABILITY

Our activities involve hazardous materials, and improper handling of these materials by our employees 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 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. We 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 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 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.

12

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 potential products is alleged to have injured subjects or patients. This risk exists for product candidates tested in human clinical trials as well as potential products that are sold commercially. 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.

RISKS RELATED TO OUR COMMON STOCK AND FINANCIAL REPORTING

Our stock price has historically been very volatile.

Stock prices and trading volumes for many biopharmaceutical companies fluctuate widely for a number of reasons, including factors which may be unrelated to their businesses or results of operations such as media coverage, legislative and regulatory measures and the activities of various interest groups or organizations. This market volatility, as well as general domestic or international economic, market and political conditions, could materially and adversely affect the market price of our common stock and the return on your investment.

Historically, our stock price has been extremely volatile. Between January 1999 and April 2009, our stock has traded as high as \$75.88 per share and as low as \$1.41 per share. Between January 1, 2006 and April 28, 2009, the price has ranged between a high of \$10.00 per share and a low of \$1.95 per share. The significant market price fluctuations of our common stock are due to a variety of factors, including:

- the demand in the market for our common stock;
- the experimental nature of our product candidates;
- fluctuations in our operating results;
- market conditions relating to the biopharmaceutical and pharmaceutical industries;
- announcements of technological innovations, new commercial products, or clinical progress or lack thereof by us, our collaborative partners or our competitors;
- announcements concerning regulatory developments, developments with respect to proprietary rights and our collaborations;
- comments by securities analysts;
- general market conditions;
- political developments related to human embryonic stem cell research;
- public concern with respect to our product candidates; or
- the issuance of common stock to partners, vendors or to investors to raise additional capital.

In addition, the stock market is subject to other factors outside our control that can cause extreme price and volume fluctuations. Securities class action litigation has often been brought against companies, including many biotechnology companies, which experience volatility in the market price of their securities. Litigation brought against us could result in substantial costs and a diversion of management's attention and resources, which could adversely affect our business.

The sale of a substantial number of shares may adversely affect the market price for our common stock.

Sale of a substantial number of shares of our common stock in the public market, or the perception that such sales could occur, could significantly and negatively affect the market price for our common stock. As of April 28, 2009, we had 200,000,000 shares of common stock authorized for issuance and 89,267,947 shares of common stock outstanding. In addition, as of April 28, 2009, we have reserved for future issuance approximately 27,071,073 shares of common stock for our stock plans, potential milestone payments and outstanding warrants.

In addition, we have issued common stock to certain parties, such as vendors and service providers, as payment for products and services. Under these arrangements, we typically agree to register the shares for resale soon after their issuance. We may continue to pay for certain goods and services in this manner, which would dilute your interest in us. Also, sales of the shares issued in this manner could negatively affect the market price of our stock.

Our undesignated preferred stock may inhibit potential acquisition bids; this may adversely affect the market price for our common stock and the voting rights of holders of our common stock.

Our certificate of incorporation provides our Board of Directors with the authority to issue up to 3,000,000 shares of undesignated preferred stock and to determine the rights, preferences, privileges and restrictions of these shares without further vote or action by our stockholders. As of the date of this Registration Statement, 50,000 shares of preferred stock have been designated Series A Junior Participating Preferred Stock and the Board of Directors still has authority to designate and issue up to 2,950,000 shares of preferred stock. The issuance of shares of preferred stock may delay or prevent a change in control transaction without further action by our stockholders. As a result, the market price of our common stock may be adversely affected.

In addition, if we issue preferred stock in the future that has preference over our common stock with respect to the payment of dividends or upon our liquidation, dissolution or winding up, or if we issue preferred stock with voting rights that dilute the voting power of our common stock, the rights of holders of our common stock or the market price of our common stock could be adversely affected.

Provisions in our share purchase rights plan, charter and bylaws, and provisions of Delaware law, may inhibit potential acquisition bids for us, which may prevent holders of our common stock from benefiting from what they believe may be the positive aspects of acquisitions and takeovers.

Our Board of Directors has adopted a share purchase rights plan, commonly referred to as a "poison pill." This plan entitles existing stockholders to rights, including the right to purchase shares of common stock, in the event of an acquisition of 15% or more of our outstanding common stock.

Our share purchase rights plan could prevent stockholders from profiting from an increase in the market value of their shares as a result of a change of control of us by delaying or preventing a change of control. In addition, our Board of Directors has the authority, without further action by our stockholders, to issue additional shares of common stock, and to fix the rights and preferences of one or more series of preferred stock.

In addition to our share purchase rights plan and the undesignated preferred stock, provisions of our charter documents and bylaws may make it substantially more difficult for a third party to acquire control of us and may prevent changes in our management, including provisions that:

- prevent stockholders from taking actions by written consent;
- divide the Board of Directors into separate classes with terms of office that are structured to prevent all of the directors from being elected in any one year; and
- set forth procedures for nominating directors and submitting proposals for consideration at stockholders' meetings.

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 the Board of Directors. Furthermore, we may incur additional indebtedness that may severely restrict or prohibit the payment of dividends.

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 and include a report of management on our internal control over 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.

15

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference into this prospectus contain forward-looking statements that are based on current expectations, estimates and projections about our industry, management's beliefs, and assumptions made by management. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," and variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict; therefore, actual results may differ materially from those expressed or forecasted in any forward-looking statements. The risks and uncertainties include those noted in "Risk Factors" above and in the documents incorporated by reference. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

USE OF PROCEEDS

We are filing the registration statement of which this prospectus is a part under our contractual obligation to the holder named in the section entitled "Selling Stockholder." We will not receive any of the proceeds from resale of these shares of common stock by the selling stockholder.

DESCRIPTION OF OUR COMMON STOCK

The following summary is a general description of our common stock. Complete details can be found in our Charter and Bylaws, copies of which are on file with the Commission as exhibits to registration statements previously filed by us. See "Where You Can Find More Information."

We have authority to issue 200,000,000 shares of common stock, \$0.001 par value per share. As of April 28, 2009, we had 89,267,947 shares of common stock outstanding.

The holders of our common stock are entitled to one vote per share on all matters to be voted upon by the stockholder. Subject to preferences that may be applicable to any outstanding shares of our preferred stock, the holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our Board of Directors out of funds legally available for that purpose. In the event of a liquidation, dissolution or winding up of our company, the holders of our common stock are entitled to share ratably in all

assets remaining after payment of liabilities, subject to preferences applicable to shares of our preferred stock, if any, then outstanding. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions available to the common stock. All outstanding shares of our common stock are, and the shares of common stock offered by this prospectus will be, fully paid and nonassessable.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the common stock is Computershare Trust Company, N.A.

16

SELLING STOCKHOLDER

The following table sets forth the name of the selling stockholder, the number of shares of common stock owned beneficially by the selling stockholder as of April 28, 2009, the number of shares which may be offered pursuant to this prospectus and the number of shares to be owned by the selling stockholder after this offering. In the aggregate, the selling stockholder may sell up to 174,798 shares of our common stock pursuant to this prospectus. Since the selling stockholder may offer all, some or none of its common stock, no definitive estimate as to the number of shares thereof that will be held by the selling stockholder after the offering can be provided. In addition, since the date the selling stockholder provided information regarding its ownership of the shares, it may have sold, transferred or otherwise disposed of all or a portion of its shares of common stock in transactions exempt from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"). Information concerning the selling stockholder may change from time to time and, when necessary, any changed information will be set forth in a prospectus supplement to this prospectus.

On April 27, 2009, as a fifth installment payment to MPI Research, Inc. ("MPI") made pursuant to Amendment No. 5 to a Master Agreement under which MPI has provided and will continue to provide certain preclinical services in support of our programs, we issued to MPI 174,798 shares of our common stock, pursuant to a Common Stock Purchase Agreement dated as of April 22, 2009.

To our knowledge, MPI has sole voting and investment power with respect to all shares of common stock beneficially owned by it. This information is based upon information provided by the selling stockholder.

| Name | Total Number of Shares Held (1) | Maximum Number of Shares Available Pursuant to this Prospectus (1) | Shares Owned After Offering (2) | Percentage (3) |
|--------------------|--|---|---------------------------------------|-------------------|
| MPI Research, Inc. | 174,798 | 174,798 | 0 | * |

(1) Based on information available as of April 28, 2009.

(2) Assumes the sale of all shares of common stock offered by this prospectus.

(3) Based on 89,267,947 shares of common stock outstanding as of April 28, 2009.

* Less than 1%.

17

PLAN OF DISTRIBUTION

We are registering a total of 174,798 shares of our common stock on behalf of the selling stockholder. The selling stockholder and any of its pledgees, assignees and successors-in-interest may, from time to time, sell any or all of the shares of common stock offered hereby on any stock exchange, market or trading facility on which

the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholder may use any one or more of the following methods when selling shares:

- sales on the Nasdaq Global Market;
- sales in the over-the-counter market;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- transactions in which broker-dealers agree with the selling stockholder to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholder may also sell the shares directly to market makers acting as principals and/or broker-dealers acting as agents for itself or its customers. These broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling stockholder and/or the purchasers of shares for whom the broker-dealers may act as agents or to whom they sell as principal or both, which compensation as to a particular broker-dealer might be in excess of customary commissions. Market makers and block purchasers purchasing the shares will do so for their own account and at their own risk. It is possible that the selling stockholder will attempt to sell shares of common stock in block transactions to market makers or other purchasers at a price per share which may be below the then market price. The selling stockholder cannot assure that all or any of the shares offered in this prospectus will be issued to, or sold by, the selling stockholder. The selling stockholder and any brokers, dealers or agents, upon effecting the sale of any of the shares offered in this prospectus, may be deemed "underwriters" as that term is defined under the Securities Act or the Exchange Act, or the rules and regulations under such acts.

The selling stockholder, alternatively, may sell all or any part of the shares offered in this prospectus through an underwriter. To our knowledge, the selling stockholder has not entered into any agreement with a prospective underwriter and we cannot assure you that any such agreement will be entered into. If the selling stockholder enters into this type of an agreement or agreements, the relevant details will be set forth in a supplement or revision to this prospectus.

The selling stockholder and any other persons participating in the sale or distribution of the shares will be subject to applicable provisions of the Exchange Act and the rules and regulations under such act, including, without limitation, Regulation M. These provisions may restrict certain activities of, and limit the timing of purchases and sales of any of the shares by, the selling stockholder or any other person. Furthermore, under Regulation M, persons engaged in a distribution of securities are prohibited from simultaneously engaging in market making and certain other activities with respect to the securities for a specified period of time prior to the commencement of the distributions, subject to specified exceptions or exemptions. All of these limitations may affect the marketability of the shares.

The selling stockholder also may sell all or a portion of its shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided it meets the criteria and conforms to the requirements of Rule 144.

LEGAL MATTERS

Latham & Watkins LLP will pass on the validity of the issuance of the shares of common stock offered by this prospectus.

EXPERTS

The consolidated financial statements of Geron Corporation appearing in Geron's Annual Report (Form 10-K) for the year ended December 31, 2008, and the effectiveness of internal control over financial reporting as of December 31, 2008, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

MATERIAL CHANGES

There have been no material changes in our affairs since December 31, 2008, which have not been described in subsequent reports on Form 10-Q or Form 8-K.

LIMITATION ON LIABILITY AND DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our bylaws provide for indemnification of our directors and officers to the fullest extent permitted by law. Insofar as indemnification for liabilities under the Securities Act may be permitted to directors, officers or controlling persons of Geron pursuant to Geron's Certificate of Incorporation, bylaws and the Delaware General Corporation Law, Geron has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. We make available free of charge on or through our Internet 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 they are electronically filed with, or furnished to, the Securities and Exchange Commission. Our Internet website address is www.geron.com. You may read and copy any document we file at the SEC's public reference room located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our SEC filings are also available to the public at the SEC's website at <http://www.sec.gov>. You may also inspect copies of these materials and other information about us at the offices of the Nasdaq Stock Market, Inc., National Market System, 1735 K Street, N.W., Washington, D.C. 20006-1500.

19

DOCUMENTS WE HAVE INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until the selling stockholder sells all the shares:

- Our quarterly report on Form 10-Q for the quarter ended March 31, 2009;
- Our annual report on Form 10-K for the fiscal year ended December 31, 2008;
- Our definitive proxy statement filed on April 10, 2009;

Edgar Filing: GERON CORP - Form S-3

- Our current reports on Form 8-K filed on January 23, 2009, January 28, 2009, February 12, 2009, February 12, 2009, February 17, 2009, March 30, 2009 and April 27, 2009; and
- The description of our common stock set forth in our registration statement on Form 8-A, filed with the Commission on June 13, 1996 (File No. 0-20859).

All documents we file under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this registration statement and prior to the filing of a post-effective amendment that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part of it from the respective dates of filing those documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained herein modifies or supersedes that statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to David L. Greenwood, Chief Financial Officer, Geron Corporation, 230 Constitution Drive, Menlo Park, California 94025, telephone: (650) 473-7700.

20

174,798 SHARES OF COMMON STOCK

GERON CORPORATION

PROSPECTUS

May 1, 2009

YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS. WE HAVE NOT AUTHORIZED ANYONE TO PROVIDE YOU WITH DIFFERENT INFORMATION. YOU SHOULD NOT ASSUME THAT THE INFORMATION CONTAINED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS IS ACCURATE AS OF ANY DATE OTHER THAN THE DATE OF THIS PROSPECTUS. WE ARE NOT MAKING AN OFFER OF THESE SECURITIES IN ANY STATE WHERE THE OFFER IS NOT PERMITTED.

21

23

PART II**INFORMATION NOT REQUIRED IN THE PROSPECTUS**

Item 14. Other Expenses of Issuance and Distribution.

The following sets forth the costs and expenses, all of which shall be borne by the Registrant, in connection with the offering of the securities pursuant to this Registration Statement:

| | |
|------------------------------|------------------|
| Registration Fee | \$ 48 |
| Accounting Fees and Expenses | \$ 10,000* |
| Legal Fees and Expenses | \$ 10,000* |
| Miscellaneous | \$ 1,500* |
| Total | \$ 21,548 |

* Estimated

Item 15. Indemnification of Directors and Officers.

Section 145(a) of the General Corporation Law of the State of Delaware (the "DGCL") provides that a Delaware corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or enterprise, against expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no cause to believe his or her conduct was unlawful.

Section 145(b) of the DGCL provides that a Delaware corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of corporation to procure a judgment in its favor by reason of the fact that such person acted in any of the capacities set forth above, against expenses actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if he or she acted under similar standards to those set forth above, except that no indemnification may be made in respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the court in which such action or suit was brought shall determine that despite the adjudication of liability, but in view of all the circumstances of the case, such person is fairly and reasonably entitled to be indemnified for such expenses which the court shall deem proper.

Section 145 of the DGCL further provides that to the extent a director or officer of a corporation has been successful in the defense of any action, suit or proceeding referred to in subsection (a) and (b) or in the defense of any claim, issue or matter therein, he or she shall be indemnified against expenses actually and reasonably incurred by him or her in connection therewith; that indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and that the corporation may purchase and maintain insurance on behalf of a director or officer of the corporation against any liability asserted against such officer or director and incurred by him or her in any such capacity or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liabilities under Section 145.

As permitted by Section 102(b)(7) of the DGCL, our Certificate of Incorporation provides that a director shall not be liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director. However, this provision does not eliminate or limit the liability of a director for acts or omissions not in good faith or for breaching his or her duty of loyalty, engaging in intentional misconduct or knowingly violating the law, paying a dividend or approving a stock repurchase which was illegal, or obtaining an improper personal benefit. A provision of this type has no effect on the availability of equitable remedies, such as injunction or rescission, for breach of fiduciary duty. Our Certificate of Incorporation requires that directors and officers be indemnified to

the maximum extent permitted by Delaware law.

II-1

Item 16. Exhibits.

See Exhibit Index.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

Provided, however, that subparagraphs (i), (ii) and (iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time to be deemed the initial bona fide offering.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

II-2

(c) The undersigned registrant hereby undertakes to deliver or cause to be delivered with the prospectus, to each person to whom the prospectus is sent or given, the latest annual report to security holders that is incorporated by reference in the prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Securities Exchange Act of 1934; and, where interim financial information required

Edgar Filing: GERON CORP - Form S-3

to be presented by Article 3 of Regulation S-X is not set forth in the prospectus, to deliver, or cause to be delivered to each person to whom the prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the prospectus to provide such interim financial information.

(d) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

II-3

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Menlo Park, state of California, on May 1, 2009.

GERON CORPORATION

By: /s/ David L. Greenwood
David L. Greenwood
Executive Vice President and
Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PERSONS PRESENT, that the persons whose signatures appear below do hereby constitute and appoint Thomas B. Okarma and David L. Greenwood, or any of them, our true and lawful attorneys-in-fact and agents, each with full power to sign for us or any of us in our names and in any and all capacities, any and all amendments (including post-effective amendments) to this Registration Statement, or any related registration statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto and other documents required in connection therewith with the Securities and Exchange Commission hereby do ratifying and confirming all that each of said attorneys-in-fact, or either of them, or his substitute or substitutes, shall do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|--|---|-------------|
| /s/ Thomas B. Okarma Thomas B. Okarma | Chief Executive Officer, President and Director (principal executive officer) | May 1, 2009 |
| /s/ David L. Greenwood David L. Greenwood | Executive Vice President and Chief Financial Officer (principal financial and accounting officer) | May 1, 2009 |
| /s/ Alexander E. Barkas Alexander E. Barkas | Director | May 1, 2009 |

Edgar Filing: GERON CORP - Form S-3

| | | |
|--|----------|-------------|
| /s/ Karin Eastham Karin Eastham | Director | May 1, 2009 |
| /s/ Edward V. Fritzky Edward V. Fritzky | Director | May 1, 2009 |
| /s/ Charles J. Homcy Charles J. Homcy | Director | May 1, 2009 |
| /s/ Thomas D. Kiley Thomas D. Kiley | Director | May 1, 2009 |
| /s/ Patrick J. Zenner Patrick J. Zenner | Director | May 1, 2009 |

S-1

EXHIBIT INDEX

| Exhibits | Description |
|----------|---|
| 4.1 | Common Stock Purchase Agreement dated as of April 22, 2009 by and between Registrant and MPI Research, Inc. |
| 5.1 | Opinion of Latham & Watkins LLP. |
| 23.1 | Consent of Latham & Watkins LLP (included in Exhibit 5.1). |
| 23.2 | Consent of Independent Registered Public Accounting Firm. |
| 24.1 | Power of Attorney (included on the signature page to this Registration Statement). |
