

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON D.C. 20549**

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2011

OR

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

For the transition period from _____ to _____.

Commission File Number: 0-20859

GERON CORPORATION

(Exact name of registrant as specified in its charter)

DELAWARE

*(State or other jurisdiction of
incorporation or organization)*

75-2287752

*(I.R.S. Employer
Identification No.)*

230 CONSTITUTION DRIVE, MENLO PARK, CA

(Address of principal executive offices)

94025

(Zip Code)

(650) 473-7700

(Registrant's telephone number, including area code)

N/A

(Former name, former address and former fiscal year, if changed since last report)

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

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

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

| | | | |
|-------------------------|--------------------------|---------------------------|-------------------------------------|
| Large accelerated filer | <input type="checkbox"/> | Accelerated filer | <input checked="" type="checkbox"/> |
| Non-accelerated filer | <input type="checkbox"/> | Smaller reporting company | <input type="checkbox"/> |

(Do not check if a smaller reporting company)

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class:
Common Stock, \$0.001 par value

Outstanding at October 24, 2011:
131,473,556 shares

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PART I. FINANCIAL INFORMATION

ITEM 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

GERON CORPORATION

CONDENSED CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS)

| | SEPTEMBER 30, 2011 (UNAUDITED) | DECEMBER 31, 2010 |
|---|--------------------------------------|----------------------|
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 33,975 | \$ 45,972 |
| Restricted cash | 793 | 792 |
| Current portion of marketable securities | 108,127 | 140,599 |
| Interest and other receivables | 1,569 | 1,799 |
| Current portion of prepaid assets | 2,840 | 5,855 |
| Total current assets | 147,304 | 195,017 |
| Noncurrent portion of marketable securities | 37,921 | 33,911 |
| Noncurrent portion of prepaid assets | — | 854 |
| Investments in licensees | — | 504 |
| Property and equipment, net | 2,247 | 3,088 |
| Deposits and other assets | 932 | 210 |
| | <u>\$ 188,404</u> | <u>\$ 233,584</u> |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| Current liabilities: | | |
| Accounts payable | \$ 4,006 | \$ 3,462 |
| Accrued compensation | 2,855 | 6,186 |
| Accrued liabilities | 3,005 | 2,644 |
| Stock issuance obligation | — | 27,500 |
| Deferred revenue | — | 350 |
| Fair value of derivatives | 137 | 707 |
| Total current liabilities | 10,003 | 40,849 |
| Long-term debt | 3,194 | — |
| Commitments and contingencies | | |
| Stockholders' equity: | | |
| Common stock | 132 | 123 |
| Additional paid-in capital | 928,898 | 881,358 |
| Accumulated deficit | (753,649) | (688,650) |
| Accumulated other comprehensive loss | (174) | (96) |
| Total stockholders' equity | 175,207 | 192,735 |
| | <u>\$ 188,404</u> | <u>\$ 233,584</u> |

See accompanying notes.

GERON CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)
(UNAUDITED)

| | THREE MONTHS ENDED | | NINE MONTHS ENDED | |
|--|--------------------|-------------|-------------------|-------------|
| | SEPTEMBER 30, | | SEPTEMBER 30, | |
| | 2011 | 2010 | 2011 | 2010 |
| Revenues from collaborative agreements | \$ — | \$ 203 | \$ 300 | \$ 653 |
| License fees and royalties | 220 | 343 | 1,887 | 1,812 |
| Total revenues | 220 | 546 | 2,187 | 2,465 |
| Operating expenses: | | | | |
| Research and development (including amounts for related parties: three months - 2011-none; 2010-\$53; nine months - 2011-none; 2010-\$697) | 16,345 | 13,728 | 49,644 | 40,662 |
| General and administrative | 3,811 | 5,021 | 18,251 | 13,359 |
| Total operating expenses | 20,156 | 18,749 | 67,895 | 54,021 |
| Loss from operations | (19,936) | (18,203) | (65,708) | (51,556) |
| Unrealized gain (loss) on derivatives, net | 291 | (97) | 570 | 133 |
| Interest and other income | 237 | 223 | 820 | 619 |
| Losses recognized under equity method investment | — | (243) | (503) | (1,135) |
| Interest and other expense | (114) | (24) | (178) | (76) |
| Net loss | \$ (19,522) | \$ (18,344) | \$ (64,999) | \$ (52,015) |
| Basic and diluted net loss per share | \$ (0.16) | \$ (0.19) | \$ (0.52) | \$ (0.54) |
| Shares used in computing basic and diluted net loss per share | 125,101,177 | 97,476,668 | 124,259,698 | 96,400,276 |

See accompanying notes.

GERON CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
CHANGE IN CASH AND CASH EQUIVALENTS
(IN THOUSANDS)
(UNAUDITED)

| | NINE MONTHS ENDED | |
|---|-------------------|-------------|
| | SEPTEMBER 30, | |
| | 2011 | 2010 |
| Cash flows from operating activities: | | |
| Net loss | \$ (64,999) | \$ (52,015) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Depreciation and amortization | 1,236 | 1,208 |
| Accretion and amortization on investments, net | 3,533 | 2,803 |
| Accretion of discount on long-term debt | 33 | — |
| Interest expense on long-term debt | 20 | — |
| Loss on retirement/sale of property and equipment | — | 53 |
| Issuance of common stock for acquired in-process research and development | 594 | — |
| Issuance of common stock in exchange for services by non-employees | 507 | 3,033 |
| Stock-based compensation for employees and directors | 12,532 | 10,442 |
| Amortization related to 401(k) contributions | 630 | 514 |
| Loss on investments in licensees | 503 | 1,135 |
| Unrealized gain on fair value of derivatives | (570) | (133) |
| Changes in assets and liabilities: | | |
| Other current and noncurrent assets | 3,557 | 3,778 |
| Other current and noncurrent liabilities | 1,395 | 1,033 |
| Translation adjustment | 4 | 12 |
| Net cash used in operating activities | (41,025) | (28,137) |
| Cash flows from investing activities: | | |
| Restricted cash transfer | (1) | (1) |
| Purchases of property and equipment | (395) | (542) |
| Proceeds from sale of property and equipment | — | 2 |
| Purchases of marketable securities | (104,591) | (95,855) |
| Proceeds from maturities of marketable securities | 129,439 | 114,195 |
| Proceeds from sale of investments in licensees | 1 | — |
| Net cash provided by investing activities | 24,453 | 17,799 |
| Cash flows from financing activities: | | |
| Proceeds from issuances of common stock and warrants, net of issuance costs | 293 | 10,227 |
| Proceeds from issuance of long-term debt | 4,282 | — |
| Net cash provided by financing activities | 4,575 | 10,227 |
| Net decrease in cash and cash equivalents | (11,997) | (111) |
| Cash and cash equivalents at the beginning of the period | 45,972 | 34,601 |
| Cash and cash equivalents at the end of the period | \$ 33,975 | \$ 34,490 |

See accompanying notes.

GERON CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2011
(UNAUDITED)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The terms “Geron”, the “Company”, “we” and “us” as used in this report refer to Geron Corporation. The accompanying unaudited condensed consolidated balance sheet as of September 30, 2011 and unaudited condensed consolidated statements of operations for the three and nine months ended September 30, 2011 and 2010 have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by U.S. generally accepted accounting principles for complete financial statements. In the opinion of management of Geron, all adjustments (consisting only of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the three and nine month periods ended September 30, 2011 are not necessarily indicative of the results that may be expected for the year ending December 31, 2011 or any other period. These financial statements and notes should be read in conjunction with the financial statements for each of the three years ended December 31, 2010, included in the Company’s Annual Report on Form 10-K. The accompanying condensed consolidated balance sheet as of December 31, 2010 has been derived from audited financial statements at that date.

Principles of Consolidation

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

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

Net Loss Per Share

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

Because we are in a net loss position, diluted earnings (loss) per share excludes the effects of potential dilutive securities. Had we been in a net income position, diluted earnings per share would have included the shares used in the computation of basic net loss per share as well as an additional 531,446 and 1,117,454 shares for 2011 and 2010, respectively, related to outstanding options, restricted stock and warrants (as determined using the treasury stock method at the estimated average market value).

Use of Estimates

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

GERON CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2011
(UNAUDITED)

Restricted Cash

The components of restricted cash are as follows:

| | September 30, 2011 | December 31, 2010 |
|--|-----------------------|----------------------|
| | (In thousands) | |
| Certificate of deposit for unused equipment line of credit | \$ 530 | \$ 530 |
| Certificate of deposit for credit card purchases | 263 | 262 |
| | <u>\$ 793</u> | <u>\$ 792</u> |

Fair Value of Financial Instruments**Cash Equivalents and Marketable Securities**

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

We classify our marketable securities as available-for-sale. We record available-for-sale securities at fair value with unrealized gains and losses reported in accumulated other comprehensive income (loss) in stockholders' equity. Realized gains and losses are included in interest and other income and are derived using the specific identification method for determining the cost of securities sold and have been insignificant to date. Dividend and interest income are recognized when earned and included in interest and other income in our condensed consolidated statements of operations. We recognize a charge when the declines in the fair values below the amortized cost basis of our available-for-sale securities are judged to be other-than-temporary. We consider various factors in determining whether to recognize an other-than-temporary charge, including whether we intend to sell the security or whether it is more likely than not that we would be required to sell the security. Declines in market value associated with credit losses judged as other-than-temporary result in a charge to interest and other income. Other-than-temporary charges not related to credit losses are included in accumulated other comprehensive income (loss) in stockholders' equity. No other-than-temporary impairment charges were recorded for our available-for-sale securities for the three and nine months ended September 30, 2011 and 2010. See Note 2 on Fair Value Measurements.

Marketable and Non-Marketable Investments in Licensees

Investments in non-marketable nonpublic companies, in which we own less than 20% of the outstanding voting stock and do not otherwise have the ability to exert significant influence over the investees, are carried at cost, as adjusted for other-than-temporary impairments. Investments in marketable equity securities are carried at fair value as of the balance sheet date with unrealized gains and losses reported in accumulated other comprehensive income (loss) in stockholders' equity. Realized gains or losses are included in interest and other income and are derived using the specific identification method.

We apply the equity method of accounting for investments in licensees in which we own more than 20% of the outstanding voting stock or otherwise have the ability to exert significant influence over the investees, but are not the primary beneficiary. Under this method, we increase (decrease) the carrying value of our investment by a proportionate share of the investee's earnings (losses). If losses exceed the carrying value of the investment, losses are then applied against any advances to the investee, including any commitment to provide financial support, until those amounts are reduced to zero. Commitments to provide financial support include formal guarantees, implicit arrangements, reputational expectations, intercompany relationships or a consistent past history of providing financial support. The equity method is then suspended until the investee has earnings. Any proportionate share of investee earnings is first applied to the share of accumulated losses not recognized during the period the equity method was suspended. We recognize previously suspended losses to the extent additional investment is determined to represent the funding of prior losses.

GERON CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2011
(UNAUDITED)

We monitor our investments in licensees for impairment on a quarterly basis and make appropriate reductions in carrying values when such impairments are determined to be other-than-temporary. Other-than-temporary charges are included in interest and other income. Factors used in determining whether an other-than-temporary charge should be recognized include, but are not limited to: the current business environment including competition and uncertainty of financial condition; going concern considerations such as the rate at which the investee company utilizes cash, and the investee company's ability to obtain additional private financing to fulfill its stated business plan; the need for changes to the investee company's existing business model due to changing business environments and its ability to successfully implement necessary changes; and the general progress toward product development, including clinical trial results. See Note 2 on Fair Value Measurements.

Fair Value of Derivatives

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

Long-Term Debt

We estimate the fair value of our long-term debt instruments using market information for similar long-term debt. In connection with each disbursement under the Loan Agreement with the California Institute for Regenerative Medicine (CIRM), we are obligated to issue to CIRM warrants to purchase our common stock. The fair value of the CIRM warrants is estimated using the Black Scholes option-pricing model. The carrying value of the CIRM loan is determined by allocating the proceeds between the fair values of the debt and warrants using the relative fair value method. The discount to the debt resulting from the allocation of proceeds between fair values of the debt and warrants is amortized to interest expense and accreted to the principal face value of the debt over the term of the CIRM loan using the effective interest rate method. Allocation of proceeds to the fair value of the warrants is recorded as permanent equity. For further discussion regarding the CIRM loan and warrants, see Note 4 on Long-Term Debt.

Revenue Recognition

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

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

Research and Development

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

GERON CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2011
(UNAUDITED)

A significant component of our research and development expenses is clinical trial costs. We review and accrue clinical trial expenses based on work performed, which relies on estimates of total costs incurred based on patient enrollment, completion of patient studies and other events. We validate our accruals quarterly with our vendors and perform detailed reviews of the activities related to our significant contracts. Accrued clinical costs are subject to revisions as trials progress to completion. Revisions are charged to expense in the period in which the facts that give rise to the revision become known.

Depreciation and Amortization

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

Stock-Based Compensation

We recognize compensation expense on a straight-line basis over the requisite service period, which is generally the vesting period. The following table summarizes the stock-based compensation expense related to stock options, restricted stock awards and employee stock purchases for the three and nine months ended September 30, 2011 and 2010, which was allocated as follows:

| | Three Months Ended | | Nine Months Ended | |
|---|--------------------|-----------------|-------------------|------------------|
| | September 30, | | September 30, | |
| | 2011 | 2010 | 2011 | 2010 |
| | (In thousands) | | | |
| Research and development | \$ 1,421 | \$ 2,124 | \$ 4,685 | \$ 4,867 |
| General and administrative | 945 | 2,198 | 7,847 | 5,575 |
| Stock-based compensation expense included in operating expenses | <u>\$ 2,366</u> | <u>\$ 4,322</u> | <u>\$ 12,532</u> | <u>\$ 10,442</u> |

In February 2011, we and Thomas B. Okarma, Ph.D., M.D. entered into a separation agreement that provided for, among other things, the modification of the vesting and exercise periods of certain outstanding restricted stock awards and stock options held by Dr. Okarma. Non-cash stock-based compensation expense of approximately \$3,472,000 has been included in general and administrative expense for the modifications.

As stock-based compensation expense recognized in the condensed consolidated statements of operations for the three and nine months ended September 30, 2011 and 2010 is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures but, at a minimum, reflects the grant-date fair value of those awards that actually vested in the period. Forfeitures have been estimated at the time of grant based on historical experience and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

GERON CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2011
(UNAUDITED)

Stock Options

The fair value of options granted during the nine months ended September 30, 2011 and 2010 has been estimated at the date of grant using the Black Scholes option-pricing model with the following assumptions:

| | Nine Months Ended September 30, | |
|-------------------------------|---------------------------------|----------------|
| | 2011 | 2010 |
| Dividend yield | None | None |
| Expected volatility range | 0.629 to 0.644 | 0.625 to 0.629 |
| Risk-free interest rate range | 0.88% to 2.37% | 1.46% to 2.65% |
| Expected term | 5 yrs | 5 yrs |

Employee Stock Purchase Plan

The fair value of employees' purchase rights during the nine months ended September 30, 2011 and 2010 has been estimated using the Black Scholes option-pricing model with the following assumptions:

| | Nine Months Ended September 30, | |
|-------------------------------|---------------------------------|----------------|
| | 2011 | 2010 |
| Dividend yield | None | None |
| Expected volatility range | 0.278 to 0.584 | 0.468 to 0.995 |
| Risk-free interest rate range | 0.10% to 0.32% | 0.18% to 0.54% |
| Expected term range | 6 - 12 mos | 6 - 12 mos |

Dividend yield is based on historical cash dividend payments and Geron has paid no dividends to date. The expected volatility range is based on historical volatilities of our stock since traded options on Geron stock do not correspond to option terms and the trading volume of options is limited. The risk-free interest rate range is based on the U.S. Zero Coupon Treasury Strip Yields for the expected term in effect on the date of grant for an award. The expected term of options is derived from actual historical exercise data and represents the period of time that options granted are expected to be outstanding. The expected term of employees' purchase rights is equal to the purchase period. We grant service-based options under our equity plans to employees, non-employee directors and consultants, for which the vesting period is generally four years.

Restricted Stock Awards

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

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

The fair value for performance-based restricted stock awards is determined using the fair value of our common stock on the date of grant. Compensation expense for awards with performance conditions is recognized over the period from the date the performance condition is determined to be probable of occurring through the date the applicable condition is expected to be met and is reduced for estimated forfeitures, as applicable. If the performance condition is not considered probable of being achieved, no expense is recognized until such time as the performance condition is considered probable of being met, if ever. If performance-based restricted stock awards are modified such that no continuing service is required for the award to vest and achievement of the performance condition is not considered probable on the date of modification, then no compensation cost is recognized until it becomes probable that the performance condition will be met. If that assessment of the probability of the performance condition being met changes, the impact of the change in estimate would be recognized in the period of the change. If the requisite service has been provided prior to the change in estimate, the effect of the change in estimate would be immediately recognized. We have not recognized any stock-based compensation expense for performance-based restricted stock awards in our condensed consolidated statements of operations for the three and nine months ended September 30, 2011 and 2010 as the achievement of the specified performance criteria was not considered probable during that time.

GERON CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2011
(UNAUDITED)

The fair value for market-based restricted stock awards is determined using a lattice valuation model with a Monte Carlo simulation. The model takes into consideration the historical volatility of our stock and the risk-free interest rate at the date of grant. In addition, the model is used to estimate the derived service period for the awards. The derived service period is the estimated period of time that would be required to satisfy the market condition, assuming the market condition will be satisfied. Compensation expense is recognized over the derived service period for the awards using the straight-line method and is reduced for estimated forfeitures, as applicable, but is accelerated if the market condition is achieved earlier than estimated. The market conditions for the market-based restricted stock awards were not achieved as of September 30, 2011.

Non-Employee Stock-Based Awards

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

Comprehensive Loss

Comprehensive loss is comprised of net loss and other comprehensive income (loss). Other comprehensive income (loss) includes certain changes in stockholders' equity which are excluded from net loss. The activity in comprehensive loss during the three and nine months ended September 30, 2011 and 2010 was as follows:

| | Three Months Ended | | Nine Months Ended | |
|--|--------------------|--------------------|--------------------|--------------------|
| | September 30, | | September 30, | |
| | 2011 | 2010 | 2011 | 2010 |
| | (In thousands) | | | |
| Net loss | \$ (19,522) | \$ (18,344) | \$ (64,999) | \$ (52,015) |
| Change in net unrealized gain on available-for-sale securities and marketable investments in licensees | (124) | 240 | (82) | 378 |
| Change in foreign currency translation adjustments | (8) | 15 | 4 | 12 |
| Comprehensive loss | <u>\$ (19,654)</u> | <u>\$ (18,089)</u> | <u>\$ (65,077)</u> | <u>\$ (51,625)</u> |

The components of accumulated other comprehensive loss were as follows:

| | September 30, 2011 | December 31, 2010 |
|--|--------------------|-------------------|
| | (In thousands) | |
| Unrealized (loss) gain on available-for-sale securities and marketable investments in licensees, net | \$ (10) | \$ 72 |
| Foreign currency translation adjustments | (164) | (168) |
| Accumulated other comprehensive loss | <u>\$ (174)</u> | <u>\$ (96)</u> |

Recently Issued Accounting Standards

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

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

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2. FAIR VALUE MEASUREMENTS

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

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

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

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

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

Cash Equivalents and Marketable Securities Available-for-Sale

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

Marketable securities by security type at September 30, 2011 were as follows:

| | Cost | Gross Unrealized Gains | Gross Unrealized Losses | Estimated Fair Value |
|--|-------------------|------------------------------|-------------------------------|-------------------------|
| (In thousands) | | | | |
| Included in cash and cash equivalents: | | | | |
| Money market funds | \$ 11,056 | \$ — | \$ — | \$ 11,056 |
| Municipal securities | 15,195 | — | — | 15,195 |
| | <u>\$ 26,251</u> | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 26,251</u> |
| Restricted cash: | | | | |
| Certificates of deposit | \$ 793 | \$ — | \$ — | \$ 793 |
| Marketable securities: | | | | |
| Certificate of deposit (due in less than 1 year) | \$ 332 | \$ — | \$ — | \$ 332 |
| Government-sponsored enterprise securities (due in less than 1 year) | 12,139 | 12 | (1) | 12,150 |
| Government-sponsored enterprise securities (due in 1 to 2 years) | 12,490 | 38 | (21) | 12,507 |
| Commercial paper (due in less than 1 year) | 27,210 | 38 | — | 27,248 |
| Corporate notes (due in less than 1 year) | 68,453 | 14 | (70) | 68,397 |
| Corporate notes (due in 1 to 2 years) | 25,434 | 26 | (46) | 25,414 |
| | <u>\$ 146,058</u> | <u>\$ 128</u> | <u>\$ (138)</u> | <u>\$ 146,048</u> |

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

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

Marketable securities with unrealized losses at September 30, 2011 and December 31, 2010 were as follows:

| | Less Than 12 Months | | 12 Months or Greater | | Total | |
|--|-------------------------|-------------------------------|-------------------------|-------------------------------|-------------------------|-------------------------------|
| | Estimated Fair Value | Gross Unrealized Losses | Estimated Fair Value | Gross Unrealized Losses | Estimated Fair Value | Gross Unrealized Losses |
| (In thousands) | | | | | | |
| As of September 30, 2011: | | | | | | |
| Government-sponsored enterprise securities (due in less than 1 year) | \$ 4,033 | \$ (1) | \$ — | \$ — | \$ 4,033 | \$ (1) |
| Government-sponsored enterprise securities (due in 1 to 2 years) | 3,980 | (21) | — | — | 3,980 | (21) |
| Corporate notes (due in less than 1 year) | 52,671 | (70) | — | — | 52,671 | (70) |
| Corporate notes (due in 1 to 2 years) | 14,990 | (46) | — | — | 14,990 | (46) |
| | <u>\$ 75,674</u> | <u>\$ (138)</u> | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 75,674</u> | <u>\$ (138)</u> |
| As of December 31, 2010: | | | | | | |
| Government-sponsored enterprise securities (due in less than 1 year) | \$ 7,287 | \$ (1) | \$ — | \$ — | \$ 7,287 | \$ (1) |
| Government-sponsored enterprise securities (due in 1 to 2 years) | 15,287 | (11) | — | — | 15,287 | (11) |
| Corporate notes (due in less than 1 year) | 61,354 | (56) | 3,019 | (1) | 64,373 | (57) |
| Corporate notes (due in 1 to 2 years) | 4,313 | (3) | — | — | 4,313 | (3) |
| | <u>\$ 88,241</u> | <u>\$ (71)</u> | <u>\$ 3,019</u> | <u>\$ (1)</u> | <u>\$ 91,260</u> | <u>\$ (72)</u> |

The gross unrealized losses related to government-sponsored enterprise securities and corporate notes as of September 30, 2011 and December 31, 2010 were due to changes in interest rates. We determined that the gross unrealized losses on our marketable securities as of September 30, 2011 and December 31, 2010 were temporary in nature. We review our investments quarterly to identify and evaluate whether any investments have indications of possible impairment. Factors considered in determining whether a loss is temporary include the length of time and extent to which the fair value has been less than the cost basis, the financial condition and near-term prospects of the investee, and whether we intend to sell the security or whether it is more likely than not that we would be required to sell the security. We currently do not intend to sell these securities before recovery of their amortized cost basis.

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Marketable and Non-Marketable Investments in Licensees

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

As of September 30, 2011 and December 31, 2010, the carrying values of our investments in non-marketable nonpublic companies were zero and \$503,000, respectively. We recognized no charges related to other-than-temporary declines in fair values of investments in licensees for the three and nine months ended September 30, 2011 and 2010. See Note 3 on Equity Method Investment for further discussion of investments in licensees.

Derivatives

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

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

| | September 30, 2011 | December 31, 2010 |
|-------------------------|--------------------|-------------------|
| Dividend yield | None | None |
| Expected volatility | 0.700 | 0.668 |
| Risk-free interest rate | 0.42% | 2.01% |
| Expected term | 4 yrs | 4 yrs |

Dividend yield is based on historical cash dividend payments and Geron has paid no dividends to date. The expected volatility is based on historical volatilities of our stock since traded options on Geron stock do not correspond to derivatives' terms and trading volume of Geron options is limited. The risk-free interest rate is based on the U.S. Zero Coupon Treasury Strip Yields for the expected term in effect on the reporting date. The expected term of derivatives is equal to the remaining contractual term of the instrument.

As of September 30, 2011 and December 31, 2010, the following non-employee options to purchase common stock were considered derivatives and classified as current liabilities:

| Issuance Date | Exercise Price | Exercisable Date | Expiration Date | At September 30, 2011 | | At December 31, 2010 | |
|------------------|-------------------|---------------------|--------------------|-----------------------|----------------|----------------------|----------------|
| | | | | Number of | Fair Value | Number of | Fair Value |
| | | | | Shares | (In thousands) | Shares | (In thousands) |
| March 2005 | \$ 6.39 | January 2007 | March 2015 | 284,600 | \$ 137 | 284,600 | \$ 707 |

Non-employee options for which performance obligations are complete are classified as derivative liabilities on our condensed consolidated balance sheet. Upon the exercise of these options, the instruments are marked to fair value and reclassified from derivative liabilities to stockholders' equity. No reclassifications from current liabilities to stockholders' equity were made for derivatives during the nine months ended September 30, 2011.

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Long-Term Debt

We estimate the fair value of our long-term debt instruments using market information for similar long-term debt. In connection with each disbursement under the CIRM loan, we are obligated to issue to CIRM warrants to purchase our common stock. The fair value of the CIRM warrants is estimated using the Black-Scholes option-pricing model. The carrying value of the CIRM loan is determined by allocating the proceeds between the fair values of the debt and warrants using the relative fair value method. The estimated fair value of our outstanding debt as of the date of issuance was \$3,141,000. The book value of our outstanding debt as of September 30, 2011 was \$3,194,000, which includes amortized debt discount of \$33,000 and accrued interest of \$20,000. For further discussion regarding the CIRM loan and warrants, see Note 4 on Long-Term Debt.

Fair Value on a Recurring Basis

The following table presents information about our financial assets and liabilities that are measured at fair value on a recurring basis as of September 30, 2011, and indicates the fair value category assigned.

| (In thousands) | Fair Value Measurements at Reporting Date Using | | | |
|---|--|-------------------------------|---------------------------------------|-------------------|
| | Quoted Prices in Active Markets for Identical Assets | Significant | | Total |
| | | Other Observable Inputs | Significant Unobservable Inputs | |
| | | Level 1 | Level 2 | |
| Assets | | | | |
| Money market funds ⁽¹⁾ | \$ 11,056 | \$ — | \$ — | \$ 11,056 |
| Certificate of deposit ⁽²⁾ | 332 | — | — | 332 |
| Municipal securities ⁽¹⁾ | — | 15,195 | — | 15,195 |
| Government-sponsored enterprise securities ^{(2) (3)} | — | 24,657 | — | 24,657 |
| Commercial paper ⁽²⁾ | — | 27,248 | — | 27,248 |
| Corporate notes ^{(2) (3)} | — | 93,811 | — | 93,811 |
| Total | \$ 11,388 | \$ 160,911 | \$ — | \$ 172,299 |

| (In thousands) | Fair Value Measurements at Reporting Date Using | | | |
|----------------------------|--|-------------------------------|---------------------------------------|--------|
| | Quoted Prices in Active Markets for Identical Assets | Significant | | Total |
| | | Other Observable Inputs | Significant Unobservable Inputs | |
| | | Level 1 | Level 2 | |
| Liabilities | | | | |
| Derivatives ⁽⁴⁾ | \$ — | \$ — | \$ 137 | \$ 137 |

- (1) Included in cash and cash equivalents on our condensed consolidated balance sheet.
- (2) Included in current marketable securities on our condensed consolidated balance sheet.
- (3) Included in noncurrent marketable securities on our condensed consolidated balance sheet.
- (4) Included in fair value of derivatives on our condensed consolidated balance sheet.

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Changes in Level 3 Recurring Fair Value Measurements

The tables below include a rollforward of the balance sheet amounts for the three and nine months ended September 30, 2011 (including the change in fair value), for financial instruments in the Level 3 category. When a determination is made to classify a financial instrument within Level 3, the determination is based upon the significance of the unobservable parameters to the overall fair value measurement. However, Level 3 financial instruments typically include, in addition to the unobservable components, observable components (that is, components that are actively quoted and can be validated to external sources). Accordingly, the gains and losses in the table below include changes in fair value due in part to observable factors that are part of the methodology.

| (In thousands) | Fair Value Measurements Using Significant Unobservable Inputs (Level 3) | | | | | |
|------------------------|---|---|---|---|--|---|
| | Three Months Ended September 30, 2011 | | | | | |
| | Fair Value at June 30, 2011 | Total Unrealized Gains Included in Earnings, net ⁽¹⁾ | Purchases, Sales, Issuances, Settlements, net | Transfers In and/or Out of Level 3 | Fair Value at September 30, 2011 | Change in Unrealized Gains Related to Financial Instruments Held at September 30, 2011 ⁽¹⁾ |
| Derivative liabilities | \$ 428 | \$ (291) | \$ — | \$ — | \$ 137 | \$ (291) |

| (In thousands) | Fair Value Measurements Using Significant Unobservable Inputs (Level 3) | | | | | |
|------------------------|---|---|---|---|--|---|
| | Nine Months Ended September 30, 2011 | | | | | |
| | Fair Value at December 31, 2010 | Total Unrealized Gains Included in Earnings, net ⁽¹⁾ | Purchases, Sales, Issuances, Settlements, net | Transfers In and/or Out of Level 3 | Fair Value at September 30, 2011 | Change in Unrealized Gains Related to Financial Instruments Held at September 30, 2011 ⁽¹⁾ |
| Derivative liabilities | \$ 707 | \$ (570) | \$ — | \$ — | \$ 137 | \$ (570) |

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

3. EQUITY METHOD INVESTMENT

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

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

In September 2009, we purchased \$3,603,000 in equity from ViaGen and simultaneously Exeter converted its outstanding debt with ViaGen into equity. The new equity purchase did not fund prior ViaGen losses and represented additional financial support to ViaGen. Ownership of ViaGen upon consummation of the transactions was as follows: Exeter – 70%; Geron – 28%; and Smithfield Foods – 2%. With the new investment in 2009, we resumed applying the equity method of accounting by increasing (decreasing) the carrying value of our investment by our proportionate share of ViaGen's earnings (losses).

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In November 2010, we provided a loan of \$1,500,000 to ViaGen to fund its operations. Also in November 2010, we agreed to appoint one of our ViaGen board member representatives as executive chairman of the ViaGen board and purchased \$23,000 in ViaGen equity directly from another shareholder, Moral Compass Corporation (MCC, previously referred to as Exeter). As of September 30, 2011, ownership of ViaGen was as follows: MCC – 58%; Geron – 40%; and Smithfield Foods – 2%.

Since ViaGen does not have sufficient equity to finance its own activities without additional subordinated financial support, it meets the definition of a VIE. By providing financial support to ViaGen, we are a variable interest holder. However, as of September 30, 2011, we lacked the power to direct activities that most significantly impact ViaGen's economic performance. Although one of our ViaGen board representatives serves as executive chairman of the ViaGen board, he has no additional rights or obligations to direct ViaGen's activities. Control over ViaGen's economic performance is driven by the ViaGen management team with authorization and approval from the entire ViaGen board, which is currently comprised of two Geron representatives and two MCC representatives. As the majority holder of the equity and debt of ViaGen, MCC maintains controlling financial interest over the company, including the right to appoint a third board member, giving them majority control of the ViaGen board. Accordingly, we have not included ViaGen's financial information with our consolidated results.

For the three and nine months ended September 30, 2011, we recognized zero and \$503,000, respectively, for our proportionate share of ViaGen's operating losses compared to \$243,000 and \$1,135,000 for the comparable 2010 periods. Our share of losses is recorded in the condensed consolidated statements of operations under losses recognized under equity method investment.

Our maximum exposure to loss pertaining to ViaGen represents the balance sheet carrying amount of our investment in ViaGen which reflects the initial amount of cash invested less our proportionate share of losses over time. The adjusted basis of our investment in ViaGen at September 30, 2011 and December 31, 2010 was zero and \$503,000, respectively, which is reflected under investments in licensees on our condensed consolidated balance sheet. We suspended the equity method of accounting during the quarter ended June 30, 2011 since the adjusted basis of our investment was zero at June 30, 2011 and we have no commitments to provide financial support or obligations to perform services or other activities for ViaGen.

4. LONG-TERM DEBT

Effective August 1, 2011, we entered into a Loan Agreement with the California Institute for Regenerative Medicine (CIRM) solely to support development of our human embryonic stem-cell derived oligodendrocyte progenitor therapy (GRNOPC1) for the treatment of spinal cord injury. CIRM shall disburse an aggregate of approximately \$24,847,000 to us over a period of three years commencing on August 1, 2011 and ending on July 31, 2014. The disbursements are pursuant to an established schedule and, in certain cases, are conditioned upon the achievement of project milestones. The interest rate for each quarterly disbursement of the loan is equal to the one-year London Interbank Offered Rate (LIBOR) plus 2%. Interest is compounded annually on the principal amount from the date of the applicable disbursement. Repayment of the principal and any accrued interest shall be due and payable at the end of the initial term of five years (August 1, 2016). We may request extension of the Loan Agreement for one additional term of five years to August 1, 2021. If the loan is extended, certain interest payments are due during the second five years. Repayment of principal and interest may be suspended if the supported project is abandoned for any reason. Any principal or interest amount that has not been due and payable for 15 years after the granting of a suspension of repayment automatically will be forgiven by CIRM.

CIRM has the right to accelerate repayment of the loan amount in the event of a change in control of Geron and under certain termination provisions, such as in the event of a no go milestone, including, but not limited to, the occurrence of serious safety issues in a clinical trial that lead to termination of all clinical studies under the GRNOPC1 spinal cord injury project. If certain progress milestones are not met at the end of the first or second year of the project, CIRM may adjust the schedule of disbursements for subsequent years, based on the project costs associated with the elements of the milestone that are unmet, upon consultation with us.

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Other conditions of the Loan Agreement include customary representations, warranties and covenants, including restrictions on our ability to issue cash dividends and execute certain stock repurchases, as well as requirements to maintain certain levels of insurance coverage, quality of investments and sufficient assets during the term of the loan equal to the total loan commitment, or approximately \$24,847,000, plus any accrued interest to date. The Loan Agreement is unsecured and ranks senior to any of our current or future indebtedness and other liabilities. As of September 30, 2011, we were in compliance with all material covenants under the Loan Agreement.

In connection with each disbursement, we are obligated to issue to CIRM a warrant to purchase Geron common stock. The number of shares underlying each of the warrants will be equal to 50% of the applicable disbursement amount divided by the average of the closing sales prices of Geron common stock as reported by The NASDAQ Global Select Market for the ten consecutive trading days immediately preceding the corresponding disbursement (Average Closing Price). The exercise price of each warrant shall also be equal to the Average Closing Price preceding the issuance of the warrant. Each of the warrants and the underlying common stock will be unregistered and each warrant shall have a term of ten years from the respective date of issuance.

As of September 30, 2011, we have received aggregate disbursements of approximately \$4,282,000 under the Loan Agreement and we have issued to CIRM warrants to purchase an aggregate of 537,893 shares of Geron common stock. Warrants issued to CIRM were assigned a fair value of \$1,556,000 using the Black-Scholes option pricing model with the following assumptions: risk-free interest rate of 2.77%; expected life of ten years; volatility of 72.51% and expected dividend yield of 0%. The proceeds received under the Loan Agreement were allocated between the principal loan and the warrants based on the relative fair value method and recorded on our condensed consolidated balance sheet as follows: \$3,141,000 as long-term debt for the fair value of the loan and \$1,141,000 as a discount to the debt and as permanent equity in additional paid-in capital. The debt discount is being amortized to interest expense and accreted to the principal face value of the debt over the five-year loan term using the effective interest rate method.

As of September 30, 2011, the book value of our outstanding debt was \$3,194,000, which includes amortized debt discount of \$33,000 and accrued interest of \$20,000. For the three months ended September 30, 2011, \$33,000 has been recorded as interest expense for debt discount amortization and approximately \$1,108,000 remains as unamortized debt discount as of September 30, 2011. The aggregate debt maturity which would occur in 2016, subject to the terms of the loan as described above, was approximately \$4,282,000 as of September 30, 2011.

5. COLLABORATIVE AGREEMENT

In June 2009, we entered into a worldwide exclusive license and alliance agreement with GE Healthcare UK, Limited (GEHC) to develop and commercialize cellular assay products derived from human embryonic stem cells (hESCs) for use in drug discovery, development and toxicity screening. Under the terms of the agreement, GEHC has been granted an exclusive license under Geron's intellectual property portfolio covering the growth and differentiation of hESCs, as well as a sublicense under Geron's rights to the hESC patents held by the Wisconsin Alumni Research Foundation. We established a multi-year alliance program with GEHC under which scientists from both companies worked to develop hESC-based products for drug discovery. The first product developed under the alliance, human cardiomyocytes derived from hESCs, was launched in October 2010 by GEHC.

In connection with the agreement, we received upfront non-refundable license payments under the exclusive license and sublicense and can receive milestone payments upon achievement of certain commercial development and product sales events and royalties on future product sales. Under the alliance program, GEHC was responsible for all costs incurred by GEHC and all costs incurred by us for activities undertaken at Geron, including the funding of our scientists who worked on the alliance program. An Alliance Steering Committee, with representatives from each company, coordinated and managed the alliance program.

License payments under the GEHC agreement were recorded as deferred revenue upon receipt and were recognized ratably as revenue over the alliance program period as a result of our continuing involvement with the collaboration. Funding received for our efforts under the alliance program was recognized as revenue as costs were incurred, which reflected our level of effort over the period of the alliance program. Since the milestone payments are subject to substantive contingencies, any such payments will be recognized upon completion of the specified milestones. Royalties received under the agreement will generally be recognized as revenue upon receipt of the related royalty payment. For the three and nine months ended September 30, 2011, we recognized zero and \$300,000, respectively, as revenue from collaborative agreements, compared to \$203,000 and \$653,000 for the comparable 2010 periods. For the three and nine months ended September 30, 2011, we recognized zero and \$350,000, respectively, as license fee revenue, compared to \$175,000 and \$525,000 for the comparable 2010 periods.

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6. SEGMENT INFORMATION

Our executive management team represents our chief decision maker. To date, we have viewed our operations as one segment, the discovery and development of therapeutic and diagnostic products for oncology and human embryonic stem cell therapies. As a result, the financial information disclosed herein materially represents all of the financial information related to our principal operating segment.

7. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS DATA

Supplemental schedule of non-cash operating and investing activities:

| (In Thousands) | Nine Months Ended September 30, | |
|--|------------------------------------|-------|
| | 2011 | 2010 |
| Supplemental Operating Activities: | | |
| Issuance of common stock for performance bonus | \$ 2,807 | \$ — |
| Issuance of common stock for 401(k) matching contributions | 1,294 | 1,034 |
| Issuance of common stock for acquired in-process research and development | 27,500 | — |
| Issuances of common stock for services rendered to date or to be received in future periods | 251 | 8,468 |
| Reclassification between deposits and other current assets | (180) | 131 |
| Supplemental Investing Activities: | | |
| Net unrealized (loss) gain on marketable securities and investments in licensees | (82) | 378 |

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

FORWARD-LOOKING STATEMENTS

This Form 10-Q contains forward-looking statements that involve risks and uncertainties. We use words such as “anticipate”, “believe”, “plan”, “expect”, “future”, “intend” and similar expressions to identify forward-looking statements. These statements are within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. These statements appear throughout the Form 10-Q and are statements regarding our intent, belief, or current expectations, primarily with respect to our operations and related industry developments. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this Form 10-Q. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including the risks faced by us and described in Part II, Item 1A, entitled “Risk Factors,” and in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part I, Item 2 of this Form 10-Q.

OVERVIEW

The following discussion should be read in conjunction with the unaudited condensed consolidated financial statements and notes thereto included in Part I, Item 1 of this Form 10-Q and with Management’s Discussion and Analysis of Financial Condition and Results of Operations contained in the Company’s Annual Report on Form 10-K for the year ended December 31, 2010, as filed with the Securities and Exchange Commission on February 25, 2011.

Geron is developing first-in-class biopharmaceuticals for the treatment of cancer and chronic degenerative diseases. We are advancing anti-cancer therapies through multiple Phase 2 clinical trials in different cancers by targeting the enzyme telomerase and with a compound designed to penetrate the blood-brain barrier (BBB). The company is developing cell therapies from differentiated human embryonic stem cells, with the first product in a Phase 1 clinical trial for spinal cord injury.

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

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

There have been no significant changes in our critical accounting policies and estimates during the nine months ended September 30, 2011 that materially impact our condensed consolidated financial statements as compared to the critical accounting policies and estimates disclosed in our Annual Report on Form 10-K for the year ended December 31, 2010, except as described below with respect to our loan agreement with the California Institute for Regenerative Medicine in the section titled “Long-Term Debt” and Note 4 of Notes to Condensed Consolidated Financial Statements.

Our condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported assets, liabilities, revenues and expenses. Note 1 of Notes to Condensed Consolidated Financial Statements describes the significant accounting policies used in the preparation of the condensed consolidated financial statements.

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

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Long-Term Debt

We estimate the fair value of our long-term debt instruments using market information for similar long-term debt. In connection with each disbursement under the Loan Agreement with the California Institute for Regenerative Medicine (CIRM), we are obligated to issue to CIRM warrants to purchase our common stock. The fair value of the CIRM warrants is estimated using the Black Scholes option-pricing model. Option-pricing model assumptions such as expected volatility, risk-free interest rate and expected term impact the fair value estimate which affects the value recorded as debt discount and resulting interest expense amortization. The carrying value of the CIRM loan is determined by allocating the proceeds between the fair values of the debt and warrants using the relative fair value method. The discount to the debt resulting from the allocation of proceeds between fair values of the debt and warrants is amortized to interest expense and accreted to the principal face value of the debt over the term of the CIRM loan using the effective interest rate method. Allocation of proceeds to the fair value of the warrants is recorded as permanent equity. For further discussion regarding the CIRM loan and warrants, see Note 4 on Long-Term Debt in Notes to Condensed Consolidated Financial Statements.

RESULTS OF OPERATIONS

Revenues

We recognized revenues from collaborative agreements of zero and \$300,000 for the three and nine months ended September 30, 2011, respectively, compared to \$203,000 and \$653,000 for the comparable 2010 periods. Revenues in 2011 and 2010 reflect revenue recognized under our collaboration with GE Healthcare UK, Ltd. (GE Healthcare).

We have entered into license and option agreements with companies involved in oncology, diagnostics, research tools, agriculture and biologics production. In each of these agreements, we have granted certain rights to our technologies. In connection with the agreements, we are entitled to receive license fees, option fees, milestone payments and royalties on future sales, or any combination thereof. We recognized license fee revenues of \$165,000 and \$1.1 million for the three and nine months ended September 30, 2011, respectively, compared to \$295,000 and \$1.2 million for the comparable 2010 periods related to our various agreements. Current revenues may not be predictive of future revenues.

We received royalties of \$55,000 and \$813,000 for the three and nine months ended September 30, 2011, respectively, compared to \$48,000 and \$610,000 for the comparable 2010 periods on product sales of telomerase detection and telomere measurement kits to the research-use-only market, cell-based research products and nutritional products. License and royalty revenues are dependent upon additional agreements being signed and future product sales.

Research and Development Expenses

Research and development expenses were \$16.3 million and \$49.6 million for the three and nine months ended September 30, 2011, respectively, compared to \$13.7 million and \$40.7 million for the comparable 2010 periods. The increase in research and development expenses for the three months ended September 30, 2011, compared to the comparable 2010 period was primarily the result of increased clinical trial costs of \$1.7 million for the start-up and enrollment of four Phase 2 clinical trials of imetelstat and the Phase 1 clinical trial of GRNOPC1 and higher clinical drug product purchases and manufacturing costs of \$2.5 million related to imetelstat and GRN1005, offset by reduced preclinical study and scientific supply costs of \$848,000 and lower non-cash stock based compensation expense of \$703,000. The increase in research and development expenses for the nine months ended September 30, 2011, compared to the comparable 2010 period was primarily the result of increased clinical trial costs of \$5.0 million for the start-up and enrollment of four Phase 2 clinical trials of imetelstat and the Phase 1 clinical trial of GRNOPC1 and higher clinical drug product purchases and manufacturing costs of \$4.0 million related to imetelstat and GRN1005. Overall, we expect research and development expenses to increase as we incur expenses related to the initiation of GRN1005 Phase 2 clinical trials in the fourth quarter of 2011 and ongoing support of the imetelstat Phase 2 trials and the GRNOPC1 Phase 1 trial.

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The following table briefly describes our current clinical development product candidates and their stage of development:

| Product | Product Description | Disease Treatment | Development Stage | Patient Enrollment Status |
|-------------------------|----------------------------------|-------------------------------------|-------------------|--|
| Imetelstat (GRN163L) | Telomerase Inhibitor | Non-Small Cell Lung Cancer (NSCLC) | Phase 2 Trial | Open |
| | | Breast Cancer | Phase 2 Trial | Open |
| | | Multiple Myeloma | Phase 2 Trial | Open |
| | | Essential Thrombocythemia | Phase 2 Trial | Open |
| GRN1005 | Peptide-Conjugated Paclitaxel | Brain Metastases from Breast Cancer | Phase 2 Trial | Planned to open in fourth quarter 2011 |
| | | Brain Metastases from NSCLC | Phase 2 Trial | Planned to open in fourth quarter 2011 |
| GRNOPC1 | Oligodendrocyte Progenitor Cells | Spinal Cord Injury | Phase 1 Trial | Open |

Having met our main objectives for Phase 1 of assessing the safety, tolerability, pharmacokinetics and pharmacodynamics of imetelstat, we are advancing the product candidate through Phase 2 clinical trials in four different malignancies. Two of the Phase 2 trials are randomized studies that test imetelstat in patients with NSCLC as maintenance therapy following platinum-based induction therapy and in patients with locally recurrent or metastatic breast cancer in combination with paclitaxel (with or without bevacizumab). The other two Phase 2 trials are single-arm studies that test imetelstat in patients with essential thrombocythemia (ET) and in patients with previously treated multiple myeloma. Patients have been enrolled in all four clinical trials.

On December 6, 2010, we and Angiochem entered into an Exclusive License Agreement that provides us with a worldwide exclusive license, with the right to grant sublicenses, to Angiochem's proprietary peptide technology that facilitates the transfer of anti-cancer compounds across the BBB to be used with tubulin disassembly inhibitors. Our initial product candidate under the license is GRN1005 (formerly ANG1005), a novel peptide-drug conjugate, which we are advancing to Phase 2 clinical studies in patients with brain metastases from breast cancer and brain metastases from NSCLC.

We have developed proprietary methods to grow, maintain, and scale the culture of undifferentiated hESCs using feeder cell-free and serum-free media with chemically defined components. Moreover, we have developed scalable processes to differentiate these cells into therapeutically relevant cells and cryopreserved formulations of these cells to enable our business model of delivering "on demand" cells for therapeutic use. We initiated the Phase 1 clinical trial of GRNOPC1 in patients with spinal cord injury with the first subject receiving cells in October 2010. A total of four patients are currently enrolled in the trial with the fourth subject receiving cells in September 2011. This is the first FDA-approved clinical trial of a cellular therapy derived from hESCs to be initiated. The clinical trial is a Phase 1 multi-center study designed to assess the safety and tolerability of GRNOPC1 in patients with complete ASIA (American Spinal Injury Association) Impairment Scale grade A thoracic spinal cord injuries. Seven clinical sites are currently open for patient enrollment.

Research and development expenses incurred under each of these programs are as follows:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|----------------|-------------------------------------|-----------|------------------------------------|-----------|
| | 2011 | 2010 | 2011 | 2010 |
| (In thousands) | (Unaudited) | | | |
| Oncology | \$ 10,073 | \$ 6,281 | \$ 28,318 | \$ 19,115 |
| hESC Therapies | 6,272 | 7,447 | 21,326 | 21,547 |
| Total | \$ 16,345 | \$ 13,728 | \$ 49,644 | \$ 40,662 |

At this time, we cannot provide reliable estimates of how much time or investment will be necessary to commercialize products from the programs currently in progress. Drug development in the United States is a process that includes multiple steps defined by the FDA under applicable statutes, regulations and guidance documents. After the preclinical research process of identifying, selecting and testing in animals a potential pharmaceutical compound, the clinical development process begins with the filing of an Investigational New Drug (IND) application. Clinical development typically involves three phases of trials: Phase 1, 2 and 3. The most significant costs associated with clinical development are incurred in Phase 3 trials, which tend to be the longest and largest studies conducted during the drug development process. After the completion of a successful preclinical and clinical development program, a New Drug Application (NDA) or Biologics License Application (BLA) must be filed with the FDA, which includes, among other things, substantial amounts of preclinical and clinical data and results and manufacturing-related information necessary to support requested approval of the product. The NDA or BLA must be reviewed and approved by the FDA.

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According to industry statistics, it generally takes 10 to 15 years to research, develop and bring to market a new prescription medicine in the United States. In light of the steps and complexities involved, the successful development of our product candidates is highly uncertain. Actual timelines and costs to develop and commercialize a product are subject to enormous variability and are very difficult to predict. The costs to take a product through clinical trials are dependent upon a number of factors including, but not limited to, the clinical indications, timing, size and design of each clinical trial, the number of patients enrolled in each trial and the speed at which patients are enrolled and treated. In addition, product candidates may be found to be ineffective or to cause unacceptable side effects during clinical trials, may take longer to progress through clinical trials than anticipated, may fail to receive necessary regulatory approvals or may prove impractical to manufacture in commercial quantities at reasonable cost or with acceptable quality. Furthermore, various statutes and regulations also govern or influence the manufacturing, safety reporting, labeling, storage, record keeping and marketing of each product.

The lengthy process of seeking these regulatory reviews and approvals, and the subsequent compliance with applicable statutes and regulations, require the expenditure of substantial resources. Any failure by us to obtain, or any delay in obtaining, regulatory approvals could materially adversely affect our business. In responding to an NDA or a BLA submission, the FDA may grant marketing approval, may request additional information, may deny the application if it determines that the application does not provide an adequate basis for approval, and may also refuse to review an application that has been submitted if it determines that the application does not provide an adequate basis for filing and review. We cannot provide assurance that any approval required by the FDA will be obtained on a timely basis, if at all.

For a more complete discussion of the risks and uncertainties associated with completing development of our product candidates, see the sub-sections titled “Risks Related to Our Business” and “Risks Related to Clinical and Commercialization Activities” in Part II, Item 1A entitled “Risk Factors” and elsewhere in this quarterly report.

General and Administrative Expenses

General and administrative expenses were \$3.8 million and \$18.3 million for the three and nine months ended September 30, 2011, respectively, compared to \$5.0 million and \$13.4 million for the comparable 2010 periods. The decrease in general and administrative expenses for the three months ended September 30, 2011, compared to the comparable 2010 period primarily reflects lower non-cash stock-based compensation expense of \$1.3 million. The increase in general and administrative expenses for the nine months ended September 30, 2011, compared to the comparable 2010 period primarily reflects expenses incurred pursuant to the separation agreement executed in February 2011 with Thomas B. Okarma Ph.D., M.D., our former CEO, which includes \$3.5 million in non-cash stock-based compensation expense associated with the modification of outstanding equity awards held by Dr. Okarma, in addition to higher corporate legal and consulting fees and increased legal costs associated with our patents.

Unrealized Gain (Loss) on Derivatives

Unrealized gain on fair value of derivatives reflects a non-cash adjustment for changes in fair value of warrants to purchase common stock and options held by non-employees that are classified as current liabilities. Derivatives classified as assets or liabilities are marked to fair value at each financial reporting date with any resulting unrealized gain (loss) recorded in the condensed consolidated statements of operations. The derivatives continue to be reported as an asset or liability until such time as the instruments are exercised or expire or are otherwise modified to remove the provisions which require them to be recorded as assets or liabilities, at which time these instruments are marked to fair value and reclassified from assets or liabilities to stockholders' equity. We incurred unrealized gains on derivatives of \$291,000 and \$570,000 for the three and nine months ended September 30, 2011, respectively, compared to an unrealized loss of \$97,000 and an unrealized gain of \$133,000 for the comparable 2010 periods. The unrealized gains and losses on derivatives for 2011 and 2010 primarily reflect the change in fair values of derivative liabilities as a result of fluctuations in the market value of our stock and changes in other inputs factored into the estimate of their fair value such as the volatility of our stock. See Note 2 on Fair Value Measurements in Notes to Condensed Consolidated Financial Statements of this Form 10-Q for further discussion of the fair value of derivatives.

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Interest and Other Income

Interest income was \$237,000 and \$820,000 for the three and nine months ended September 30, 2011, respectively, compared to \$223,000 and \$619,000 for the comparable 2010 periods. The increase in interest and other income in 2011 compared to 2010 was due to higher cash and investment balances as a result of the receipt of \$93.7 million in net proceeds in December 2010 from an underwritten public offering of our common stock. Interest earned in future periods will depend on the size of our securities portfolio and prevailing interest rates.

Losses Recognized Under Equity Method Investment

We own 40% of ViaGen, Inc. (ViaGen), a licensee with in-house breeding services and expertise in advanced reproductive technologies for animal cloning. In accordance with the equity method of accounting, we recognized losses of zero and \$503,000 for the three and nine months ended September 30, 2011, respectively, compared to \$243,000 and \$1.1 million for the comparable 2010 periods for our proportionate share of ViaGen's losses. See Note 3 on Equity Method Investment in Notes to Condensed Consolidated Financial Statements of this Form 10-Q for further discussion of ViaGen.

Interest and Other Expense

Interest and other expense was \$114,000 and \$178,000 for the three and nine months ended September 30, 2011, respectively, compared to \$24,000 and \$76,000 for the comparable 2010 periods. The increase in interest and other expense in 2011 compared to 2010 primarily reflects \$53,000 in interest expense resulting from the amortization of the debt discount and accrual of interest on the CIRM loan. See Note 4 on Long-Term Debt in Notes to Condensed Consolidated Financial Statements of this Form 10-Q for further discussion of the CIRM loan.

Net Loss

Net loss was \$19.5 million and \$65.0 million for the three and nine months ended September 30, 2011, respectively, compared to \$18.3 million and \$52.0 million for the comparable 2010 periods. The increase in net loss in 2011 compared to 2010 was primarily due to higher clinical trial costs for start-up and enrollment of four Phase 2 clinical trials of imetelstat and the Phase 1 clinical trial of GRNOPC1, increased clinical drug product purchases and manufacturing costs for imetelstat and GRN1005 and higher personnel costs, which primarily consisted of non-cash stock-based compensation expense.

LIQUIDITY AND CAPITAL RESOURCES

Cash, restricted cash, cash equivalents and marketable securities at September 30, 2011 were \$180.8 million, which included approximately \$24.8 million that we are required to maintain pursuant to covenants in our loan agreement with CIRM, compared to \$221.3 million at December 31, 2010. We have an investment policy to invest these funds in liquid, investment grade securities, such as interest-bearing money market funds, certificates of deposit, municipal securities, U.S. government and agency securities, corporate notes, commercial paper and asset-backed securities. Our investment portfolio does not contain securities with exposure to sub-prime mortgages, collateralized debt obligations or auction rate securities and, to date, we have not recognized an other-than-temporary impairment on our marketable securities or any significant changes in aggregate fair value that would impact our cash resources or liquidity. To date, we have not experienced lack of access to our invested cash and cash equivalents; however, we cannot provide assurances that access to our invested cash and cash equivalents will not be impacted by adverse conditions in the financial markets. The decrease in cash, restricted cash, cash equivalents and marketable securities in 2011 was the result of use of cash for operations.

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We estimate that our existing capital resources, interest income, scheduled disbursements under our loan agreement with CIRM and amounts available to us under our equipment financing facility will be sufficient to fund our current level of operations through at least December 2012. However, our future capital requirements will be substantial. Changes in our research and development plans or other changes affecting our operating expenses or cash balances may result in the expenditure of available resources before such time. Factors that may require us to use our available capital resources sooner than we anticipate include:

- the accuracy of the assumptions underlying our estimates for our capital needs for the remainder of 2011 and beyond;
- changes in our clinical development plans for our product candidates, imetelstat, GRN1005 and GRNOPC1;
- our ability to meaningfully reduce manufacturing costs of current product candidates;
- changes in the magnitude and scope of our research and development programs, including the number and type of product candidates we intend to pursue;
- timing of the initiation of future clinical trials for our product candidates and future clinical trial results;
- whether we establish new and maintain existing strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- reduction in the schedule of disbursements from CIRM under our loan agreement as a result of progress milestones not being met;
- the receipt of an accelerated repayment demand from CIRM as a result of a no go milestone occurring under our loan agreement;
- CIRM's denial of a request for loan repayment suspension;
- progress of our research programs;
- the cost and timing of regulatory approvals; and
- the filing, maintenance, prosecution, defense and enforcement of patent claims and other intellectual property rights.

Our minimum liquidity requirements are also determined by financial covenants in our loan agreement with CIRM as described below.

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

Cash Flows from Operating Activities. Net cash used in operations for the nine months ended September 30, 2011 and 2010 was \$41.0 million and \$28.1 million, respectively. The increase in net cash used for operations in 2011 was primarily the result of higher clinical trial costs for start-up and enrollment of four Phase 2 clinical trials of imetelstat and the Phase 1 clinical trial of GRNOPC1 and increased clinical drug product purchases and manufacturing costs for imetelstat and GRN1005.

Cash Flows from Investing Activities. Net cash provided by investing activities for the nine months ended September 30, 2011 and 2010 was \$24.5 million and \$17.8 million, respectively. The increase in net cash provided by investing activities reflected higher proceeds from maturities of marketable securities, partially offset by higher purchases of marketable securities.

As of September 30, 2011, we had approximately \$500,000 available for borrowing under our equipment financing facility. We renewed the commitment for this equipment financing facility in 2009 to further fund equipment purchases. If we are unable to renew the commitment in the future, we will use our cash resources for capital expenditures.

Cash Flows from Financing Activities. Net cash provided by financing activities for the nine months ended September 30, 2011 and 2010 was \$4.6 million and \$10.2 million, respectively. In August 2011, we entered into a Loan Agreement with CIRM solely to support development of GRNOPC1 for the treatment of spinal cord injury. As of September 30, 2011, we have received aggregate disbursements of approximately \$4.3 million under the Loan Agreement. In January 2010, we exchanged outstanding warrants held by certain institutional investors for shares of our common stock. In connection with the warrant exchange, we sold 1,481,481 shares of our common stock and warrants to purchase an additional 740,741 shares of common stock to the investors for gross proceeds of \$10.0 million.

Long-Term Debt

Effective August 1, 2011, we entered into a Loan Agreement with CIRM solely to support development of GRNOPC1 for the treatment of spinal cord injury. CIRM shall disburse an aggregate of approximately \$24.8 million to us over a period of three years commencing on August 1, 2011 and ending on July 31, 2014. The disbursements are pursuant to an established schedule and, in certain cases, are conditioned upon the achievement of project milestones. The interest rate for each quarterly disbursement of the loan is equal to the one-year London Interbank Offered Rate (LIBOR) plus 2%. Interest is compounded annually on the principal amount from the date of the applicable disbursement. Repayment of the principal and any accrued interest shall be due and payable at the end of the initial term of five years (August 1, 2016). We may request extension of the Loan Agreement for one additional term of five years to August 1, 2021. If the loan is extended, certain interest payments are due during the second five years. Repayment of principal and interest may be suspended if the supported project is abandoned for any reason. Any principal or interest amount that has not been due and payable for 15 years after the granting of a suspension of repayment automatically will be forgiven by CIRM.

CIRM has the right to accelerate repayment of the loan amount in the event of a change in control of Geron and under certain termination provisions, such as in the event of a no go milestone, including, but not limited to, the occurrence of serious safety issues in a clinical trial that lead to termination of all clinical studies under the GRNOPC1 spinal cord injury project. If certain progress milestones are not met at the end of the first or second year of the project, CIRM may adjust the schedule of disbursements for subsequent years, based on the project costs associated with the elements of the milestone that are unmet, upon consultation with us.

Other conditions of the Loan Agreement include customary representations, warranties and covenants, including restrictions on our ability to issue cash dividends and execute certain stock repurchases, as well as requirements to maintain certain levels of insurance coverage, quality of investments and sufficient assets during the term of the loan equal to approximately \$24.8 million plus any accrued interest to date. The Loan Agreement is unsecured and ranks senior to any of our current or future indebtedness and other liabilities. As of September 30, 2011, we were in compliance with all material covenants under the Loan Agreement.

In connection with each disbursement, we are obligated to issue to CIRM a warrant to purchase our common stock. The number of shares underlying each of the warrants will be equal to 50% of the applicable disbursement amount divided by the average of the closing sales price of our common stock as reported by The NASDAQ Global Select Market for the ten consecutive trading days immediately preceding the corresponding disbursement (the Average Closing Price). The exercise price of each warrant shall also be equal to the Average Closing Price preceding the issuance of such warrant. Each of the warrants and the underlying common stock will be unregistered and each warrant shall have a term of ten years from the respective date of issuance.

Significant Cash and Contractual Obligations

The following table summarizes our scheduled contractual obligations and commitments that will affect our future liquidity as of September 30, 2011:

| Contractual Obligations ⁽¹⁾ | Principal Payments Due by Period | | | | |
|---|----------------------------------|----------------------|-----------------|---------------|-----------------|
| | Total | Remainder in 2011 | 2012- 2013 | 2014- 2015 | After 2015 |
| | (Amounts in thousands) | | | | |
| Equipment leases | \$ 30 | \$ 5 | \$ 25 | \$ — | \$ — |
| Long-term debt, including interest ⁽²⁾ | 4,302 | — | — | — | 4,302 |
| Operating leases ⁽³⁾ | — | — | — | — | — |
| Research funding ⁽⁴⁾ | 3,246 | 939 | 1,415 | 367 | 525 |
| Total contractual cash obligations | \$ 7,578 | \$ 944 | \$ 1,440 | \$ 367 | \$ 4,827 |

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

(2) The principal amount shown represents the aggregate funding received as of September 30, 2011 under the CIRM loan agreement and assumes repayment is made at the end of the loan term. Repayment of the loan may be suspended upon abandonment of the underlying project. Interest accrues under CIRM loan at a variable rate which was 2.76% at September 30, 2011. We calculated future interest payments assuming that interest on the loan will be paid at a rate of 2.76%, which may not represent actual interest payments to be made.

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

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

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Off-Balance Sheet Arrangements

None.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

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

Credit Risk. We place our cash, restricted cash, cash equivalents and marketable securities with six financial institutions in the United States and Scotland. Deposits with banks may exceed the amount of insurance provided on such deposits. While we monitor the cash balances in our operating accounts and adjust the cash balances as appropriate, these cash balances could be impacted if the underlying financial institutions fail or could be subject to other adverse conditions in the financial markets. Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash equivalents and marketable securities. Cash equivalents and marketable securities currently consist of money market funds, certificates of deposit, municipal securities, U.S. government-sponsored enterprise securities, commercial paper and corporate notes. Our investment policy, approved by our Board of Directors, limits the amount we may invest in any one type of investment issuer, thereby reducing credit risk concentrations. We limit our credit and liquidity risks through our investment policy and through regular reviews of our portfolio against our policy. To date, we have not experienced any loss or lack of access to cash in our operating accounts or to our cash equivalents and marketable securities in our investment portfolios.

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

The fair value of our cash equivalents and marketable securities at September 30, 2011 was \$172.3 million. These investments include \$26.3 million of cash equivalents that are due in less than 90 days, \$108.1 million of short-term investments that are due in less than one year and \$37.9 million of long-term investments that are due in one to two years. We primarily invest our marketable securities portfolio in securities with at least an investment grade rating to minimize interest rate and credit risk as well as to provide for an immediate source of funds. Although changes in interest rates may affect the fair value of the marketable securities portfolio and cause unrealized gains or losses, such gains or losses would not be realized unless the investments are sold. Due to the nature of our investments, which are primarily money market funds, certificates of deposit, municipal securities, U.S. government-sponsored enterprise securities, commercial paper and corporate notes, we have concluded that there is no material interest rate risk exposure.

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Foreign Currency Exchange Risk. Because we translate foreign currencies into U.S. dollars for reporting purposes, currency fluctuations can have an impact, though generally immaterial, on our operating results. We believe that our exposure to currency exchange fluctuation risk is insignificant primarily because our wholly-owned international subsidiary, Geron Bio-Med Ltd., satisfies its financial obligations almost exclusively in its local currency. As of September 30, 2011, there was an immaterial currency exchange impact from our intercompany transactions. As of September 30, 2011, we did not engage in foreign currency hedging activities.

ITEM 4. CONTROLS AND PROCEDURES

(a) *Evaluation of Disclosure Controls and Procedures.* The Securities and Exchange Commission defines the term “disclosure controls and procedures” to mean a company’s controls and other procedures that are designed to ensure that information required to be disclosed in the reports that it files or submits under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission’s rules and forms. Our Chief Executive Officer (CEO) and our Chief Financial Officer (CFO) have concluded, based on the evaluation of the effectiveness of our disclosure controls and procedures by our management, with the participation of our CEO and our CFO, as of the end of the period covered by this report, that our disclosure controls and procedures were effective, at a reasonable assurance level, for this purpose.

(b) *Changes in Internal Controls Over Financial Reporting.* There was no change in our internal control over financial reporting for the three months ended September 30, 2011 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

It should be noted that any system of controls, however well designed and operated, can provide only reasonable assurance, and not absolute assurance, that the objectives of the system are met. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events. Because of these and other inherent limitations of control systems, there can be no assurance that any design will succeed in achieving its stated goals in all future circumstances.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

None.

ITEM 1A. RISK FACTORS

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

RISKS RELATED TO OUR BUSINESS

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

Our business is at an early stage of development, in that we do not yet have product candidates in late-stage clinical trials or on the market. 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 promising therapeutic compounds or cell therapies for development;
- obtain required regulatory approvals;
- obtain financing on commercially reasonable terms for our operations;
- manufacture product candidates at commercially reasonable costs; 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 product candidates 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. Competitors may have proprietary rights which prevent us from developing and marketing our products or they may sell similar, superior or lower-cost products.

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

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

Because of the significant scientific, regulatory and commercial milestones that must be reached for any of our research and development programs or product candidates to be successful, any program or product candidate may be delayed or abandoned, even after we have expended significant resources on it. Such a delay or abandonment of our programs in telomerase technology, receptor-targeting peptide technology to cross the BBB, hESCs, imetelstat, GRN1005 or GRNOPC1, would likely have a material adverse effect on our business.

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In our Phase 1 clinical trials of imetelstat, we observed dose-limiting toxicities, including thrombocytopenia when the drug was used as a single agent, and neutropenia when the drug was used in combination with paclitaxel, and a low incidence of severe infusion reactions. We also did not observe single agent efficacy with imetelstat in our Phase 1 program. Further, the information we have related to the ability of GRN1005 to penetrate brain tissue and its anti-tumor activity is preliminary and based on Phase 1 clinical studies conducted by Angiochem. In the Phase 1 studies of GRN1005, Grade 4 neutropenia was the primary dose-limiting toxicity observed. In our Phase 2 clinical trials of imetelstat or GRN1005, we may observe similar dose-limiting toxicities or other safety issues which may impact our ability to complete our oncology clinical trials on a timely basis, if at all. In animal studies of GRNOPC1, a low frequency of injected animals developed microscopic cysts at the site of injection. Were these cysts to occur and grow in a confined space such as the spinal cord, this might result in adverse symptoms or worsening of neurologic function in patients.

Similarly, research stage programs are inherently subject to high levels of technical risk and timeline delays. For example, recent technical challenges identified by our collaborator for hESC-derived chondrocytes (GRNCHND1) mean that we can no longer expect to report efficacy data from a preliminary short-term sheep study at the end of 2011, or to report data from a long-term large animal efficacy study by the end of 2012.

Restrictions on the use of hESCs, political commentary and the ethical and social implications of research involving hESCs 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 significant programs involve the use of stem cells that are derived from human embryos. The use of hESCs gives rise to ethical and social issues regarding the appropriate use of these cells. Our research related to hESCs may become the subject of adverse commentary or publicity, which could significantly harm the market price of 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 had been created for *in vitro* fertilization procedures but were no longer desired or suitable for that use and were 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 hESCs, thereby impairing our ability to conduct research in this field.

Government-imposed restrictions with respect to use of embryos or hESCs in research and development could have a material effect on our business, including:

- harming our ability to establish critical partnerships and collaborations;
- delaying or preventing progress in our research, product development or clinical testing; and
- preventing commercialization of therapies derived from hESCs.

These potential effects and others may result in a decrease in the market price of our common stock.

Changes in governmental regulations relating to funding of stem cell research may also materially impact our product development programs and result in an increase to the volatility of the market price of our common stock. For example, in March 2009 President Obama issued Executive Order 13505, entitled "Removing Barriers to Responsible Scientific Research Involving Human Stem Cells." As a result, the Secretary of Health and Human Services, through the Director of the National Institutes of Health (NIH), issued new guidelines relating to human stem cell research to allow federal funding for research using hESCs derived from embryos created by *in vitro* fertilization for reproductive purposes, but are no longer needed for that purpose. However, in August 2010 the Federal District Court for the District of Columbia issued a preliminary injunction prohibiting federal funding for hESC research. The injunction was overturned by the appeals court in April 2011 and the case was dismissed in July 2011 upon remand to the District Court. Opponents of the Executive Order and the NIH guidelines may pursue further legal challenges, potentially seeking review from the United States Supreme Court. Meanwhile, 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 hESCs) is regulated by the government, whether or not the research involves government funding.

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 September 30, 2011, our accumulated deficit was approximately \$753.6 million. Losses have resulted principally from costs incurred in connection with our research and development activities and from general and administrative costs associated with our operations. We expect to incur additional operating losses and, as our development efforts and clinical testing activities continue, our operating losses may increase in size.

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

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

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

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

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

- the accuracy of the assumptions underlying our estimates for our capital needs for the remainder of 2011 and beyond;
- changes in our clinical development plans for our product candidates, imetelstat, GRN1005 and GRNOPC1;
- our ability to meaningfully reduce manufacturing costs of current product candidates;
- the magnitude and scope of our research and development programs, including the number and type of product candidates we intend to pursue;
- the progress we make in our research and development programs, preclinical development and clinical trials;
- our ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- achievement of progress milestones under our loan agreement with CIRM to maintain the current disbursement schedule;
- receipt of an accelerated repayment demand from CIRM as a result of an event of default under our loan agreement;
- CIRM's denial of a request for loan repayment suspension;
- 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.

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Our current committed sources of additional capital are limited to our equipment financing facility and our loan arrangement with CIRM. Notably, the receipt of future disbursements from our loan arrangement with CIRM is subject to the achievement of various milestones and proceeds received, if any, must be used solely to fund the clinical development of GRNOPC1 for the treatment of spinal cord injury. Additional financing through strategic collaborations, public or private equity financings, capital lease transactions or other financing sources may not be available on acceptable terms, or at all. The receptivity of the public and private equity markets to proposed financings is substantially affected by the general economic, market and political climate and by other factors which are unpredictable and over which we have no control. Additional equity financings, if we obtain them, could result in significant dilution to our stockholders. Further, in the event that additional funds are obtained through arrangements with collaborative partners, these arrangements may require us to relinquish rights to some of our technologies, product candidates or proposed products that we would otherwise seek to develop and commercialize ourselves. If sufficient capital is not available, we may be required to delay, reduce the scope of, suspend or eliminate one or more of our programs, any of which could have a material adverse effect on our business. For example, we are not currently funding continued research in our GRNCM1, GRNIC1, or GRNVAC2 programs.

Our loan arrangement with the California Institute for Regenerative Medicine (CIRM) contains progress milestones that must be achieved prior to receiving future disbursements, as well as certain covenants that limit our flexibility to use the proceeds and in operating our business.

On August 1, 2011, we entered into a loan agreement with CIRM that provides us with a product-backed loan in an amount up to approximately \$24.8 million to support the clinical development of our human embryonic stem-cell derived oligodendrocyte progenitor cell therapy (GRNOPC1) for the treatment of spinal cord injury. Our ability to receive any future disbursements under the loan is subject to the achievement of certain progress milestones set forth in the Notice of Loan Award (NLA). Whether we can achieve these milestones and, as a result, receive future disbursements under the loan is uncertain.

The loan agreement with CIRM contains certain restrictions on our ability to use the proceeds from the loan, specifically, the proceeds we receive must be used solely to fund the clinical development of GRNOPC1 for the treatment of spinal cord injury. In addition, the loan agreement requires that we reserve sufficient capital to fund our portion of the GRNOPC1 project costs and re-pay the outstanding loan balance, and also contains covenants that limit our flexibility to engage in specified types of transactions, including, among other things:

- selling, transferring, leasing or disposing of certain of our assets;
- creating, incurring or assuming additional indebtedness related to our GRNOPC1 project;
- encumbering or permitting liens on certain of our assets;
- making restricted payments, including paying dividends on, repurchasing or making cash distributions with respect to our common stock;
- making specified investments (including loans and advances);
- consolidating, merging, selling or otherwise disposing of all or substantially all of our assets; and
- entering into certain transactions with our affiliates.

A breach of any of these covenants could result in a default under our loan agreement. Upon the occurrence of an event of default under our loan agreement, CIRM could elect to declare all amounts outstanding to be immediately due and payable and terminate all commitments regarding future disbursements, which could have a material adverse effect on our ability to fund our operations. In addition, if certain progress milestones are not met, CIRM may adjust the schedule of disbursements under the loan agreement.

RISKS RELATED TO CLINICAL AND COMMERCIALIZATION ACTIVITIES

Our ability to timely complete our ongoing clinical trials is subject to risks and uncertainties related to factors such as patient enrollment and regulatory approval.

Our ongoing 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 timely completion of clinical testing of our product candidates could increase research and development costs and could prevent or would delay us from obtaining regulatory approval for our product candidates, both of which would likely have a material adverse effect on our business.

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With respect to our clinical studies of GRN1005, we have aggressive initiation and enrollment goals, and we can give no assurance that our studies will start on time or that our enrollment projections will be met. Enrollment into our Phase 2 studies of imetelstat in multiple myeloma and essential thrombocythemia, and our Phase 1 study of GRNOPC1 in thoracic spinal cord injury, has been slower than expected. We have enrolled four patients into our GRNOPC1 study since October 2010. Our ability to escalate dosing in thoracic patients and to expand enrollment into patients with cervical injuries is also subject to numerous risks and uncertainties. For example, regulatory agencies and Institutional Review Boards may find our existing non-clinical or clinical data insufficient.

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

The commencement of 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;
- manufacturing sufficient quantities or producing drugs meeting our quality standards for a product candidate;
- obtaining approval of an IND application or proposed trial design from the FDA;
- reaching agreement on acceptable terms with our collaborators on all aspects of the clinical trial, including the contract research organizations (CROs) and the trial sites; and
- obtaining institutional review board approval to conduct a clinical trial at a prospective site.

We may not achieve manufacturing at costs or scales necessary to conduct our clinical programs or potential future commercialization activities.

Our product candidates are likely to be more expensive to manufacture than most other treatments currently on the market today. Our manufacturing processes are conducted at a modest scale. If we are not able to substantially reduce manufacturing costs through process improvements and scale increases, the profit margin on our product candidates, including GRNOPC1, imetelstat and GRN1005, would likely be significantly less than that of most drugs on the market today.

The commercial cost of manufacturing imetelstat and GRN1005 will need to be significantly lower than our current scale costs in order for these product candidates to become commercially successful products. Oligonucleotides are relatively large molecules produced using complex chemistry, and the cost of manufacturing an oligonucleotide like imetelstat is greater than the cost of making typical small-molecule drugs. Our present imetelstat manufacturing processes are conducted at a relatively modest scale appropriate for Phase 2 clinical trials. Similarly, our GRN1005 manufacturing processes are currently conducted at a relatively small scale, and there is also limited history of manufacturing of GRN1005. Accordingly, we can provide no assurance that we will achieve sufficient scale increases or cost reductions necessary for successful commercial production of imetelstat or GRN1005.

Manufacturing our product candidates is subject to process and technical challenges and regulatory risk.

Processes and technologies for manufacturing of cellular therapeutics in general, and hESC-derived therapies in particular, are significantly less mature than those for small molecule and protein therapeutics. For example, significant risks impact the manufacturability of our GRNOPC1 product, including:

- we have a low frequency of manufactured lots that currently meet all release testing requirements;
- several critical raw materials are currently sole sourced and/or are not available at sufficient scale and levels of regulatory compliance to support regulatory approval; and
- the current manufacturing process is not sufficiently scaled to enable randomized trials or commercial production.

In addition, regulatory requirements for product quality of oligonucleotide products are less well-defined than for small molecule drugs, and there is no guarantee that we will achieve sufficient product quality standards required for Phase 3 clinical trials or for commercial approval and manufacturing of imetelstat. Similarly, the required product quality for GRN1005, while appropriate for Phase 2 clinical studies, will need to continue to advance to meet regulatory requirements for Phase 3 clinical trials and ultimately for commercial approval.

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

We have no experience as a company in conducting large-scale, late stage clinical trials. We cannot be certain that our planned clinical trials will begin or be completed on time, if at all. Large-scale clinical trials will require either additional financial and management resources, or reliance on third-party clinical investigators, 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 commercialization capabilities for our product candidates. Developing an internal sales, marketing 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 marketing any of our product candidates. The inability to commercialize and market our product candidates could materially adversely 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, and from successfully conducting our development efforts and commercializing our product candidates. 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 to commence 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.

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.

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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 future sale by us or our collaborators of any commercially viable product will be subject to government regulation related to numerous matters, 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 from product sales 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 the manufacture, distribution and sales and marketing of products; 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, we may not be able to further develop or commercialize our product candidates and our business would be negatively impacted.

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

In light of recent developments in European law, we can give no assurance that we will be able to effectively protect our hESC-based products through patent filings.

In Europe, the European Patent Convention (EPC) prohibits the granting of European patents for inventions that concern “uses of human embryos for industrial or commercial purposes.” The European Patent Office (EPO) initially interpreted this prohibition broadly, and applied it to reject claims in any patent application that pertained to hESCs. An early patent application filed by the Wisconsin Alumni Research Foundation (WARF) with claims covering the original isolation of hESCs was appealed as a test case, and examination of other hESC patent applications was suspended while that case was heard. In November 2008 in case G2/06, the EPO Enlarged Board of Appeals held that the claims in the WARF application were unpatentable. We hold a worldwide license under this patent family, and since the decision is not subject to further appeal, this WARF patent family will not afford protection to our hESC-based product candidates in Europe. Nevertheless, we believe the basis for the EPO decision in the WARF case was narrow, and following further deliberation the EPO restarted examination of hESC cases and seemed to have adopted a policy, although not uniformly applied, that a patent application directed to an hESC-related invention could be granted if the application had been filed at point in time when hESC lines could be obtained from a public source, such as a cell repository. That is, the EPO appeared to have concluded that if the invention could be practiced at the time that the patent application was filed using available hESC lines (i.e., without the need to destroy an embryo to obtain hESCs de novo), the subject matter could be patented. In October 2011, the European Court of Justice (ECJ) rendered a decision in the *Brüstle v. Greenpeace* case that is widely viewed to have effectively abolished the ability to enforce patents on hESC technologies in member states of the European Union (EU). That case was a referral from the German Federal Court of Justice to the ECJ, of questions relevant to the German court’s hearing of a challenge to a German patent with claims covering certain uses of hESCs. The German court requested the ECJ to provide guidance on language in a Directive of the European Parliament on biotechnology inventions, specifically issues relating to the patentability of human embryos, and asked questions concerning patentability of hESCs. The ECJ decision was largely in line with the decision from the EPO in case G2/06, but went further in holding that the availability of hESC lines at the time that a patent application for an hESC-related invention is filed does not provide a basis for patentability since the creation of the hESC line required the prior destruction of a human embryo, thereby excluding the invention from patentability. It is unknown whether or how the EPO will change its policy on the patentability of hESC-related inventions following the ECJ decision since the EPO and the ECJ are unrelated legal bodies. However, the decision of the ECJ will be precedential for the national courts in EU countries, so even if the EPO continues to grant such patents, they will likely not be enforceable in EU national courts. We therefore believe that, unless there are further changes to EU law, we will likely be unable to effectively protect our hESC-related technologies in Europe through patent filings.

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

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.

Where more than one party seeks U.S. patent protection for the same technology, the Patent Office may declare an interference proceeding in order to ascertain the party to which the patent should be issued. Patent interferences are typically complex, highly contested legal proceedings, subject to appeal. They are usually expensive and prolonged, and can cause significant delay in the issuance of patents. Moreover, parties that receive an adverse decision in an interference can lose important patent rights. Notably, under the America Invents Act (AIA) signed into law in September 2011, interference proceedings will be eliminated in March 2013, to be replaced with other types of proceedings, including post-grant review procedures. Until such time, our pending patent applications, or our issued patents, may be drawn into interference proceedings which may delay or prevent the issuance of patents, or result in the loss of issued patent rights. By way of example, we are currently a party to an interference proceeding that involves patent filings for making endoderm cells from hESCs. We requested that the Patent Office declare this interference after ViaCyte, Inc. was granted patent claims that conflict with subject matter we filed in an earlier patent application. A number of outcomes are possible: (i) the claims may be awarded to ViaCyte; (ii) the claims may be awarded to us, or (iii) neither party might be found to be entitled to the claims. The decision from the Patent Office may also be subject to appeal. Since the interference is still ongoing, we cannot predict what the outcome will be.

Certain jurisdictions, such as Europe, New Zealand and Australia, permit oppositions to be filed against granted patents or patents proposed to be granted. Because our intent is to commercialize products internationally, securing both proprietary protection and freedom to operate outside of the United States is important to our business. We are involved in both opposing the grant of patents to others through such opposition proceedings and in defending our patent applications against oppositions filed by others. For example, we have been involved in several patent oppositions before the EPO with a series of companies (GemVax, Pharmexa and KAEL-GemVax) developing GV1001, a cancer vaccine that employs a short telomerase peptide to induce an immune response against telomerase. The rights to GV1001 passed from GemVax, a Norwegian company, to Pharmexa, a Danish company, as a result of a 2005 acquisition. In late 2008, Pharmexa reported that it sold its telomerase vaccine program to a Korean company, KAEL Co. Ltd., and the continuing company now operates under the name KAEL-GemVax. Various clinical studies of GV1001 are underway, including a Phase 3 combination study in pancreatic cancer. Pharmexa originally obtained a European patent with broad claims to the use of telomerase vaccines for the treatment of cancer, and we opposed that patent in 2004. In 2005, the Opposition Division (OD) of the EPO revoked the claims originally granted to Pharmexa, but permitted Pharmexa to add new, narrower claims limited to five specific small peptide fragments of telomerase. The decision was appealed to the Technical Board of Appeals (TBA). In August 2007, the TBA ruled, consistent with the decision of the OD, that Pharmexa was not entitled to the originally granted broad claims but was only entitled to the narrow claims limited to the five small peptides. KAEL-GemVax was recently granted a further related European patent covering its telomerase peptide vaccine against which we have filed an opposition. That opposition is ongoing and we cannot predict the outcome.

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In parallel, Pharmexa opposed a European patent held by us, the claims of which cover many facets of human telomerase, including the use of telomerase peptides in cancer vaccines. In June 2006, the OD of the EPO revoked three of the granted claims in our patent, specifically the three claims covering telomerase peptide cancer vaccines. The remaining 47 claims were upheld, and that decision was recently affirmed by the TBA. We have now been awarded a second European patent with claims to telomerase peptides, and this patent has also been opposed by KAEL-GemVax. We cannot predict the outcome of this opposition or any subsequent appeal of the decision in the opposition.

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

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

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 hESCs. 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 us pursuant to a January 2002 license agreement with WARF. The license agreement conveys exclusive rights to us under the WARF patents for the development and commercialization of therapeutics based on neural cells, cardiomyocytes and pancreatic islet cells, derived from hESCs, as well as non-exclusive rights for other product opportunities. In October 2006, the Patent Office initiated the reexamination proceedings. After initially rejecting the patent claims, the Patent Office issued decisions in all three cases upholding the patentability of the claims as amended. The decisions to uphold the 5,843,780 and 6,200,806 patents are final and not subject to further appeal. Consumer Watchdog appealed the decision on the 7,029,913 patent. In April 2010, the Board of Patent Appeals and Interferences reversed the earlier decision of the Patent Office on the 7,029,913 patent. WARF will now have the opportunity to present amended claims for further examination at the Patent Office. We cooperated with WARF in these reexamination actions and expect that WARF will continue to vigorously defend its patent position. The final outcome of these 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 could negatively impact our proprietary position in this technology and adversely impact our business.

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

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

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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.

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

Our business depends on several critical technologies that are based in part on patents licensed from third parties, including the exclusive worldwide license rights we obtained from Angiochem in December 2010. Those third-party license agreements impose obligations on us, such as payment obligations and obligations to diligently pursue development of commercial products under the licensed patents. If a licensor believes that we have failed to meet our obligations under a license agreement, the licensor could seek to limit or terminate our license rights, which could lead to costly and time-consuming litigation and, potentially, a loss of the licensed rights. During the period of any such litigation our ability to carry out the development and commercialization of product candidates could be significantly and negatively affected. If our license rights were restricted or ultimately lost, our ability to continue our business based on the affected technology would be severely adversely affected.

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

Our commercial success depends significantly on our ability to operate without infringing patents and the proprietary rights of others. Our technologies may infringe the patents or proprietary rights of others. In addition, we may become aware of discoveries and technology controlled by third parties that are advantageous to our programs. In the event our technologies infringe the rights of others or we require the use of discoveries and technology controlled by third parties, we may be prevented from pursuing research, development or commercialization of product candidates or may be required to obtain licenses to those patents or other proprietary rights or develop or obtain alternative technologies. We have obtained licenses from several universities and companies for technologies that we anticipate incorporating into our product candidates, and we initiate negotiation for licenses to other technologies as the need or opportunity arises. We may not be able to obtain a license to patented technology on commercially favorable terms, or at all. If we do not obtain a necessary license, we may need to redesign our technologies or obtain rights to alternate technologies, the research and adoption of which could cause delays in our product development. In cases where we are unable to license necessary technologies, we could be prevented from developing certain product candidates. Our failure to obtain alternative technologies or a license to any technology that we may require to research, develop or commercialize our product candidates would significantly and negatively affect our business.

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 and test our product candidates, and our ability to develop and commercialize product candidates 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, Sienna is developing cancer diagnostics using our telomerase technology and GE Healthcare UK Limited is developing cell-based assays using cells derived from our hESCs. Our collaborators may not cooperate with us or perform their obligations under our agreements with them. We cannot control the amount and timing of resources devoted by our collaborators 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.

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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 our product candidates 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 agreements with collaborators, or if our collaborators breach or terminate their collaborative agreements with us, our business may be materially harmed.

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

We rely on other companies for certain process development, supply of starting materials, manufacturing or other technical scientific work with respect to our imetelstat and GRN1005 product candidates, and for the supply of starting materials and technical scientific work for our GRNOPC1 product candidate. 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, or if they choose to exit the business, our ability to develop or manufacture our product candidates could be significantly harmed.

There are other risks and uncertainties that we face with respect to manufacturing. For example, certain commonly used reagents and solvents can experience market shortages and, if these shortages occur, they may adversely impact our ability to manufacture our product candidates.

At this time we have primary sources in place for each aspect of the GRN1005 supply chain, but we have not yet contracted with secondary manufacturers. Similarly, for our GRNOPC1 product candidate, several critical raw materials currently are sole sourced.

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

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

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

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

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

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

Many companies are developing alternative therapies to treat cancer and, in this regard, are competitors of ours. 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.

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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 product candidates will depend on a number of factors, including:

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

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

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

Our ability to successfully commercialize our product candidates will depend significantly on our ability to obtain acceptable prices and the availability of reimbursement to the patient from third-party payors. In March 2010, President Obama signed the Patient Protection and Affordability Care Act, as amended by the Health Care and Education Affordability Reconciliation Act (collectively, the PPACA) into law. Focused on expanding healthcare coverage to millions of uninsured Americans and reducing the rate of increase in healthcare costs, the PPACA contains numerous initiatives that impact the pharmaceutical industry. These include, among other things:

- increasing existing price rebates in federally funded health care programs;
- expanding rebates, or other pharmaceutical company discounts, into new programs;
- imposing a new non-deductible excise tax on sales of certain prescription pharmaceutical products by prescription drug manufacturers and importers;
- reducing incentives for employer-sponsored health care;
- creating an independent commission to propose changes to Medicare with a particular focus on the cost of biopharmaceuticals in Medicare Part D;
- providing a government-run public option with biopharmaceutical price-setting capabilities;
- allowing the Secretary of Health and Human Services to negotiate drug prices within Medicare Part D directly with pharmaceutical manufacturers;
- reducing the number of years of data exclusivity for innovative biological products potentially leading to earlier biosimilar competition; and
- increasing oversight by the FDA of pharmaceutical research and development processes and commercialization tactics.

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

RISKS RELATED TO ENVIRONMENTAL AND PRODUCT LIABILITY

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

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

Our business exposes us to potential product liability risks that are inherent in the testing, manufacturing and marketing of human therapeutic and diagnostic products. We may become subject to product liability claims if the use of our product candidates is alleged to have injured subjects or patients. This risk exists for our product candidates currently being tested in human clinical trials as well as product candidates that are sold commercially. 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.

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Historically, our stock price has been extremely volatile. Between January 1, 2001 and September 30, 2011, our stock has traded as high as \$20.75 per share and as low as \$1.41 per share. Between January 1, 2008 and September 30, 2011, the price has ranged between a high of \$9.24 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 hESC research;
- public concern with respect to our product candidates;
- the issuance of common stock to partners, vendors or to investors to raise additional capital; and
- the occurrence of any of those risks and uncertainties discussed in this Item 1A Risk Factors.

In addition, the stock market is subject to other factors outside our control that can cause extreme price and volume fluctuations. Since the latter half of 2008, broad distress in the financial markets and the economy have resulted in greatly increased market uncertainty and instability in both U.S. and international capital and credit markets. These conditions, combined with foreign credit concerns, declining business and consumer confidence and high unemployment have recently contributed to substantial market volatility, and if such market conditions persist, the price of our common stock may fluctuate or decline.

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

Securities-related class action litigation has often been brought against companies, including many biotechnology companies, which experience volatility in the market price of their securities. This risk is especially relevant for us because biotechnology and biopharmaceutical companies often experience significant stock price volatility in connection with their product development programs. In December 2010, a securities class action complaint was filed naming us and one of our executive officers as defendants. The lawsuit alleged that the defendants made materially false or misleading public statements regarding our financial condition. The case was voluntarily dismissed, without prejudice, in February 2011. In January and February 2011, shareholder derivative complaints were filed against the members of our board of directors and one of our executive officers. The derivative complaints were based on the same factual background as the same dismissed class action, and alleged that the defendants breached their fiduciary duties. Each of the derivative cases was voluntarily dismissed, without prejudice, in March 2011. Such securities-related litigation may be filed in the future and a decision adverse to our interests in any such lawsuit could result in the payment of substantial damages by us, and could have a material adverse effect on our cash flow, results of operations and financial position.

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. Monitoring and defending against legal actions is time-consuming for our management, is likely to be expensive and may detract from our ability to fully focus our internal resources on our business activities. 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. In addition, the inherent uncertainty of such litigation could lead to increased volatility in our stock price.

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

The 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 of our common stock. As of September 30, 2011, we had 200,000,000 shares of common stock authorized for issuance and 131,523,097 shares of common stock outstanding. In addition, as of September 30, 2011, we have reserved approximately 37,390,602 shares of common stock for future issuance pursuant to our stock plans, potential milestone payments and outstanding warrants.

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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 common stock.

As partial consideration for the license rights we obtained from Angiochem, Inc. (Angiochem), we issued to Angiochem 5,261,144 shares of common stock (Angiochem Shares) on January 5, 2011. On January 7, 2011, we filed a registration statement on Form S-3 (Angiochem S-3) with the Securities and Exchange Commission covering the shares issued to Angiochem which was declared effective on January 13, 2011. The Angiochem Shares were initially subject to a lock-up agreement with us that expired on February 5, 2011. Any sales by Angiochem of the Angiochem Shares are subject to certain monthly volume restrictions. Sales of the Angiochem Shares could negatively impact the market price of our common stock in the future.

Our undesignated preferred stock may inhibit potential acquisition bids; this may adversely affect the market price of 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 or alter the rights, preferences, privileges and restrictions granted to or imported upon these shares without further vote or action by our stockholders. 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 charter, bylaws and 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.

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 our board of directors. Furthermore, our loan agreement with CIRM restricts our ability to pay dividends on our common stock.

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

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

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

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Pursuant to our Loan Agreement with CIRM, we are obligated to issue to CIRM a warrant to purchase our common stock in connection with each disbursement thereunder. As of September 30, 2011, we have issued to CIRM a warrant to purchase an aggregate of 537,893 shares of our common stock at an exercise price of \$3.98 per share, the average closing sales price of our common stock as reported by The NASDAQ Global Select Market for the ten consecutive trading days immediately preceding the corresponding disbursement. The issuances of warrants to CIRM are in reliance upon exemptions from registration pursuant to Section 4(2) under the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. (REMOVED AND RESERVED)

None.

ITEM 5. OTHER INFORMATION

None.

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ITEM 6. EXHIBITS

| Exhibit Number | Description |
|----------------|---|
| 10.1† | California Institute for Regenerative Medicine Notice of Loan Award. |
| 10.2 | Employment Agreement between Registrant and John A. Scarlett, M.D., dated September 29, 2011. * |
| 31.1 | Certification of Chief Executive Officer pursuant to Form of Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated November 3, 2011. |
| 31.2 | Certification of Chief Financial Officer pursuant to Form of Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated November 3, 2011. |
| 32.1 | Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated November 3, 2011. ** |
| 32.2 | Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated November 3, 2011. ** |
| 101 | The following materials from the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2011, formatted in Extensible Business Reporting Language (XBRL) include: (i) Condensed Consolidated Balance Sheets as of September 30, 2011 and December 31, 2010, (ii) Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2011 and 2010, (iii) Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2011 and 2010, and (iv) Notes to Condensed Consolidated Financial Statements. *** |

† Certain portions of this Exhibit have been omitted for which confidential treatment has been requested and filed separately with the Securities and Exchange Commission.

* Management contract or compensation plan or arrangement.

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

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

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

GERON CORPORATION

By: /s/ DAVID L. GREENWOOD

David L. Greenwood
President and Chief Financial Officer
(Duly Authorized Signatory)

Date: November 3, 2011

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

CONFIDENTIAL TREATMENT HAS BEEN REQUESTED FOR PORTIONS OF THIS EXHIBIT. THE COPY FILED HERewith OMITs THE INFORMATION SUBJECT TO THE CONFIDENTIALITY REQUEST. OMISSIONS ARE DESIGNATED AS *. A COMPLETE, UNREDACTED VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.

SIGN AND RETURN THIS PAGE TO CIRM

CT1-05168

**NOTICE OF LOAN AWARD – CIRM RFA-10-03: Targeted Clinical Development Awards
California Institute for Regenerative Medicine**

Issue Date: July 27, 2011

| | | | |
|----------------------------|--------------------|-----------------------|-----------------------|
| Loan Number: | CT1-05168 | Budget Period: | Annual as of 8/1/2011 |
| Loan Recipient Name: | Geron Corporation | | |
| Loan Recipient/Grantee ID: | PR-Y0009A-SF | Project Period Start: | 8/1/2011 |
| Principal Investigator: | Dr. Jane Lebkowski | Project Period End: | 7/31/2014 |

Project Title: Evaluation of Safety and Preliminary Efficacy of Escalating Doses of GRNOPC1 in Subacute Spinal Cord Injury

| | |
|--|---|
| Authorized Organizational Official and Address: | Official and Address to Receive Payments: |
| David Greenwood | Olivia Bloom |
| President, Chief Financial Officer & interim Chief | Vice President & Chief Accounting Officer |
| Executive Officer 230 Constitution Dr | 230 Constitution Dr |
| Menlo Park, CA 94025 | Menlo Park, CA 94025 |

The California Institute for Regenerative Medicine hereby awards a loan in the amount of **\$24,846,856** to be disbursed over a total period of 3 years to **Geron Corporation** (Loan Recipient/Grantee ID PR-Y0009A-SF) in support of the above referenced project. This award is made pursuant to the California Stem Cell Research and Cures Act (Health and Safety Code section 125290.10 *et. seq.*) and is subject to the Terms and Conditions referenced below. (Capitalized terms are defined herein or in the *CIRM Loan Administration Policy*, (LAP) a copy of which may be found on the CIRM website at: <http://www.cirm.ca.gov/cirm-operations/Regulations>.)

In accepting this Loan, the Loan Recipient warrants to CIRM that any funds expended under the award will be for the purposes set forth in the approved application and this Notice of Loan Award (NLA) and agrees to comply with all applicable CIRM regulations and standards.

To accept this Loan, the Principal Investigator and Authorized Organizational Official must sign and return this NLA to CIRM within 45 days of the issue date. Payment will be issued only after the signed NLA is received by CIRM. Loan funds will be sent to the organization’s address listed above under *Official and Address to Receive Payments* unless an updated address is provided in the box below. If the applicant cannot accept the award, including the legal obligation to perform in accordance with the provisions of this NLA, it should notify CIRM immediately.

If you have any questions about this award, please contact the CIRM staff referenced on page 3.

/s/ Alan Trounson
Alan O. Trounson, Ph.D.
President
California Institute for Regenerative Medicine

| |
|---|
| <u>Updated Address to Receive Payments:</u> |
| |

AWARD ACCEPTANCE: The Principal Investigator and Authorized Organizational Official must sign below and return the entire NLA to CIRM to accept the Loan award.

| | Principal Investigator | Authorized Organizational Official |
|------------------|------------------------|------------------------------------|
| Name | Jane Lebkowski | David Greenwood |
| Signature | /s/ Jane S. Lebkowski | /s/ David L. Greenwood |
| Date | July 28, 2011 | |

SIGN AND RETURN ALL PAGES TO CIRM

TERMS AND CONDITIONS OF AWARD

A. This award is based on the application submitted to CIRM, and as approved by the Independent Citizens' Oversight Committee (ICOC) on the above-titled project and is subject to the terms and conditions incorporated either directly or by reference in the following:

1. The *California Stem Cell Research and Cures Act* (Health and Safety Code Section 125290.10 *et. seq.*) and regulations adopted by the ICOC.
2. The *CIRM Loan Administration Policy* (Cal. Code Regs., tit. 17, § 100800 *et seq.*), the *CIRM Scientific and Medical Accountability Standards* (Cal. Code Regs., tit. 17, § 10010 *et seq.*), the *CIRM Intellectual Property and Revenue Sharing Requirements for Non-Profit and For-Profit Grantees* (Cal. Code Regs., tit. 17, § 100600 *et seq.*), and *Grants Administration Policies* (Cal. Code Regs., tit. 17, § 100500 *et seq.*).
3. The terms and requirements detailed in RFA 10-03: CIRM Targeted Clinical Development Awards.
4. The terms and requirements of Loan Agreement, including the Warrant Agreement attached thereto (Appendix A to this NLA).
5. Research Project Milestones (Appendix B to this NLA).
6. Budget and disbursement detail (Appendix C to this NLA).

C. The timing of the distribution of funds pursuant to this award shall be contingent upon the availability of funds in the California Stem Cell Research and Cures Fund in the State Treasury, as determined by CIRM in its sole discretion.

Please check the following website for updated policy documents: <http://www.cirm.ca.gov/cirm-operations/Regulations>

AWARD DETAIL (U.S. Dollars):

| | Year 1 | Year 2 | Year 3 |
|--------------------------------------|---------------------|--------------------|--------------------|
| Total CIRM Project Costs | | | |
| * | \$ * | \$ * | \$ * |
| * | \$ * | \$ * | \$ * |
| * | \$ * | \$ * | \$ * |
| * | \$ * | \$ * | \$ * |
| * | \$ * | \$ * | \$ * |
| * | \$ * | \$ * | \$ * |
| Total CIRM Project Costs | \$ 6,764,267 | \$5,513,344 | \$3,609,643 |
| Facilities and Indirect Costs | \$ 3,939,797 | \$3,158,715 | \$1,861,090 |
| APPROVED BUDGET TOTAL | \$10,704,064 | \$8,672,059 | \$5,470,733 |

RESTRICTION ON THE USE OF FUNDS

CIRM-funded Project costs are allocated to 7 sub-projects that make up the overall funded project. CIRM funds allocated to one sub-project may only be used for that sub-project. Geron may reallocate funds from one sub-project to another, without advance approval from CIRM, as long as the funds for each sub-project stay within 10% of its original allocation.

Four of the subprojects cannot commence until certain milestones are met, so funds for those sub-projects may not be used for costs incurred before those milestones are met. The sub-projects and the preconditions are shown in the following table.

| Sub-Project | Project Costs | Precondition to use |
|-------------|---------------|--|
| * | \$ * | None |
| * | \$ * | FDA clearance * |
| * | \$ * | FDA clearance * |
| * | \$ * | FDA clearance * |
| * | \$ * | None |
| * | \$ * | Agreed need for Years 2/3 manufacturing to meet cell supply requirements for CIRM-Funded Project |
| * | \$ * | None |

QUARTERLY INSTALLMENTS ON LOAN DISBURSEMENTS

Disbursements will be made in quarterly installments, issued at the beginning of each quarter. Quarters will be tied to the project start date and will be made based on the figures provided in Appendix C (Budget Worksheet). The final quarterly installment will be held until completion of Close-Out. The disbursement schedule for Years 2 and 3 assumes that No-Go milestones do not occur and Progress milestones are met. If some milestones are unmet at the end of Year 1 or Year 2, CIRM may adjust the disbursement schedule for subsequent years, based on the Project Costs associated with the elements of the milestones that are unmet, after consultation with Geron.

CIRM requires the grantee to maintain a 1:1 expenditure match on a quarterly basis to be verified during quarterly financial reporting. If the match is not maintained, CIRM may elect to reduce the next quarterly payment by the lowest amount needed to maintain the 1:1 match and will reinstate those funds upon the next quarterly report that shows a 1:1 match.

Disbursement for Pre-Award activities and Year 1 Quarter 1 will be released immediately upon execution of this agreement.

*: Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Disbursement Schedule

| Type | Schedule Date | Amount |
|--------------------------------------|--|--------|
| Pre-Award and Budget Period Year1 Q1 | 8/1/11 | \$ ** |
| Budget Period Year1 Q2 | 11/1/11 | \$ * |
| Budget Period Year1 Q3 | 2/1/12 | \$ * |
| Budget Period Year1 Q4 | 5/1/12 | \$ * |
| Budget Period Year2 Q1 | 8/1/12 | \$ ** |
| Budget Period Year2 Q2 | 11/1/12 | \$ * |
| Budget Period Year2 Q3 | 2/1/13 | \$ * |
| Budget Period Year2 Q4 | 5/1/13 | \$ * |
| Budget Period Year3 Q1 | 8/1/13 | \$ ** |
| Budget Period Year3 Q2 | 11/1/13 | \$ * |
| Budget Period Year3 Q3 | 2/1/14 | \$ * |
| Budget Period Year3 Q4 | 10/1/14 (Held until completion of Close-Out) | \$ * |

*Amounts specified in section 4.6 (b) of the Loan Agreement will be delivered by CIRM directly to the service provider.

PROGRESS REPORTS SCHEDULE

| | Year 1 | Year 2 | Year 3 |
|------------------------------|----------|----------|----------|
| 1st Quarter Progress Report | 11/1/11 | 11/1/12 | 11/1/13 |
| 1st Quarter Financial Report | 11/15/11 | 11/15/12 | 11/15/13 |
| 2nd Quarter Progress Report | 2/1/12 | 2/1/13 | 2/1/14 |
| 2nd Quarter Financial Report | 2/15/12 | 2/15/13 | 2/15/14 |
| 3rd Quarter Progress Report | 5/1/12 | 5/1/13 | 5/1/14 |
| 3rd Quarter Financial Report | 5/15/12 | 5/15/13 | 5/15/14 |
| Annual Programmatic Report | 8/1/12 | 8/1/13 | 8/1/14 |
| Annual Financial Report | 10/1/12 | 10/1/13 | 10/1/14 |

CIRM CONTACTS:

Gabriel Thompson, Deputy Grants Management Officer
Phone: * Email: * Fax: *

Ingrid Caras, Ph.D., Science Officer
Phone: * Email: * Fax: *

CIRM Mailing Address:

California Institute for Regenerative Medicine
Attn: Grants Management Office
210 King Street
San Francisco, CA 94107

The CIRM home page is at <http://www.cirm.ca.gov>

*: Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

APPENDICES

- Appendix A Loan Agreement
- Appendix B Research Milestones
- Appendix C Budget Worksheets

CIRM USE ONLY: 6445-601-6047001/H&S Code 125291.20 Statutes 2004
(00099586; 2)

**CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE
LOAN AGREEMENT**

This LOAN AGREEMENT (the “**Agreement**”) is entered into as of August 1, 2011, by and between the California Institute for Regenerative Medicine (“**CIRM**”) and Geron Corporation (“**Loan Recipient**”).

RECITALS

A. Whereas, California voters approved Proposition 71, the California Stem Cell Research and Cures Act, in November 2004 to support stem cell research for the development of life-saving regenerative medical treatments and cures;

B. Whereas, one of the purposes of Proposition 71 is to advance the biotech industry in California to world leadership, as an economic engine for California’s future;

C. Whereas, CIRM was established pursuant to Proposition 71 to make grants and provide loans for stem cell research, research facilities, and other vital research opportunities;

D. Whereas, CIRM issued Request for Applications 10-03 (CIRM Targeted Clinical Development Awards) in 2010 to solicit applications for research projects designed to facilitate clinical development of novel cell therapies derived from pluripotent stem cells that may offer unique benefit with well considered risk to persons with disease or serious injury by supporting the conduct of early clinical trials (e.g. Phase 1, Phase 1/2, Phase 2a) as well as ancillary activities that will enable these trials;

E. Whereas, CIRM, as part of Request for Applications 10-03, offered Company-Backed Loans and Product-Backed Loans to for-profit entities, and to non-profit entities whose applications included a co-principal investigator from a for-profit entity that was willing to undertake the required loan obligations;

F. Whereas, Loan Recipient is a for-profit company that is seeking funds to support Loan Recipient’s on-going phase I clinical trial for the treatment of people with spinal cord injury;

G. Whereas, Loan Recipient applied for a Targeted Clinical Development Award from CIRM, and on May 4, 2011, CIRM’s Governing Board, the Independent Citizens’ Oversight Committee, approved the award of a Product-Backed Loan to Loan Recipient in furtherance of the purposes of CIRM; and

H. Whereas, this Agreement sets forth the terms and conditions pursuant to which CIRM will loan funds to Loan Recipient, and Loan Recipient will repay the amounts owing, plus interest, and issue warrants to CIRM.

NOW, THEREFORE, in reliance on the mutual representations, warranties and agreements herein contained, the parties agree as follows:

**ARTICLE I
DEFINITIONS**

1.1 Certain Definitions. As used in this Agreement, the following terms have the meanings indicated below.

Affiliate. The term “Affiliate” shall mean any Person directly or indirectly controlling or controlled by, or under direct or indirect common control with, another Person. A Person shall be deemed to control another Person for purposes of this definition if such Person possesses, directly or indirectly, the power to direct, or cause the direction of, the management and policies of the other Person, whether through the ownership of voting securities, common directors, trustees or officers, by contract or otherwise; provided that, in any event for purposes of this definition, any Person that owns, directly or indirectly, ten percent (10%) or more of the securities having the ordinary voting power for the election of directors or governing body of a corporation or ten percent (10%) or more of the partnership or other ownership interest of any other Person (other than as a limited partner of such other Person) will be deemed to control such corporation or other Person).

Application. The term “Application” shall mean the application that Loan Recipient submitted to CIRM in response to RFA 10-03, and any attachment or appendices thereto.

Authorized Representative. The term “Authorized Representative” shall mean those persons shown on the list of officers provided by Loan Recipient pursuant to Section 4.12(e) hereof or on any update of any such list provided by Loan Recipient to CIRM, or any further or different officers of Loan Recipient so named by an Authorized Representative of Loan Recipient in a written notice to CIRM.

Business. The term “Business” shall mean the CIRM-Funded Project and the development and commercialization of products resulting from the CIRM-Funded Project.

Capital Lease. The term “Capital Lease” shall mean any lease of Property which in accordance with GAAP is required to be capitalized on the balance sheet of the lessee.

Capitalized Lease Obligation. The term “Capitalized Lease Obligation” shall mean, for any Person, the amount of the liability shown on the balance sheet of such Person in respect of a Capital Lease determined in accordance with GAAP.

Change of Control. The term “Change of Control” shall mean a sale, merger, transfer, exchange or other disposition (whether of assets, stock or otherwise) of a majority or controlling ownership position of Loan Recipient.

CIRM. The term “CIRM” shall mean the California Institute for Regenerative Medicine.

CIRM-Funded Project. The term “CIRM-Funded Project” shall mean the phase I clinical trials of Loan Recipient’s embryonic stem cell-derived oligodendrocyte progenitor cell (OPC1) product for the treatment of people with spinal cord injury, as described in detail by Loan Recipient in the Application. The Loan Recipient must obtain prior approval from CIRM for any change in the scope of the CIRM-Funded Project pursuant to CIRM’s Grants Administration Policy, article V, section D(1). Upon such approval, the term “CIRM-Funded Project” shall include any such deviation, amendment or change that is so approved by CIRM.

CIRM's Governing Board. The term "CIRM's Governing Board" shall mean the Independent Citizens' Oversight Committee.

CIRM Representatives. The term "CIRM Representatives" shall mean CIRM's officers, employees, agents, attorneys, consultants, accountants and members CIRM's Governing Board.

Code. The term "Code" shall mean the Internal Revenue Code of 1986, as amended, and any successor statute thereto.

Company-Backed Loan. The term "Company-Backed Loan" shall have the meaning given in the Loan Administration Policy.

Controlled Group. The term "Controlled Group" shall mean all members of a controlled group of corporations and all trades or businesses (whether or not incorporated) under common control which, together with Loan Recipient, are treated as a single employer under Section 414 of the Code.

Direct Research Funding Costs. The term "Direct Research Funding Costs" shall mean the sum of Project Costs and Facilities Costs.

Disbursement. The term "Disbursement" shall have the meaning given to it in Section 4.4(a) of this Agreement.

Disbursed Loan Amount. The term "Disbursed Loan Amount" shall mean that amount of the Loan Award that CIRM has distributed in immediately available funds to the Loan Recipient through any one or more Disbursements.

ERISA. The term "ERISA" shall mean the Employee Retirement Income Security Act of 1974, as amended, or any successor statute thereto.

Exchange Act. The term "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended.

Facilities Costs. The term "Facilities Costs" shall mean the general operating costs of the facilities that will house all elements of the CIRM-Funded Project.

Indebtedness. The term "Indebtedness" shall mean for any Person (without duplication), (a) all indebtedness created, assumed or incurred in any manner by such Person representing money borrowed (including by the issuance of debt securities), (b) all indebtedness for the deferred purchase price of property or services (other than trade accounts payable arising in the ordinary course of business), (c) all indebtedness secured by any Lien upon Property of such Person, whether or not such Person has assumed or become liable for the payment of such indebtedness, (d) all Capitalized Lease Obligations of such Person, and (e) all obligations of such Person on or with respect to letters of credit, bankers' acceptances and other extensions of credit whether or not representing obligations for borrowed money.

Indirect Costs. The term “Indirect Costs” shall mean the administrative costs (including but not limited to loan origination and administration fees) incurred for common or joint objectives which cannot be readily and specifically identified with a particular project. Indirect costs shall be capped at twenty percent (20%) of Direct Research Funding Costs, exclusive of the costs of equipment, tuition and fees, and subcontracts, as group, totaling more than \$25,000 per year.

LIBOR. The term “LIBOR” shall have the meaning given in Section 4.3 of this Agreement.

Lien. The term “Lien” shall mean any mortgage, lien, security interest, pledge, charge or encumbrance of any kind in respect of any Property, including the interests of a vendor or lessor under any conditional sale, Capital Lease or other title retention arrangement.

Loan. The term “Loan” shall mean the product-backed loan specified in Section 4.1 of this Agreement.

Loan Administration Policy. The term “Loan Administration Policy” shall mean the “CIRM Loan Administration Policy,” as approved by the Office of Administrative Law and as attached hereto as Exhibit C, including amendments thereto adopted by CIRM and agreed to by CIRM and Loan Recipient.

Loan Award. The term “Loan Award” shall mean the award of twenty-four million, eight hundred and forty-six thousand, and eight hundred and fifty-six hundred dollars (\$24,846,856) to Loan Recipient, which was approved by CIRM’s Governing Board on or about May 4, 2011.

Loan Balance. The term “Loan Balance” shall mean the principal amount CIRM distributes to Loan Recipient pursuant to any Disbursement plus accrued interest thereon, less any prepayment(s) made under Section 4.7(a).

Loan Documents. The term “Loan Documents” shall mean this Agreement, the Notice of Loan Award, the Warrants, and all documents incorporated by reference pursuant to Article II.

Loan Period. The term “Loan Period” shall mean the five-year period beginning on the Effective Date of this Agreement, unless the Loan Recipient elects to extend the term of the Loan Period pursuant to Section 4.8, in which case “Loan Period” shall mean the period as so extended pursuant to the terms set forth herein.

Loan Recipient. The term “Loan Recipient” shall mean Geron Corporation.

Material Adverse Effect. The term “Material Adverse Effect” shall mean any event, condition or change which materially and adversely affects or could reasonably be expected to materially and adversely affect the Business or the financial results of operations, or financial condition of the Loan Recipient.

No Go Milestones. The term “No Go Milestones” shall mean the milestones specified in the Notice of Loan Award by which CIRM will determine, in its reasonable, but sole discretion, whether or not the funding by CIRM of the CIRM-Funded Project will continue, including whether additional Disbursements will be contingent on Loan Recipient’s satisfaction of conditions imposed by CIRM.

Notice of Loan Award or NLA. The terms “Notice of Loan Award” or “NLA” shall mean the Notice of Loan Award executed by CIRM and Loan Recipient in connection with RFA 10-03.

Organizational Documents. The term “Organizational Documents” shall mean Loan Recipient’s certificate of incorporation and bylaws (or comparable organizational documents), each as amended to date, which have been furnished to CIRM by Loan Recipient.

PBGC. The term “PBGC” shall mean the Pension Benefit Guaranty Corporation or any Person succeeding to any or all of its functions under ERISA.

Permitted Indebtedness. The term “Permitted Indebtedness” shall mean:

(a) Loan Recipient’s indebtedness to CIRM under this Agreement or any other Loan Document;

(b) Indebtedness existing on the date hereof and described in Schedule 7.8;

(c) Indebtedness secured by a lien described in Section 7.8(d) of this Agreement;

(d) Indebtedness to trade creditors incurred in the ordinary course of business;

(e) Indebtedness arising from credit facilities, term loans and other debt financings (including, for the avoidance of doubt, any debt financing provided by Loan Recipient’s equity investors), established to support the Loan Recipient’s working capital and general corporate needs; provided that such Indebtedness shall not be secured by the CIRM-Funded Project; and

(f) Indebtedness that is subordinated to the Loan Recipient’s Indebtedness to CIRM under this Agreement or any other Loan Document, pursuant to subordination, intercreditor or similar agreements reasonably satisfactory to CIRM.

Permitted Lien(s). The term “Permitted Lien” or “Permitted Liens” shall have the meaning provided in Section 7.8 of this Agreement.

Person. The term “Person” shall mean an individual, partnership, corporation, limited liability company, association, trust, unincorporated organization or any other entity or organization, including a government or agency or political subdivision thereof.

Plan. The term “Plan” shall mean any employee pension benefit plan covered by Title IV of ERISA or subject to the minimum funding standards under Section 412 of the Code that either (a) is maintained by a member of the Controlled Group for employees of a member of the Controlled Group or (b) is maintained pursuant to the collective bargaining agreement or any other arrangement under which more than one employer makes contributions and to which a member of the Controlled Group is then making or accruing an obligation to make contributions or has within the preceding five plan years made contributions.

Product-Backed Loan. The term “Product-Backed Loan” shall have the meaning given in the Loan Administration Policy.

Progress Milestones. The term “Progress Milestones” shall mean those milestones specified in the Notice of Loan Award by which CIRM will measure Loan Recipient’s progress in achieving the aims of the CIRM-Funded Project.

Project Costs. The term “Project Costs” shall mean those costs identified in the budget included in the Notice of Loan Award, and any other costs that may be specifically identified with the CIRM-Funded Project and mutually agreed upon by CIRM and Loan Recipient.

Property. The term “Property” shall mean, as to any Person, all types of real, personal, tangible, intangible or mixed property owned by such Person whether or not included in the most recent balance sheet of such Person and its subsidiaries under GAAP.

Request for Applications 10-03 or RFA 10-03. The terms “Request for Applications 10-03” and “RFA 10-03” shall mean the request for applications issued by CIRM in 2010 for Targeted Clinical Development Awards.

Senior Credit. The term “Senior Credit” shall mean the Indebtedness described in clause (e) of the definition “Permitted Indebtedness.”

Subsidiary. The term “Subsidiary” shall mean any corporation or other Person more than fifty percent (50%) of the outstanding ordinary voting shares or other equity interest of which is at the time directly or indirectly owned by Loan Recipient, by one or more of its Subsidiaries, or by Loan Recipient and one or more of its Subsidiaries.

“Third Party” shall mean an entity other than CIRM and its Affiliates and Geron and its Affiliates.

Warrants. The term “Warrants” shall mean the warrants required to be issued by Loan Recipient pursuant to Section 4.5 of this Agreement.

1.2 Other Terms. The definitions set forth in the CIRM Loan Administration Policy (Cal. Code Regs., tit. 17, § 100800 et seq.), the CIRM Risk Premium Interim Regulation (Cal. Code Regs., tit. 17, § 100802), the CIRM Scientific and Medical Accountability Standards (Cal. Code Regs., tit. 17, § 100010 et seq.), the CIRM Intellectual Property and Revenue Sharing Requirements for Non-Profit and For-Profit Grantees (Cal. Code Regs., tit. 17, § 100600 et seq.), and the CIRM Grants Administration Policy for Academic and Non-Profit Institutions (Cal. Code Regs., tit. 17, § 100500 et seq.) shall apply to the terms used in this Agreement unless otherwise specified.

**ARTICLE II
INCORPORATION BY REFERENCE**

2.1 Notice of Loan Award. The Notice of Loan Award is hereby incorporated into this Agreement by reference.

2.2 Application for CIRM Targeted Clinical Development Award. Loan Recipient's Application for a Targeted Clinical Development Award, including all attachments and supplemental information, submitted to CIRM or its agents in response to RFA 10-03 is hereby incorporated into this Agreement by reference.

**ARTICLE III
APPLICATION OF CIRM REGULATIONS**

Loan Recipient shall be bound by, and shall comply with, all CIRM regulations applicable to loans to for-profit organizations, including the CIRM Loan Administration Policy (Cal. Code Regs., tit. 17, § 100800 et seq.), the CIRM Scientific and Medical Accountability Standards (Cal. Code Regs., tit. 17, § 100010 et seq.), the CIRM Intellectual Property Provisions Applicable to Loan Recipients (Cal. Code Regs., tit. 17, § 100801; and the CIRM Grants Administration Policy for Academic and Non-Profit Institutions (Cal. Code Regs., tit. 17, § 100500 et seq.), as made applicable to loan recipients pursuant to the Loan Administration Policy. The Loan Administration Policy in effect on the Effective Date of this Agreement shall apply to Loan Recipient, unless Loan Recipient and CIRM mutually agree that an amendment to the Loan Administration Policy shall apply to Loan Recipient.

**ARTICLE IV
LOAN AND TERMS OF PAYMENT**

4.1 Maximum Loan Amount; Repayment. Subject to and upon the terms and conditions of this Agreement and in reliance on the representations and warranties set forth in this Agreement, CIRM agrees to provide Loan Recipient a Loan in an aggregate principal amount not to exceed the Loan Award. Loan Recipient agrees to repay the Loan Balance at the end of the Loan Period (or if such day is not a business day, then, without any further penalty or fee, the first business day after such date), unless (a) Loan Recipient elects to extend the Loan Period pursuant to Section 4.8, in which case such repayment will occur at the end of the Loan Period as so extended (or if such day is not a business day, then, without any further penalty or fee, the first business day after such date) subject to the Loan Recipient making payments during such extended Loan Period as provided under Article VII, Section H of the Loan Administration Policy, (b) Loan Recipient's obligation to repay the Loan Balance is accelerated pursuant to Sections 4.9, 8.3 or 8.4, in which case such repayment will occur upon the effective date of such acceleration, (c) this Agreement is terminated before the end of the Loan Period pursuant to Section 8.1, in which case such repayment will occur upon the effective date of such termination, (d) the Loan Recipient relinquishes the Loan or transfers the Loan to a new Loan Recipient pursuant to Article V, Section D of the Loan Administration Policy, or (e) suspension or forgiveness of all or part of the Loan based on the success of the CIRM-Funded Project occurs as specified in Article VII, Section G of the Loan Administration Policy.

4.2 Use of Proceeds. The Loan Recipient shall use the proceeds of the Loan solely for the purposes of funding the CIRM-Funded Project.

4.3 Interest. The interest rate for each Disbursement of the Loan shall be a per annum rate equal to the London Inter-Bank Offered Rate (“**LIBOR**”) for a one-year deposit in U.S. dollars, as published by the Wall Street Journal (or if the Wall Street Journal is not available, a comparable source) on the date of the applicable Disbursement to Loan Recipient, plus two percent (2%). The interest rate so determined shall apply only to the Disbursed Loan Amount being disbursed on such Disbursement date, and not for the Disbursed Loan Amount outstanding before such Disbursement date. Interest shall be compounded annually on the principal amount disbursed by CIRM from the date of the applicable Disbursement to Loan Recipient. For each additional year of the Loan Period beyond the fifth anniversary of the Effective Date, the interest rate shall increase from the base rate on the fifth year anniversary (LIBOR plus 2%) (the “Base Rate”) as follows: one percent (1%) over the Base Rate on the fifth year anniversary in the sixth year; two percent (2%) over the Base Rate on the fifth year anniversary in the seventh year; three percent (3%) over the Base Rate on the fifth year anniversary in the eighth year; four percent (4%) over the Base Rate on the fifth year anniversary in the ninth year; and five percent (5%) over the Base Rate on the fifth year anniversary in the tenth year. If for any reason on a date a Disbursement is required to be made LIBOR is not being published or is not available, any Disbursement required to be made on such date shall bear interest at the previously established LIBOR rate until LIBOR is available or published (on which date such Disbursement shall begin bearing interest as provided in this Section 4.3). Any amount not paid when due hereunder shall thereafter bear interest at the then-applicable per annum interest rate specified hereunder, plus five percent (5%).

4.4 Disbursement Procedures and Limitations.

(a) Subject to and upon the terms and conditions of this Agreement, CIRM agrees, unless otherwise notified in writing by Loan Recipient, to disburse the proceeds of the Loan (each a “**Disbursement**”) according to the payment schedule set forth in the NLA, unless such schedule is modified by agreement of the parties or otherwise as set forth herein. The aggregate of all Disbursements made pursuant to this Agreement shall not exceed the Loan Award.

(b) CIRM may suspend or permanently cease Disbursements pursuant to the Loan Administration Policy, including without limitation, Article V, Section J.

(c) CIRM may suspend or permanently cease Disbursements if CIRM determines, in its reasonable, but sole discretion, that a No Go Milestone has occurred or that Loan Recipient has breached the covenant set forth in Section 5.9(b).

(d) In accordance with the Notice of Loan Award, CIRM may adjust Disbursements if Loan Recipient does not meet Progress Milestones.

4.5 Warrants.

(a) In connection with each Disbursement, Loan Recipient shall issue to CIRM a Warrant, in the form attached hereto as Exhibit A, to purchase Loan Recipient's common stock, in an amount equal to fifty percent (50%) of each Disbursement at the time the Disbursement is made. Each Warrant shall be for shares of the most recently issued series or class of common stock issued by Loan Recipient. The strike price for each Warrant shall be set at the time of each Disbursement and shall be equal to the average of the closing share prices of Loan Recipient's common stock as reported on The NASDAQ Global Select Market for the ten (10) consecutive trading days immediately preceding the corresponding Disbursement. For purposes of this paragraph, the date on the check issued by CIRM shall be considered the date of the Disbursement.

(b) Except as provided in Section 4.12(a), Loan Recipient shall issue Warrants pursuant to subdivision (a) within five (5) business days of Loan Recipient's receipt of each Disbursement.

4.6 Indirect Costs and Facilities Costs.

(a) The Loan shall cover Indirect Costs incurred by Loan Recipient equal to twenty percent (20%) of allowable Direct Research Funding Costs awarded by CIRM. The Loan shall also cover Facilities Costs incurred by Loan Recipient equal to thirty-five percent (35%) of allowable Project Costs.

(b) CIRM shall deduct twenty thousand dollars (\$20,000) from Loan Recipient's Indirect Costs and the initial Disbursement for the costs incurred by CIRM in engaging a financial consultant to conduct due diligence of Loan Recipient prior to the award of the Loan, and shall deduct from Loan Recipient's Indirect Costs and the initial Disbursement (as well as the Disbursement made in each of calendar years 2012 and 2013) an annual fee of sixteen thousand, six hundred and sixty-six dollars and sixty-six cents (\$16,666.66) for the first three (3) years of this Agreement for the costs incurred by CIRM in engaging a financial consultant to conduct financial due diligence of Loan Recipient during the Loan Period.

(c) If Loan Recipient elects to extend the term of the Loan Period pursuant to Section 4.8, Loan Recipient shall pay CIRM, in addition to interest and principal owed, ten thousand dollars (\$10,000) per year, payable on or before March 15 of each year, for each year the Loan is extended to reimburse CIRM for the costs that it incurs in engaging a financial consultant to conduct financial due diligence of Loan Recipient during the extension.

4.7 Repayment at End of Loan Period/Prepayment.

(a) Unless (i) the Loan Recipient has extended the Loan Period pursuant to Section 4.8, (ii) the repayment of the Loan Balance has been accelerated pursuant to Sections 4.9, 8.3 or 8.4, (iii) this Agreement has been terminated pursuant to Section 8.1, (iv) the Loans have been relinquished or transferred by Loan Recipient pursuant to Article V, Section D of the Loan Administration Policy, or (v) repayment of the Loan Balance has been suspended under Section 4.10(a), the Loan Balance, and all unpaid fees and other amounts due hereunder, is due and payable in full to CIRM on the last day of the Loan Period (unless such day is not a business day, then, without any additional fees or penalties but with additional interest, on the next business day). Loan Recipient may elect to prepay the full amount of the balance of Loan Balance, or to make one or more partial prepayments, each in an amount of not less than \$100,000, and in each case with accrued and unpaid interest on the amount prepaid, at any time, without penalty or premium. Any amounts prepaid hereunder may not be reborrowed.

(b) If the Loan Recipient elects to extend the term of the Loan Period pursuant to Section 4.8, the Loan Balance shall bear interest as set forth in Section 4.3 and Loan Recipient shall repay interest as required by Article VII, Section H of the Loan Administration Policy.

4.8 Loan Extension. The Loan Recipient may extend the term of the Loan Period up to a maximum term of ten (10) years from the Effective Date, provided that the Loan Recipient provides notice to CIRM at least ninety (90) days prior to the end of the current Loan Period of its intent to extend the then applicable Loan Period and complies with the conditions specified in Article VII, Section H of the Loan Administration Policy.

4.9 Loan Acceleration. CIRM shall have the right but not the obligation to require the Loan Recipient to accelerate repayment of the Loan Balance in the event of a Change of Control occurs or if this Agreement is terminated pursuant to Section 8.1. A decision to accelerate repayment of the Loan Balance shall be made by the Finance Subcommittee of CIRM's Governing Board, based on the recommendation of the President of CIRM. If the proposed Change of Control is not a matter of public knowledge, the Finance Subcommittee of CIRM's Governing Board shall consider the matter in closed session to protect the confidentiality of the Change of Control transaction.

4.10 Loan Suspension and Forgiveness.

(a) An application by the Loan Recipient for suspension of repayment of the Loan Balance will be governed by Article VII, Section G of the Loan Administration Policy, including any amendments thereto adopted by CIRM and agreed to by CIRM and Loan Recipient.

(b) Any Loan Balance which has not become due and payable within fifteen (15) years after the granting of a suspension of repayment of the Loan Balance under this Section 4.10(a) of this Agreement will be automatically forgiven.

4.11 Effective Date. This Agreement shall take effect on the date this Agreement has been executed by the last party to sign the Agreement, Loan Recipient has received CIRM's written agreement (or written waiver by CIRM) that the conditions set forth in Section 4.12 have been met, and the initial Disbursement has been made (the "**Effective Date**"). This Agreement shall continue in full force and effect for so long as a Loan Balance remains outstanding or CIRM has any obligation to make Disbursements under this Agreement, unless it is earlier terminated pursuant to Section 8.1, the repayment obligation has been accelerated pursuant to Sections 4.9, 8.3 or 8.4, CIRM has agreed to the forgiveness of the Loan Balance pursuant to Section 4.10, or the Loan Recipient has relinquished or transferred the Agreement pursuant to Article V, Section D of the Loan Administration Policy.

4.12 Initial Disbursement. Concurrently with the initial Disbursement:

(a) CIRM shall have received this Agreement and the Warrant to be issued with the initial Disbursement, duly executed by Loan Recipient;

(b) CIRM shall have received copies of Loan Recipient's certificate of incorporation and bylaws, or articles of organization or certificate of formation, as applicable, and operating agreement (or comparable organizational documents) and any amendments thereto, certified in each instance by its Secretary or Assistant Secretary;

(c) CIRM shall have received copies of resolutions of Loan Recipient's Board of Directors (or similar governing body) and (if applicable) stockholders authorizing the execution, delivery and performance of this Agreement and the other Loan Documents, including, without limitation, the Warrants, and the consummation of the transactions contemplated hereby and thereby, all certified in each instance by its Secretary or Assistant Secretary;

(d) CIRM shall have received copies of the certificates of good standing for Loan Recipient (dated no earlier than 30 days prior to the date hereof) from the office of the Secretary of State of its incorporation or organization and of each state in which it is qualified to do business as a foreign corporation or organization;

(e) CIRM shall have received a list of the Loan Recipient's Authorized Representatives;

(f) CIRM shall have received certification of the insurance required under Section 7.3 of this Agreement;

(g) CIRM shall have received UCC, tax and judgment lien search results against the Property of Loan Recipient evidencing the absence of Liens on its Property except as permitted by Section 7.8 hereof;

(h) CIRM shall have received the favorable written opinion of Loan Recipient's in-house or outside counsel, in the form attached hereto as Exhibit B, regarding the existence and power of Loan Recipient, the due authorization of the Loan Agreement (including the transactions contemplated thereby) and the Warrants, and the enforceability of the Loan Agreement and the initial Warrant against Loan Recipient; and

(i) Loan Recipient shall certify that no Material Adverse Effect has occurred since September 30, 2010.

4.13 All Disbursements. At the time of each subsequent Disbursement hereunder:

(a) the representations and warranties set forth in Sections 5.1, 5.2, 5.4, 5.5, 5.7, 5.8, 5.9, 5.10, 5.11, 5.12, 5.13, 5.14 and 5.15 shall be true and correct as of the date of such Disbursement, except (other than with respect to the representations and warranties in the first two sentences of Section 5.1 and the first two sentences of Section 5.2, to which clauses (i) and (ii) shall not apply) to the extent: (i) the same expressly relate to an earlier date; or (ii) disclosed to CIRM in updates to the Schedules hereto provided by Loan Recipient at least three (3) business days prior to such Disbursement; provided that, in the case of (i) and (ii), no Material Adverse Effect exists or no event or circumstance exists which could reasonably be expected to result in a Material Adverse Effect; and

(b) no Event of Default or other event permitting termination of this Agreement shall have occurred and be continuing or would occur as a result of such Disbursement.

Acceptance by Loan Recipient of a Disbursement hereunder through deposit of such Disbursement to Loan Recipient's account shall be deemed to be a representation and warranty by Loan Recipient on the date of such Disbursement as to the matters specified in subsections (a) through (b), inclusive, of this Section 4.13; provided, however, that CIRM may continue to make Disbursements in its sole discretion, notwithstanding the failure of Loan Recipient to satisfy one or more of the conditions set forth above and any such Disbursements so made shall not be deemed a waiver of any Event of Default or other condition set forth above that may then exist.

**ARTICLE V
LOAN RECIPIENT REPRESENTATIONS AND WARRANTIES**

Except as set forth in the Schedules hereto delivered by Loan Recipient and with respect to Disbursements made after the date hereof, as such schedules are updated by Loan Recipient during the term of this Agreement, Loan Recipient represents and warrants to CIRM as follows:

5.1 Due Organization and Qualification. Loan Recipient is duly organized, validly existing and in good standing under the laws of the state of its incorporation and is qualified to do business in each jurisdiction in which such qualification is required, except where the failure to be so qualified would not have either individually or in the aggregate, a Material Adverse Effect on the Loan Recipient or the rights of CIRM under this Agreement, whether individually or taken as a whole. Loan Recipient has all required power and authority to own its property, to carry on its business as presently conducted or contemplated, to enter into this Agreement, to issue the Warrants, and generally to carry out the transactions contemplated hereby. The copies of Loan Recipient's Organizational Documents provided to CIRM are correct and complete as of the date hereof. Loan Recipient is not in violation of any term of its Organizational Documents, as amended, or in violation of any term of any agreement, instrument, judgment, decree, order, statute, rule or government regulation applicable to Loan Recipient or to which Loan Recipient is a party, in any case where any violation, noncompliance or default would result in a Material Adverse Effect.

5.2 Due Authorization; No Conflict. Loan Recipient is duly authorized to enter into this Agreement and the other Loan Documents, and the execution, delivery and performance thereof are valid and binding obligations of Loan Recipient enforceable in accordance with their terms, except as may be limited by bankruptcy, insolvency, reorganization or other laws affecting the enforcement of creditors' rights generally. The execution, delivery, and performance of the Loan Documents are within Loan Recipient's powers, have been duly authorized, and are not in conflict with nor constitute a breach of any provision contained in Loan Recipient's Organizational Documents, as amended, nor will they constitute an event of default under any material agreement by which Loan Recipient is bound. The Loan Documents will not conflict with any other material agreement or contract to which Loan Recipient is a party and will not violate any law, regulation or order by which Loan Recipient is bound, nor is Loan Recipient in default under any material agreement by which it is bound, other than where any violation, noncompliance or default would not result in a Material Adverse Effect.

5.3 Name; Location of Chief Executive Office. Except as disclosed in Schedule 5.3, Loan Recipient has not done business under any name other than that specified on the signature page hereof, and its exact legal name is as set forth in the first paragraph of this Agreement. The chief executive office of Loan Recipient is located at the address indicated on the signature page hereof.

5.4 Compliance with Laws. Loan Recipient is, and to Loan Recipient's knowledge, all premises occupied and used by Loan Recipient are, in compliance in all material respects with all federal, state, municipal and local laws, ordinances and regulations, if any, that may in any way affect Loan Recipient's Business, other than where a failure to comply would not result in a Material Adverse Effect.

5.5 Government Consents. Loan Recipient has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all governmental authorities that are necessary for the continued operation of Loan Recipient's business as currently conducted, other than where failure to do so would not result in a Material Adverse Effect.

5.6 Full Disclosure. Neither the Loan Documents nor any document, certificate, projection, statement, representation or warranty furnished to CIRM in writing by or on behalf of Loan Recipient, including but not limited to documents submitted to CIRM and its agents by Loan Recipient in response to RFA 10-03, contains any untrue statement of a material fact, and none of the Loan Documents or such other documents, certificates, projections, statements, representations or warranties omit to state a material fact necessary in order to make the statements contained herein or therein not misleading. To Loan Recipient's knowledge based on due inquiry, there is no fact relating to the business, operations, affairs or conditions of Loan Recipient that materially and adversely affects the same which has not been set forth in the Loan Documents or otherwise disclosed to CIRM in writing. CIRM recognizes that the estimates, projections and forecasts provided by Loan Recipient in good faith and based upon reasonable assumptions are not to be viewed as facts, and that actual results during the period or periods covered by any such estimates, projections and forecasts may materially differ from the projected or forecasted results.

5.7 Litigation. Except as set forth on Schedule 5.7, there is no action, suit or claim at law or in equity by any third party, or before or by a governmental agency or instrumentality that is currently pending or, to the knowledge of Loan Recipient, threatened against Loan Recipient or affecting any of its properties, assets or, to the knowledge of Loan Recipient, its employees which seeks to prevent the consummation of the transactions contemplated by the Loan Documents or the Warrants or which if adversely decided against the Loan Recipient would have a Material Adverse Effect.

5.8 Bankruptcy. Loan Recipient: (i) does not intend to file a voluntary petition for relief pursuant to 11 U.S.C. § 101 et seq. – Title 11 of the United States Code (the “**Bankruptcy Code**”); (ii) does not have any knowledge of any circumstance that may result in the filing of a voluntary petition for relief pursuant to the Bankruptcy Code; and (iii) does not have any notice of any creditor’s intention to file an involuntary petition for relief pursuant to the Bankruptcy Code.

5.9 Sufficient Assets.

(a) In the good faith estimate of Loan Recipient, the aggregate value of all of the assets of Loan Recipient, at a fair valuation, is equal to or greater than the total amount of Loan Recipient’s currently existing balance sheet liabilities (excluding the Loan). The “fair valuation” of Loan Recipient’s assets shall be determined on the basis of that amount which may be realized within a reasonable time, in any manner through realization of the value of, or dispositions of, such assets at fair market value (i.e., the amount which could be obtained for the properties in questions within such period by a capable and diligent business person from an interested buyer who is willing to purchase under ordinary selling conditions). Loan Recipient is able to pay its debts as they become due in the ordinary course of business for the next six (6) months.

(b) At the time of each Disbursement and throughout the Loan Period, Loan Recipient has funds available, either in the form of cash, cash equivalents, marketable debt securities not subject to SEC Rule 144, funding received from corporate partnerships, or a valid credit facility, as demonstrated through appropriate documentation, with respect to which Loan Recipient is not in default and has the ability under which to borrow, which together is equal to not less than the sum of twenty-four million, eight hundred and forty-six thousand, and eight hundred and fifty-six dollars (\$24,846,856), plus the accrued and unpaid amount of interest on the Disbursements. All of said funds must be the property of and maintained by Loan Recipient (and not by any Subsidiary of Loan Recipient or any other affiliate of Loan Recipient).

5.10 Title to Properties. Loan Recipient has good and marketable title in fee simple to such of its fixed assets as are real property, and good and merchantable title to all of its other properties and assets used in the conduct of the Business by Loan Recipient, free and clear of mortgages, security interests, pledges, charges, liens, restrictions or encumbrances except for Permitted Liens or as disclosed in writing to CIRM. To Loan Recipient’s knowledge, all machinery and equipment included in such properties described in the previous sentence is in good condition and repair, ordinary wear and tear excepted, and all leases of real or personal property used in the conduct of the Business by Loan Recipient to which Loan Recipient is a party are fully effective and afford Loan Recipient peaceful and undisturbed possession of the subject matter of such leases.

5.11 Indebtedness. Loan Recipient has no outstanding Indebtedness, except for Permitted Indebtedness or as previously disclosed to CIRM in writing.

5.12 Tax Matters. Loan Recipient has filed all foreign, federal, state, and local income, excise or franchise tax returns, real estate, and personal property tax returns, sales and use tax returns, and other tax returns required to be filed by it (and such returns are true and correct in all material respects) and has paid all taxes owed by it, except taxes which have not yet accrued or otherwise become due or for which adequate provision has been made in the pertinent financial statements. All taxes and other assessments and levies which Loan Recipient is required to withhold or collect have been withheld and collected and have been paid over to the proper governmental authorities, except where the failure to pay would not have a Material Adverse Effect. With regard to the income tax returns of Loan Recipient, Loan Recipient has not received notice of any audit or of any purported deficiencies from any taxing authority, and no controversy with respect to taxes of any type is pending or, to the knowledge of Loan Recipient, threatened, unless, after the date hereof, such notice or controversy is disclosed to CIRM in writing.

5.13 Contracts and Commitments. Loan Recipient is not in default under any contract, obligation or commitment, where such default would have a Material Adverse Effect. To the knowledge of Loan Recipient, there is no state of facts which upon notice or lapse of time or both would constitute such a default, nor would the execution, issuance and delivery of this Agreement, or the consummation of any transaction contemplated hereby, constitute such a default, where such default would have a Material Adverse Effect.

5.14 Proprietary Rights; Employee Restrictions.

(a) All Intellectual Property Rights created or generated by any employee or officer of Loan Recipient in the course of their performance of the CIRM-Funded Project for Loan Recipient have been assigned to Loan Recipient. Loan Recipient's issued patents necessary to the CIRM-Funded Project are valid and enforceable, in whole or in part, except as would not, individually or in the aggregate, have a Material Adverse Effect. Except as disclosed in Schedule 5.14, Loan Recipient has not received communications from any third Person alleging that the currently contemplated activities or products related to the Business infringe on any Intellectual Property Rights of any such third Person, nor have any of the Intellectual Property Rights necessary to the conduct of the Business been subject to U.S. Patent Office interference proceedings, a re-examination, or any other proceeding challenging Loan Recipient's patent rights related to the Business. Loan Recipient has taken commercially reasonable measures to protect and preserve the security, confidentiality (except and to the extent where disclosure is required by law or such information is already in the public domain) and value of its Intellectual Property Rights, including its trade secrets and other confidential information. For the purposes of this Agreement, "**Intellectual Property Rights**" shall mean any and all rights in patents, patent applications, copyrights, copyright applications, licenses, databases, computer programs and other computer software user interfaces, know-how, test data and results not disclosed to regulators, financial and cost information and data, trade secrets, trademarks, trademark applications, service marks, service mark applications, trade names, customer lists, proprietary technology, processes and formulae, source code, object code, algorithms, architecture, structure, inventions, trade dress, logos and designs and all documentation and media constituting, describing or relating to the foregoing.

(b) All employees of Loan Recipient have entered into non-disclosure and assignment of invention agreements for the benefit of Loan Recipient.

5.15 Regulatory Compliance. Loan Recipient is not an “investment company” or a company “controlled” by an “investment company” under the Investment Company Act of 1940. Loan Recipient is not engaged as one of its activities in extending credit for margin stock (under Regulations G, T and U of the Federal Reserve Board of Governors). To Loan Recipient’s knowledge based on due inquiry, Loan Recipient is in compliance with the Federal Fair Labor Standards Act. Loan Recipient’s properties or assets have not been used by Loan Recipient or, to Loan Recipient’s knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than minimal amounts legally in the ordinary course of Loan Recipient’s business. Loan Recipient has delivered to CIRM, and at all times will deliver to CIRM promptly after delivery or receipt, copies of all investigations relating to hazardous substances, and any conclusions thereof.

5.16 Sophistication of Loan Recipient. Loan Recipient, by reason of its business and financial experience, has the capacity to protect its own interests in connection with the transactions contemplated hereby, including the issuance of Warrants, and by the other Loan Documents.

5.17 Warrants. Loan Recipient has full power and authority to issue the Warrants to CIRM pursuant to Section 4.5 and no disability or contractual obligations exists that would prohibit Loan Recipient from issuing the Warrants to CIRM pursuant to this Agreement.

ARTICLE VI CIRM REPRESENTATIONS, WARRANTIES AND COVENANTS

6.1 Due Authorization; No Conflict. CIRM hereby represents and warrants that it is duly authorized to enter into this Agreement and that the execution, delivery and performance thereof will not conflict with any other agreement or contract to which it is a party and will not, to the best of its knowledge, violate any law, regulation or order by which it is bound.

6.2 Enforceability. This Agreement has been duly executed and delivered by CIRM and constitutes a valid and binding obligation of CIRM, enforceable against CIRM in accordance with its terms, subject only to the effect, if any, of (i) laws affecting the rights of creditors generally and (ii) rules of law governing specific performance, injunctive relief and other equitable remedies.

6.3 Sophistication of CIRM. CIRM, by reason of its business and financial experience, has the capacity to protect its own interests in connection with the transactions contemplated hereby, including the issuance of Warrants, and by the other Loan Documents.

6.4 Subordination to Senior Credit. Requests for subordination to Senior Credit made by Loan Recipient to CIRM shall be governed by Article VII, Section I of the Loan Administration Policy.

ARTICLE VII

COVENANTS

7.1 Information and Access Covenants. During such time as any balance of the Loan Amount or accrued interest is outstanding or so long as any credit is available to Loan Recipient hereunder, except to the extent compliance in any case or cases is waived in writing pursuant to the terms of Section 10.3 hereof, Loan Recipient shall:

(a) deliver to CIRM, as soon as practicable, but in any event by the end of February of each fiscal year (or within 60 days of the end of the fiscal year, if the end of the fiscal year is other than December 31st), an updated budget for the Business for such fiscal year;

(b) deliver to CIRM such other information relating to the financial condition, business or corporate affairs related to the Business of Loan Recipient as CIRM may from time to time reasonably request; provided, however, that Loan Recipient shall not be obligated under this subsection (b) or any other subsection of this Section to provide information that it deems in good faith to be a trade secret or similar confidential information;

(c) at the reasonable request (including with respect to the number of such requests) of CIRM, provide CIRM Representatives reasonable access, at reasonable and mutually acceptable times during normal business hours to all of the properties, books, contracts, documents, insurance policies, records and personnel (including officers) of or with respect to the Business of Loan Recipient and shall furnish to CIRM Representatives such information related to the Business as they may from time to time reasonably request; and

(d) deliver to CIRM reports detailing scientific progress and activities regarding the Business as specified in the Notice of Loan Award.

7.2 Indemnification. Loan Recipient shall indemnify, defend and hold harmless CIRM, the State of California, and their respective agents, officers and employees (“**CIRM Indemnitees**”) against any and all liabilities, losses, damages, claims, penalties, costs or expenses, interest, awards, judgments and penalties brought by or awarded to any Third Party which any of them may sustain, incur or be required to pay (howsoever they may occur), including, without limitation, reasonable attorneys’ and consultants’ fees (“**Losses**”), resulting from, arising out of, or in connection with: (i) the execution, delivery and performance of Loan Recipient’s obligations under the Loan Documents, including without limitation, the Warrants; (ii) the operation of Loan Recipient’s business; (iii) any material breach by Loan Recipient of any representation or warranty or covenant under the Loan Documents; (iii) any CIRM-Funded Invention, as defined in Cal. Code Regs., tit. 17, §100601(c); or (iv) the performance of the CIRM-Funded Project by Loan Recipient; provided that Loan Recipient shall not be required to indemnify the CIRM Indemnitees to the extent any such Losses are caused by (a) such CIRM Indemnitees’ gross negligence or willful misconduct, (b) a breach of CIRM’s obligations under this Agreement or any other Loan Document or (c) a breach of any of CIRM’s representations and warranties made in this Agreement or any other Loan Document. Loan Recipient’s indemnity obligations under this paragraph are in addition to Loan Recipient’s indemnity obligations under the Loan Administration Policy. CIRM shall promptly notify Loan Recipient of any claims or suits with respect to which indemnification under this Agreement is or could be sought, but failure to do so shall not relieve Loan Recipient of its obligations hereunder. Loan Recipient shall have no liability under this Section 7.2 with respect to claims or suits settled or compromised without prior notice to Loan Recipient.

7.3 Required Insurance. During the term of this Agreement, Loan Recipient shall procure and maintain at its expense insurance customary for companies similarly situated with Loan Recipient and protecting Loan Recipient and CIRM (including naming CIRM as an additional insured and loss payee on such policies) against all claims, losses or expenses resulting from alleged, adjudicated or statutory liability for injury to Persons or damage to property arising out of or in connection with any CIRM-Funded Invention, as defined in Cal. Code Regs., tit. 17, §100601(c), and the performance of the CIRM-Funded Project by Loan Recipient.

7.4 Maintenance of Business. Loan Recipient shall preserve and maintain its existence. Loan Recipient shall make commercially reasonable efforts to preserve and keep in force and effect all licenses, permits, franchises, approvals, patents, trademarks, trade names, trade styles, copyrights and other proprietary rights necessary to the proper conduct of the Business, other than where failure to do so would not result in a Material Adverse Effect.

7.5 Maintenance of Properties. Loan Recipient shall make commercially reasonable efforts to maintain, preserve and keep its property, plant and equipment in good repair, working order and condition (ordinary wear and tear excepted), and shall from time to time make all necessary and proper repairs, renewals, replacements, additions and betterments thereto so that at all times the efficiency thereof shall be fully preserved and maintained, other than where failure to do so would not result in a Material Adverse Effect.

7.6 Taxes and Assessments. Loan Recipient shall duly pay and discharge all taxes, rates, assessments, fees and governmental charges upon or against it or its Property, in each case before the same become delinquent and before penalties accrue thereon, unless and to the extent that the same are being contested in good faith and by appropriate proceedings which prevent enforcement of the matter under contest and adequate reserves are provided therefor.

7.7 No Guaranties. Other than any liabilities or guarantees in connection with credit support provided in connection with (A) Permitted Indebtedness or (B) any investment permitted under subsections (g), (h) and (i) of Section 7.9, Loan Recipient shall not become liable as endorser, guarantor, surety or otherwise for any debt, obligation or undertaking of any other Person exceeding one and a half million dollars (\$1,500,000) individually or in the aggregate, or otherwise agree to provide funds for payment of the obligations of another, or supply funds thereto or invest therein or otherwise assure a creditor of another against loss, or apply for or become liable to the issuer of a letter of credit which supports an obligation of another.

7.8 Liens. Loan Recipient shall not create, incur or permit to exist any Lien of any kind on any Property owned by Loan Recipient; *provided, however*, that the foregoing shall not apply to nor operate to prevent the following “**Permitted Liens**”:

(a) Liens arising by statute in connection with worker’s compensation, unemployment insurance, old age benefits, social security obligations, taxes, assessments, statutory obligations or other similar charges (other than Liens arising from ERISA), good faith cash deposits in connection with tenders, contracts or leases to which Loan Recipient is a party or other cash deposits required to be made in the ordinary course of business, provided in each case that the obligation is not for borrowed money and that the obligation secured is not overdue or, if overdue, is being contested in good faith by appropriate proceedings which prevent enforcement of the matter under contest and adequate reserves have been established therefore;

(b) mechanics’, workmen’s, materialmen’s, landlords’, carriers’ or other similar Liens arising in the ordinary course of business with respect to obligations which are not due or which are being contested in good faith by appropriate proceedings which prevent enforcement of the matter under contest;

(c) judgment Liens and judicial attachment Liens not constituting an Event of Default under Section 8.2(b) hereof and the pledge of assets for the purpose of securing an appeal, stay or discharge in the course of any legal proceeding, provided that the aggregate amount of such judgment liens and attachments and liabilities of Loan Recipient secured by a pledge of assets permitted under this subsection, including interest and penalties thereon, if any, shall not be in excess of five hundred thousand dollars (\$500,000) at any one time outstanding;

(d) Liens on equipment of Loan Recipient created solely for the purpose of securing indebtedness incurred to finance the purchase price of such Property, provided that no such Lien shall extend to or cover other Property of Loan Recipient other than the respective Property so acquired, and the principal amount of indebtedness secured by any such Lien shall at no time exceed the purchase price of such Property, as reduced by repayments of principal thereon;

(e) Liens arising out of Indebtedness (other than the Loan itself) incurred by Loan Recipient solely to fund the cost and expenses of the CIRM-Funded Project;

(f) Liens disclosed in Schedule 7.8(f), including the amounts thereof;

(g) Liens for taxes, fees, assessments or other governmental charges or levies that either are not delinquent or are being contested in good faith by appropriate proceedings;

(h) Liens securing Permitted Indebtedness;

(i) Liens incurred in the extension, renewal or refinancing of the Indebtedness secured by Liens described in subsections (d), (e), (f) or (h); provided that any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness may not increase;

(j) leases, subleases, licenses, sublicenses, options, rights of first refusal, rights to negotiate and the like granted to third parties in the ordinary course of Loan Recipient's business, provided that the foregoing do not, individually or in the aggregate, have a Material Adverse Effect; and

(k) Liens arising from the rights of a licensor or grantor under the terms and conditions of a license, option or other right granted to or by Loan Recipient, provided that any such Lien does not hinder the Business.

7.9 Investments, Acquisitions, Loans and Advances. Loan Recipient shall not, directly or indirectly, make, retain or have outstanding any investments (whether through purchase of stock or obligations or otherwise) in, or loans or advances to (other than for travel advances and other similar cash advances made to employees in the ordinary course of business), any other Person, or acquire all or any substantial part of the assets or business of any other Person or division thereof; *provided, however*, that the foregoing shall not apply to nor operate to prevent:

(a) investments in direct obligations of the United States of America or of any agency or instrumentality thereof whose obligations constitute full faith and credit obligations of the United States of America; investments in direct obligations of the State of California whose obligations constitute full faith and credit obligations of the State of California;

(b) investments in commercial paper rated at least P-1 by Moody's and at least A-1 by S&P;

(c) investments in certificates of deposit issued by any United States commercial bank having capital and surplus of not less than \$100,000,000;

(d) investments in repurchase obligations with a term of not more than 7 days for underlying securities of the types described in subsection (a) above entered into with any bank meeting the qualifications specified in (c) above, *provided* all such agreements require physical delivery of the securities securing such repurchase agreement, except those delivered through the Federal Reserve Book Entry System;

(e) investments in money market funds that invest solely, and which are restricted by their respective charters to invest solely, in investments of the type described in the immediately preceding subsections (a), (b), (c) and (d) above;

(f) investments existing on the date of this Agreement in its Subsidiaries and Affiliates;

(g) the purchase of securities or acquisition of assets in connection with strategic transactions involving Loan Recipient and other Persons, including without limitation (i) joint ventures, manufacturing, marketing or distribution arrangements or (ii) technology transfer or development arrangements;

(h) any acquisition by Loan Recipient of the assets or securities of a Person or division thereof for the purpose of acquiring intellectual property or other assets; or

(i) any investments permitted by the Loan Recipient's investment policy dated September 14, 2010, and to the extent approved by CIRM (such approval to only apply if a material amendment or modification is requested and not be unreasonably withheld), the same as amended or modified by the board of directors of the Loan Recipient.

7.10 Dividends and Certain Other Restricted Payments. Loan Recipient will not (a) declare or pay any cash dividends or cash distributions, on any stock or other equity interests of Loan Recipient or (b) directly or indirectly, through any Subsidiary or otherwise, purchase, redeem or retire any of its stock or other equity interests or make any other payment or distribution, either directly or indirectly, through any Subsidiary or otherwise, in respect of its stock or other equity interests, other than (i) the repurchase of stock or other equity interests in the ordinary course of business of employees which leave the employ of Loan Recipient, (ii) the repurchase of stock or other equity interests pursuant to agreements which permit Loan Recipient to repurchase such shares at cost (or the lesser of cost or fair market value) upon termination of an employee's, officer's, director's or consultant's services to the Company or (iii) the repurchase by Loan Recipient from one or more former employees, officers, directors or consultants of its equity securities during the Loan Period, provided that the aggregate repurchase price for all repurchases pursuant to this clause (iii) does not exceed one hundred thousand dollars (\$100,000) per year.

7.11 ERISA. Loan Recipient shall promptly pay and discharge all obligations and liabilities arising under ERISA of a character which if unpaid or unperformed could reasonably be expected to result in the imposition of a Lien against any of its Property. Loan Recipient shall promptly notify CIRM of: (a) the occurrence of any reportable event (as defined in ERISA) with respect to a Plan, (b) receipt of any notice from the PBGC of its intention to seek termination of any Plan or appointment of a trustee therefor, (c) its intention to terminate or withdraw from any Plan, and (d) the occurrence of any event with respect to any Plan which would result in the incurrence by Loan Recipient of any material liability, fine or penalty, or any material increase in the contingent liability of Loan Recipient with respect to any post-retirement Welfare Plan benefit. All terms used in this Section 7.11 and not defined shall have the meaning given to them under ERISA.

7.12 Compliance with Laws. Loan Recipient shall comply in all respects with the requirements of all federal, state and local laws, rules, regulations, ordinances and orders applicable to or pertaining to its Property or business operations, except where any such non-compliance, individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect or result in a Lien upon any of its Property, other than a Permitted Lien.

7.13 Diligent Conduct of Business. Loan Recipient shall conduct the Business in a commercially reasonable and diligent manner and shall not knowingly engage in any other business activity that Loan Recipient reasonably believes would have a Material Adverse Effect on the Business or a material adverse effect on the rights of CIRM under this Agreement or the CIRM-Funded Project.

7.14 Use of Proceeds. The Loan Recipient shall use the credit extended under this Agreement solely for the purposes set forth in, or otherwise permitted by, Section 4.2 hereof.

7.15 Diligence. The Loan Recipient shall use commercially reasonable efforts to perform the CIRM-Funded Project within the time frame specified in the Notice of Loan Award.

7.16 Notification. If Loan Recipient becomes aware of any matters that could reasonably be expected to have a Material Adverse Effect pursuant to any review, examination, proceeding or correspondence, suits or actions related to Loan Recipient's issued patents necessary to the CIRM-Funded Project, Loan Recipient shall promptly notify CIRM in writing.

ARTICLE VIII TERMINATION

8.1 Termination.

(a) CIRM may terminate this Agreement pursuant to Article V, Section J of the Grants Administration Policies, or Article V, Section J of the Loan Administration Policy.

(b) CIRM may terminate this Agreement at any time after a material breach of any term of the Loan Documents by Loan Recipient that is not cured within thirty (30) days of the date that CIRM provides notice of such breach to Loan Recipient.

(c) CIRM may terminate this Agreement if any of the representations and warranties made herein by Loan Recipient were not true and correct in all material respects at the time they were made or deemed to be made under Section 4.13 at the time of each Disbursement when they are reaffirmed.

(d) CIRM may terminate this Agreement if any of the Events of Default in Section 8.2 occur and are continuing.

(e) CIRM may terminate this Agreement based on CIRM's determination, in its reasonable, but sole discretion, that a No Go Milestone has occurred.

8.2 Events of Default and Remedies. Any one or more of the following shall constitute an “**Event of Default**” hereunder:

(a) Loan Recipient fails to pay within five (5) business days of the day when due all or any part of the principal of or interest on any Loan (whether at the stated maturity thereof or at any other time provided for in this Agreement), any accrued interest or any fee or other obligation payable hereunder or under any other Loan Document;

(b) any judgment or judgments, writ or writs or warrant or warrants of attachment, or any similar process or processes, entered or filed against Loan Recipient or against any of its Property, in an aggregate amount in excess of \$1,000,000 (except to the extent fully covered by insurance pursuant to which the insurer has accepted liability therefor in writing), and which remains undischarged, unvacated, unbonded or unstayed for a period of 45 days;

(c) Loan Recipient, or any member of its Controlled Group, fails to pay when due an amount or amounts aggregating in excess of \$500,000 which it shall have become liable to pay to the PBCG or to a Plan under Title IV of ERISA; or notice of intent to terminate a Plan or Plans having aggregate Unfunded Vested Liabilities in excess of \$500,000 (collectively, a “**Material Plan**”) is filed under Title IV of ERISA by Loan Recipient, or any other member of its Controlled Group, any plan administrator or any combination of the foregoing, or the PBGC institutes proceedings under Title IV of ERISA to terminate or to cause a trustee to be appointed to administer any Material Plan or a proceeding is instituted by a fiduciary of any Material Plan against Loan Recipient, or any member of its Controlled Group, to enforce Section 515 or 4219(c)(5) of ERISA and such proceeding shall not have been dismissed within 45 days thereafter; or a condition exists by reason of which the PBGC would be entitled to obtain a decree adjudicating that any Material Plan must be terminated;

(d) dissolution or termination of the existence of Loan Recipient, unless Loan Recipient has previously relinquished the Loan or transferred the Loan to a new Loan Recipient pursuant to Article V, Section D of the Loan Administration Policy;

(e) Loan Recipient has had (i) entered involuntarily against it a final order for relief under the United States Bankruptcy Code, as amended, (ii) does not pay, or admits in writing its inability to pay, its debts generally as they become due, (iii) makes an assignment for the benefit of creditors, (iv) applies for, seeks, consents to or acquiesces in, the appointment of a receiver, custodian, trustee, examiner, liquidator or similar official for it or any substantial part of its Property, (v) institutes any proceeding seeking to have entered against it an order for relief under the United States Bankruptcy Code, as amended, to adjudicate it insolvent, or seeking dissolution, winding up, liquidation, reorganization, arrangement, adjustment or composition of it or its debts under any law relating to bankruptcy, insolvency or reorganization or relief of debtors or fails to file an answer or other pleading denying the material allegations of any such proceeding filed against it, (vi) takes any corporate action in furtherance of any matter described in parts (i) through (v) above, or (vii) fails to contest in good faith any appointment or proceeding described in Section 8.2(f) hereof; or

(f) a custodian, receiver, trustee, examiner, liquidator or similar official is appointed for Loan Recipient, or any substantial part of any of its Property, or a proceeding described in Section 8.2(e)(v) shall be instituted against any of Loan Recipient, and such appointment continues undischarged or such proceeding continues undismissed or unstayed for a period of 90 days.

8.3 Non-Bankruptcy Termination. When CIRM, at CIRM's election, has terminated this Agreement for any reason (other than an Event of Default described in subsections (e) or (f) of Section 8.2 of this Agreement), (a) the remaining commitments of CIRM to make Disbursements of the Loan and all other obligations of the Lenders hereunder on the date stated in such notice (which may be the date thereof) shall terminate; and (b) the principal of and the accrued interest on all outstanding Loans shall be immediately due and payable together with all other amounts payable under the Loan Documents without further demand, presentment, protest or notice of any kind.

8.4 Bankruptcy Termination. When any Event of Default described in subsections (e) or (f) of Section 8.2 of this Agreement has occurred and is continuing, then this Agreement shall automatically, and without the necessity of any further action, terminate and all outstanding Loans and interest thereon shall immediately become due and payable together with all other amounts payable under the Loan Documents, without presentment, demand, protest or notice of any kind, and the obligation of CIRM to make further Disbursements of the Loan or extend further credit pursuant to any of the terms hereof shall immediately terminate.

ARTICLE IX COMPLIANCE WITH CERTAIN LAWS

9.1 Nondiscrimination. Loan Recipient shall not unlawfully discriminate against any qualified employee or applicant for employment, or deny services to any individual because of race, color, national origin, ancestry, age, sex, religion, physical or mental handicap, or sexual orientation. Loan Recipient agrees to comply with all applicable Federal and State statutes, rules and regulations prohibiting discrimination in employment.

9.2 Lobbying. Without limiting the provisions of Section 4.2 of this Agreement, no funds disbursed hereunder shall be used for any activities to influence any matter pending before the California Legislature or the U.S. Congress, or for any election campaign.

9.3 Audit. In addition to the provisions of Section 7.1(f) hereof, during the term of this Agreement, CIRM will have the right to audit, during mutually acceptable business hours and a reasonable number of times per year, Loan Recipient's records to confirm the use of the Loan proceeds and the Direct Research Funding Costs. In addition, Loan Recipient shall maintain books, records, and other compilations of data made under this Agreement to the extent and in such detail as shall properly substantiate use of the Loan for the purposes allowed under Section 4.2. Loan Recipient shall maintain all such records for a period of not less than five (5) years, starting on the earlier of (a) first day after final payment under this Agreement or (b) repayment of the entire accrued balance of the Loan. If any litigation, claim, negotiation, audit or other action involving the records is commenced prior to the expiration of the applicable retention period, all records shall be retained until completion of such action and resolution of all issues resulting therefrom, or until the end of the applicable retention period, whichever is later. CIRM or the State of California or any of their duly authorized representatives shall have the right, at reasonable times and upon reasonable notice, to examine and copy at reasonable expense, the books, records, and other compilations of data of Loan Recipient which pertain to the provisions and requirements of this Agreement. Such access shall include on-site audits and review and copying of records.

**ARTICLE X
GENERAL CLAUSES**

10.1 Binding Effect; Assignment. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors (including, for the avoidance of doubt, any agency or department of the State of California which may succeed CIRM or assume CIRM's obligations) and assigns (including, without limitation, by sale or transfer of all or substantially all assets, merger or consolidation), provided, however, that neither this Agreement nor any rights hereunder may be assigned by either party without the other party's prior written consent, which consent shall not be unreasonably withheld. Both parties shall use their commercially reasonable efforts to consider and respond to other's request for consent within ten (10) business days of any such request.

10.2 Choice of Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of California, without regard to principles of conflicts of law or choice of law provisions. Jurisdiction shall lie in the State of California. All disputes, controversies, claims, actions and similar proceedings arising with respect to the Loan or any related agreement or transaction shall be brought in the Superior Court of San Francisco County, California or the United States District Court for the Northern District of California and Loan Recipient consents to the exclusive personal jurisdiction of such courts.

10.3 Waivers. All conditions, covenants, duties and obligations contained in this Agreement can be waived only by written agreement. Forbearance or indulgence in any form or manner by a party shall not be construed as a waiver, nor in any way limit the remedies available to that party.

10.4 Amendments. All conditions, covenants, duties and obligations contained in this Agreement may be amended only through a written amendment signed by Loan Recipient and CIRM, except as otherwise specified herein.

10.5 Publicity. Loan Recipient shall, unless prohibited by law or regulation, notify CIRM's Communications Officer at least one calendar day before issuing any press release that refers to the CIRM-Funded Project. Any press release or research paper by Loan Recipient in which CIRM is concerned or discussed shall include the following statement:

Geron's Phase 1 Clinical Trial in Spinal Cord Injury is funded in part through the support of the California Institute of Regenerative Medicine.

Loan Recipient may use a statement other than the foregoing only with the express written consent of CIRM. Loan Recipient shall use its reasonable best efforts to recognize CIRM's support in any media interview in which the CIRM-Funded Project is discussed. Loan Recipient will not represent that positions taken or advanced by Loan Recipient represent the opinion or position of CIRM or the State of California.

Loan Recipient agrees to work with CIRM to establish a communications protocol to ensure that accurate information, including, without limitation, any adverse event involving a clinical trial subject, relating to the CIRM-Funded Project is provided to stakeholders in a timely matter.

10.6 Survival. All covenants, representations and warranties contained herein shall survive the execution and delivery of this Agreement and all covenants contained herein shall survive until all of the obligations hereunder are fully and finally discharged or earlier waived or terminated (provided that the provisions of Sections 9.3 and 10.6 shall survive as specifically stated therein and Sections 10.1, 10.2, 10.3, 10.4 and 10.11 shall survive indefinitely). The obligations of Loan Recipient to indemnify CIRM with respect to the expenses, damages, losses, costs and liabilities described in Section 7.2 shall survive until all applicable statute of limitations periods with respect to actions that may be brought against CIRM have run. In addition, CIRM's rights of audit and inspection pursuant to Section 9.3 shall survive until the obligations thereunder are fully and finally discharged or earlier waived or terminated

10.7 Notice. All communications to CIRM shall be mailed or delivered to the following address, or sent by facsimile:

California Institute for Regenerative Medicine
Attn: Amy Lewis, Grants Management Officer
210 King Street
San Francisco, CA 94107
FAX: *
TEL: *

All communications to Loan Recipient shall be mailed or delivered to the following address, or sent by facsimile to the following number with confirmation of receipt by voice:

Geron Corporation
230 Constitution Drive
Menlo Park, CA 94025
Attn: Chief Legal Officer
Telephone: *
Facsimile: *

The parties may change the address at which they are to receive notices in writing.

*: Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

10.8 Additional Funding. Loan Recipient acknowledges that (a) CIRM has not made any oral or written commitment or otherwise agreed to provide funding with respect to the CIRM-Funded Project other than the Loan; (b) in no way is Loan Recipient relying on this Agreement or any other statement, oral or written, to provide any expectation of additional funding by CIRM; and (c) any future agreement between CIRM and Loan Recipient shall be in writing and executed by duly authorized representatives of CIRM and Loan Recipient.

10.9 No Waiver, Cumulative Remedies. No delay or failure on the part of either Party in the exercise of any power or right under any Loan Document shall operate as a waiver thereof or as an acquiescence in any default, nor shall any single or partial exercise of any power or right preclude any other or further exercise thereof or the exercise of any other power or right. The rights and remedies hereunder of the parties are cumulative to, and not exclusive of, any rights or remedies which either party would otherwise have.

10.10 Headings. Section headings used in this Agreement are for reference only and shall not affect the construction of this Agreement.

10.11 Costs and Expense; Indemnification. Loan Recipient agrees to pay to CIRM all costs and expenses incurred or paid by CIRM, including reasonable attorneys' fees and disbursements and court costs, in connection with any Event of Default hereunder or in connection with the enforcement or protection of its rights: (a) in connection with this Agreement or any of the Loan Documents, including, without limitation, the Warrants, and (b) in connection with the Loan made hereunder.

10.12 Construction. The parties acknowledge and agree that the Loan Documents shall not be construed more favorably in favor of any party hereto based upon which party drafted the same, it being acknowledged that all parties hereto contributed substantially to the negotiation of the Loan Documents. The provisions of this Agreement relating to Subsidiaries shall only apply during such times as the Loan Recipient has one or more Subsidiaries. **NOTHING CONTAINED HEREIN SHALL BE DEEMED OR CONSTRUED TO PERMIT ANY ACT OR OMISSION WHICH IS PROHIBITED BY THE TERMS OF ANY LOAN DOCUMENT.**

10.13 Counterparts. This Agreement may be executed in two or more counterparts, each of which, when executed and delivered, shall be deemed an original, but all of which together shall constitute one and the same instrument. Executed copies of the signature pages of this Agreement sent by facsimile or transmitted electronically in Portable Document Format ("**PDF**"), or any similar format, shall be treated as originals, fully binding and with full legal force and effect, and the parties waive any rights they may have to object to such treatment.

10.14 Severability. If one or more provisions of this Agreement or any of the other Loan Documents are held to be unenforceable under applicable law, such provision shall be excluded from this Agreement, and the balance of the Agreement shall be interpreted as if such provision were so excluded, and shall be enforceable in accordance with its terms.

10.15 Confidentiality. As a public entity, CIRM is subject to the California Public Records Act and thus documents and other materials made or received by its employees are subject to public disclosure, unless an exception applies. To the extent permitted by applicable law, for a period of five (5) years after expiration or termination of the Loan Period, CIRM shall maintain in confidence and trust any confidential or proprietary information provided by Loan Recipient to CIRM prior to or during the Loan Period, using the same level of care employed by CIRM with respect to its own confidential and proprietary information. If Loan Recipient submits confidential or proprietary information to CIRM, it shall label the material “confidential” and shall include a brief explanation of the reason the information is confidential or proprietary pursuant to Health and Safety Code section 125290.30(g)(2). CIRM shall provide notice to Loan Recipient if it receives a Public Records Act Request for a document or documents that Loan Recipient has labeled “confidential.”

10.16 Captions. The captions of the sections and subsections of this Agreement are inserted for convenience only and shall not be deemed to define, expand or limit the provisions of the Agreement.

10.17 Integration. This Agreement and the other Loan Documents, including, without limitation, the Warrants, any document incorporated by reference and any exhibits and schedules attached hereto, is the entire agreement between the parties with respect to the Loan and supersedes all prior and contemporaneous negotiations, commitments and writings.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written.

GERON CORPORATION

By: /s/ David L. Greenwood

Name: David L. Greenwood

Title: President, Interim Chief Executive Officer
And Chief Financial Officer

Address: Geron Corporation
230 Constitution Drive
Menlo Park, CA 94025

CALIFORNIA INSTITUTE FOR
REGENERATIVE MEDICINE

By: /s/ Alan Trounson

Name: Alan O. Trounson, Ph.D.

Title: President

EXHIBITS

Exhibit A

Form of Warrant

THIS WARRANT AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY STATE SECURITIES LAWS, AND HAS BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISPOSITION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF THE COMPANY'S COUNSEL, REASONABLY SATISFACTORY TO THE COMPANY AND AT THE COMPANY'S EXPENSE, THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT.

Warrant No.: _____

Number of Shares: _____

Date of Issuance: _____

GERON CORPORATION

COMMON STOCK WARRANT AGREEMENT

Geron Corporation (the "Company"), for value received, hereby certifies that **the California Institute for Regenerative Medicine** or their registered assigns (in accordance with Section 3 below) (the "Registered Holder"), is entitled, subject to the terms set forth below, to purchase from the Company, at any time after the date hereof and on or before the Expiration Date (as defined in Section 6 below), up to _____ shares of Common Stock of the Company, par value \$0.001 per share (the "Common Stock"), as adjusted from time to time pursuant to the terms of this Common Stock Warrant Agreement ("Warrant"), at a purchase price of \$_____ per share. The shares purchasable upon exercise of this Warrant are hereinafter referred to as the "Warrant Stock." The aggregate exercise price of the Warrant Stock is hereinafter referred to as the "Purchase Price."

1. EXERCISE.

(a) **CASH EXERCISE.** This Warrant may be exercised by the Registered Holder, in whole or in part on or after the date hereof, by surrendering this Warrant, with the properly endorsed Notice of Exercise appended hereto as **Exhibit A** duly executed by such Registered Holder or by such Registered Holder's duly authorized attorney in fact, at the principal office of the Company, or at such other office or agency as the Company may designate, accompanied by payment in full by cash, check or wire transfer of the Purchase Price payable in respect of the number of shares of Warrant Stock purchased upon such exercise; provided, however, that in no event may this Warrant be exercised after the Expiration Date (as defined herein). In any event, if the Company is unable to issue the Warrant Shares, the Company shall not be required to settle the Warrant in cash in lieu of issuance of the Warrant Shares. For the avoidance of doubt, the preceding sentence shall not apply to, nor constitute a waiver of, any liability by Company for damages as a result of a breach by the Company of the terms and conditions of this Warrant.

(b) **NET EXERCISE.** In addition to and without limiting the rights of the Registered Holder hereof under the terms hereof, this Warrant may be exercised, in lieu of exercising this Warrant by payment of cash in accordance with Section 1(a), by being exchanged in whole or in part at any time or from time to time prior to the Expiration Date for a number of shares of Common Stock equal to the value (as determined below) of this Warrant (or the portion thereof being canceled) by surrender of this Warrant together with the properly endorsed Notice of Exercise, in which event the Company shall issue to the Registered Holder a number of shares of Common Stock computed using the following formula::

Let FMV = Fair market value per share.
PSP = Per share purchase price at date of exercise.
N = Number of shares covered by the Warrant (or if only a portion of the Warrant is being exercised the portion of the Warrant being cancelled).
X = Number of shares issued after exercise.

$$X = \frac{N*(FMV - PSP)}{FMV}$$

No payment of cash or any other consideration to the Company shall be required from the holder of this Warrant in connection with any exercise of this Warrant by exchange pursuant to this Section. No fractional shares arising out of the above formula for determining the number of shares issuable in such exchange shall be issued, and the Company shall in lieu thereof make payment to the Registered Holder of cash in the amount of such fraction multiplied by the fair market value of a share of Common Stock on the date of the exchange. For the purposes of this Section, the "fair market value" of any number of shares of Common Stock shall mean: (i) the average of the closing prices for the shares of Common Stock as reported on The NASDAQ Global Select Market for the ten (10) consecutive trading days immediately preceding the day on which the Registered Holder surrenders this Warrant and delivers the properly endorsed Notice of Exercise or (ii) if the shares of Common Stock are traded over-the-counter, the average of the closing bid prices over the ten (10) consecutive trading days immediately preceding the day on which the Registered Holder surrenders this Warrant and delivers the properly endorsed Notice of Exercise. If the shares of Common Stock are not regularly traded in a public market, the Board of Directors of the Company shall determine the fair market value in its reasonable good faith judgment.

(c) **EFFECTIVE TIME OF EXERCISE.** The exercise of this Warrant shall be deemed to have been effected immediately prior to the close of business on the day on which this Warrant shall have been surrendered to the Company, with payment of the applicable Purchase Price, as provided in Section 1(a) above, or, on the day immediately prior to the close of business on the day on which this Warrant shall have been surrendered for cancellation, as provided in Section 1(b). At such time, the person or persons in whose name or names any certificates for Warrant Stock shall be issuable upon such exercise as provided in Section 1(d) below shall be deemed to have become the holder or holders of record of the Warrant Stock represented by such certificates. Such exchange shall be effective.

(d) **DELIVERY TO REGISTERED HOLDER.** As soon as practicable after the exercise of this Warrant, and in any event within ten (10) business days thereafter, the Company, at its expense, will cause to be issued in the name of, and delivered to, the Registered Holder, or as such Registered Holder (upon payment by such Registered Holder of any applicable transfer taxes) may direct, a certificate or certificates for the number of shares of Warrant Stock to which such Registered Holder shall be entitled.

2. **CERTAIN ADJUSTMENTS.**

(a) **Mergers and Consolidations.** If at any time there shall be a merger or consolidation of the Company with another corporation, then, as a part of such merger or consolidation, lawful provision shall be made so that the Registered Holder shall thereafter be entitled to receive upon exercise of this Warrant during the period specified in this Warrant and upon payment of the Purchase Price, the number of shares of stock or other securities or property of the Company or the successor corporation resulting from such merger or consolidation, to which a holder of the Common Stock deliverable upon exercise of this Warrant would have been entitled under the provisions of the agreement in such merger or consolidation if this Warrant had been exercised immediately before that merger or consolidation. In any such case, appropriate adjustment (as determined in good faith by the Company's Board of Directors) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Registered Holder after the merger or consolidation to the end that the provisions of this Warrant (including adjustment of the Purchase Price then in effect and the number of shares of Warrant Stock) shall be applicable after that event, as near as reasonably may be, in relation to any shares or other property deliverable after that event upon exercise of this Warrant.

(b) **SPLITS, SUBDIVISIONS AND DIVIDENDS.** In the event the Company should at any time or from time to time fix a record date for the effectuation of a split or subdivision of the outstanding shares of Common Stock or the determination of the holders of Common Stock entitled to receive a dividend or other distribution payable in additional shares of Common Stock or other securities or rights convertible into, or entitling the Registered Holder to receive directly or indirectly, additional shares of Common Stock (hereinafter referred to as the "Common Stock Equivalents") without payment of any consideration by such holder for the additional shares of Common Stock or Common Stock Equivalents (including the additional shares of Common Stock issuable upon conversion or exercise thereof), then, as of such record date (or the date of such distribution, split or subdivision if no record date is fixed), the per share Purchase Price shall be appropriately decreased and the number of shares of Warrant Stock shall be appropriately increased in proportion to such increase (or potential increase) of outstanding shares.

(c) **COMBINATION OF SHARES.** If the number of shares of Common Stock outstanding at any time after the date hereof is decreased by a combination of the outstanding shares of Common Stock, the per share Purchase Price shall be appropriately increased and the number of shares of Warrant Stock shall be appropriately decreased in proportion to such decrease in outstanding shares.

(d) **ADJUSTMENT CERTIFICATE.** When any adjustment is required to be made in the securities issuable upon exercise of this Warrant, the Company shall mail to the Registered Holder a certificate setting forth a statement of the facts requiring such adjustment. Such certificate shall also set forth the kind and amount of stock or other securities or property into which this Warrant shall be exercisable following the occurrence of any of the events specified in this Section 2.

(e) **FRACTIONAL SHARES.** No fractional shares shall be issued upon the exercise of this Warrant as a consequence of any adjustment pursuant hereto. All shares of Common Stock (including fractions) to be issued upon exercise of this Warrant shall be aggregated for purposes of determining whether the exercise would result in the issuance of any fractional share. If, after aggregation, the exercise would result in the issuance of a fractional share, the Company shall, in lieu of issuance of any fractional share, pay the Registered Holder otherwise entitled to such fraction a sum in cash equal to the product resulting from multiplying the then current fair market value of one share of Common Stock by such fraction.

3. **TRANSFER RESTRICTIONS; REPRESENTATIONS.**

(a) The Registered Holder acknowledges that this Warrant and the Warrant Stock have not been registered under the Securities Act, and agrees not to sell, pledge, distribute, offer for sale, transfer or otherwise dispose of this Warrant or any Warrant Stock issued upon its exercise in the absence of an opinion of the Company's counsel, reasonably satisfactory to the Company and at the Company's expense, that registration and qualification are not required.

(b) The Registered Holder hereby further represents and warrants to the Company with respect to the issuance of the Warrant and the purchase of the Warrant Stock as follows:

(i) **PURCHASE ENTIRELY FOR OWN ACCOUNT.** This Warrant is issued to the Registered Holder in reliance upon such Registered Holder's representation to the Company, which by such Registered Holder's execution of this Warrant such Registered Holder hereby confirms, that the Warrant and the Warrant Stock will be acquired for investment for such Registered Holder's own account, not as a nominee or agent, and not with a present view to the resale or distribution of any part thereof, and that such Registered Holder has no present intention of selling, granting any participation in, or otherwise distributing the same.

(ii) **KNOWLEDGE AND EXPERIENCE; ABILITY TO BEAR ECONOMIC RISKS.** The Registered Holder has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of the investment contemplated by this Warrant and such party is able to bear the economic risk of its investment in the Company (including a complete loss of its investment).

(iii) **RESALE.** The Registered Holder understands that the Warrant being issued hereunder and the Warrant Stock to be purchased hereunder are characterized as “restricted securities” under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such laws and applicable regulations, such securities may be resold without registration under the Securities Act only in certain circumstances. In this regard, the Registered Holder represents that it is familiar with Rule 144 under the Securities Act, and understands the resale limitations imposed thereby and by the Securities Act.

(iv) **LEGENDS.** The Registered Holder acknowledges that all stock certificates representing shares of stock issued to the Registered Holder upon exercise of this Warrant may, if such Warrant Stock is not registered under the Securities Act, have affixed thereto a legend substantially in the following form:

(x) “THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR ANY STATE SECURITIES LAWS. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH SECURITIES ACT OR AN OPINION OF THE COMPANY’S COUNSEL SATISFACTORY TO THE COMPANY AND AT THE COMPANY’S EXPENSE, THAT SUCH REGISTRATION IS NOT REQUIRED OR UNLESS SOLD PURSUANT TO AN EXEMPTION TO SUCH SECURITIES ACT.”

(y) Any legend required by the laws of any state in which the securities will be issued.

(c) Subject to the provisions of Section 3(a) hereof, this Warrant and all rights hereunder are transferable in whole or in part upon surrender of the Warrant with a properly executed assignment (in the form of **Exhibit B** hereto) at the principal office of the Company.

(d) The Company will maintain a register containing the names and addresses of the Registered Holder(s) of this Warrant. Any Registered Holder may change such Registered Holder’s address as shown on the warrant register by written notice to the Company requesting such change.

(e) As of the date of issuance, the Company hereby represents and warrants to the Registered Holder that the Warrant Stock, when issued and paid for in compliance with the provisions of this Warrant, will be validly issued, fully paid and non-assessable and free of all taxes, liens and charges with respect to the issuance thereof (other than the foregoing created by or imposed upon the Registered Holder through no action of the Company).

4. **NO IMPAIRMENT.** The Company will not, by amendment of its charter or through reorganization, consolidation, merger, dissolution, sale of assets or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to fulfill its obligations hereunder.

5. **TERMINATION.** This Warrant (and the right to purchase securities upon exercise hereof) shall terminate at 5:00 p.m. Pacific Time on the date of the tenth (10th) anniversary of the Date of Issuance (the "Expiration Date"). The period between the date of issuance of this Warrant and the Expiration Date, is referred to as the "Exercise Period."

6. **NOTICES OF CERTAIN TRANSACTIONS.** In the event that:

(a) the Company shall take a record of the holders of its Common Stock (or other stock or securities at the time deliverable upon the exercise of this Warrant) for the purpose of entitling or enabling them to receive any dividend or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right; or

(b) the Company shall undertake a merger or consolidation as set forth in Section 2(a)), or

(c) the Company voluntarily or involuntarily dissolves, liquidates or winds-up its business or affairs,

then, and in each such case, the Company will mail or cause to be mailed to the Registered Holder of this Warrant a notice specifying, as the case may be, (i) the date on which a record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, and (ii) the effective date on which such merger, consolidation, dissolution, liquidation or winding-up is expected to take place, and the record date for determining shareholders entitled to vote thereon. Such notice shall be mailed at least ten (10) calendar days prior to the record date or effective date for the event specified in such notice.

7. **RESERVATION OF STOCK.** The Company shall at all times reserve and keep available, solely for the issuance and delivery upon the exercise of this Warrant, such shares of Warrant Stock or other stock or securities, as from time to time shall be issuable upon the exercise of this Warrant.

8. **EXCHANGE OF WARRANTS.** Upon the surrender by the Registered Holder of this Warrant, properly endorsed, to the Company at the principal office of the Company, the Company will, subject to the provisions of Section 3(a) hereof, issue and deliver to or upon the order of such Registered Holder, at the Company's expense, a new warrant in a form substantially similar to this Warrant, in the name of such Registered Holder or as such Registered Holder (upon payment by such Registered Holder of any applicable transfer taxes) may direct, calling in the aggregate on the face thereof for the number of shares of Common Stock called for on the face of the Warrant so surrendered.

9. **REPLACEMENT OF WARRANTS.** Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, upon delivery of an indemnity agreement, with surety if reasonably required, in an amount reasonably satisfactory to the Company, or, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company will issue, in lieu thereof, a new warrant in a form substantially similar to this Warrant.

10. **MAILING OF NOTICES.** Any notice required or permitted by this Warrant shall be in writing and shall be deemed sufficient upon receipt, when delivered personally or by a nationally-recognized delivery service (such as Federal Express or UPS) or confirmed facsimile, or forty-eight (48) hours after being deposited in the U.S. mail as certified or registered mail with postage prepaid, if such notice is addressed to the party to be notified at such party's address or facsimile number as set forth below or as subsequently modified by written notice.

11. **NO RIGHTS AS STOCKHOLDER.** Until the exercise of this Warrant, the Registered Holder of this Warrant shall not have or exercise any rights by virtue hereof as a stockholder of the Company (including without limitation the right to notification of stockholder meetings or the right to receive any notice or other communication concerning the business or affairs of the Company).

12. **AMENDMENT OR WAIVER.** Any term of this Warrant may be amended or waived only by an instrument in writing signed by the party against which enforcement of the amendment or waiver is sought.

13. **HEADINGS.** The headings in this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.

14. **SUCCESSORS AND ASSIGNS.** The terms and provisions of this Warrant shall inure to the benefit of, and be binding upon, the Company and the Registered Holder and their respective permitted successors and assigns (in the case of the Registered Holder, in accordance with Section 3(a) hereof).

15. **ATTORNEYS' FEES.** In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all reasonable costs incurred in such dispute, including reasonable attorneys' fees.

16. **GOVERNING LAW.** This Warrant shall be governed, construed and interpreted in accordance with the laws of the State of California, without giving effect to principles of conflicts of law thereof.

17. **COUNTERPARTS.** This Warrant may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its duly authorized officer.

GERON CORPORATION

By: _____

Dated: _____

Name:

Title:

Address: Geron Corporation
230 Constitution Drive
Menlo Park, CA 94025

CALIFORNIA INSTITUTE OF REGENERATIVE MEDICINE

Signature: _____

Dated: _____

Name:

Title:

Address:

EXHIBIT A

NOTICE OF EXERCISE

To: GERON CORPORATION (the "Company")

(1) The undersigned, pursuant to the provisions set forth in the attached Warrant, hereby irrevocably elects to purchase _____ shares of the Common Stock covered by such Warrant and herewith makes payment of \$_____, representing the full purchase price for such shares at the price per share provided for in Section 1(a) of the Warrant, together with all applicable transfer taxes, if any.

(2) The undersigned, pursuant to the provisions set forth in the attached Warrant, hereby irrevocably elects to purchase _____ shares of the Common Stock pursuant to the net exercise provisions set forth in Section 1(b) of the Warrant, and shall tender payment of all applicable transfer taxes, if any.

Please issue a certificate or certificates representing said shares of Common Stock in the name of the undersigned or in such other name as is specified below:

(Name)

(Address)

The undersigned represents that (i) the aforesaid shares of Common Stock are being acquired for the account of the undersigned not with a present view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares; (ii) the undersigned is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision regarding its investment in the Company; (iii) the undersigned is experienced in making investments of this type and has such knowledge and background in financial and business matters that the undersigned is capable of evaluating the merits and risks of this investment and protecting the undersigned's own interests; (iv) the undersigned understands that the shares of Common Stock issuable upon exercise of this Warrant have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), by reason of a specific exemption from the registration provisions of the Securities Act, which exemption depends upon, among other things, the bona fide nature of the investment intent as expressed herein, and, because such securities have not been registered under the Securities Act, they must be held indefinitely unless subsequently registered under the Securities Act or an exemption from such registration is available; (v) the undersigned is aware that the aforesaid shares of Common Stock may not be sold pursuant to Rule 144 adopted under the Securities Act unless certain conditions are met and until the undersigned has held the shares for the time period prescribed by Rule 144, that among the conditions for use of the Rule is the availability of current information to the public about the Company; and (vi) the undersigned agrees not to make any disposition of all or any part of the aforesaid shares of Common Stock unless and until there is then in effect a registration statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with said registration statement, or the undersigned has provided the Company with an opinion of the Company's counsel, satisfactory to the Company and at the Company's expense, stating that such registration is not required.

(Date)

(Signature)

(Print name)

EXHIBIT B

ASSIGNMENT FORM

FOR VALUE RECEIVED, _____ hereby sells, assigns and transfers all of the rights of the undersigned under the attached Warrant with respect to the number of shares of Common Stock covered thereby set forth below, unto:

| NAME OF ASSIGNEE | ADDRESS | No. OF SHARES |
|------------------|---------|---------------|
|------------------|---------|---------------|

Signature: _____

Witness: _____

Dated: _____

Form of In-House Counsel Opinion

August 1, 2011

California Institute for Regenerative Medicine
210 King Street
San Francisco, CA 94107

Re: Loan Agreement for CIRM Loan Number CT1-05168 to Geron

Ladies and Gentlemen:

I am Secretary, Chief Legal Officer and Senior Vice President for Corporate Transactions for Geron, a Delaware corporation (the "Company"). This letter is in reference to the Loan Agreement dated August 1, 2011, by and between the Company and the California Institute for Regenerative Medicine ("CIRM") that is attached as Appendix A to the Notice of Loan Award for CIRM loan number CT 1-05168 (the "Loan Agreement"). I am rendering this opinion pursuant to Section 4.9(h) of the Loan Agreement. Capitalized terms used but not defined herein have the meanings given them in the Loan Agreement.

I have examined such matters of fact and questions of law as I have considered appropriate for purposes of this letter. Additionally, I have examined the Loan Agreement. Except as otherwise stated herein, as to factual matters I have, with your consent, relied upon the foregoing, and upon oral and written statements and representations of officers and other representatives of the Company and others, including the representations and warranties of CIRM. I have not independently verified such factual matters.

On the basis of the foregoing, in reliance thereon, and with the qualifications set forth herein, I am of the opinion that:

The Company is duly organized, validly existing and in good standing under the laws of the State of Delaware.

The Company has the requisite corporate power to own its property and assets and to conduct its business as it is currently being conducted. With your consent, based solely on certificates from public officials, the Company is qualified as a foreign corporation to do business and is in good standing in the State of California.

The Company has the requisite corporate power to execute, deliver and perform its obligations under the Loan Agreement, including the issuance of the initial warrant on the terms specified in the Loan Agreement.

The execution, delivery and performance by the Company of the Loan Agreement has been duly authorized by all requisite corporate action on the part of the Company.

The Loan Agreement has been duly executed and delivered by the Company and constitutes a valid and binding obligation of the Company, enforceable against the Company in accordance with its terms.

My opinions are subject to:

- a. the effects of bankruptcy, reorganization, preference, fraudulent transfer, moratorium or other similar laws relating to or affecting the rights or remedies of creditors;
- b. the effect of general principles of equity, whether considered in a proceeding in equity or at law (including the possible unavailability of specific performance or injunctive relief), concepts of materiality, reasonableness, good faith, fair dealing and the discretion of the court before which a proceeding is brought;
- c. the invalidity under certain circumstances under law or court decisions of provisions for the indemnification or exculpation of or contribution to a party with respect to a liability where such is contrary to public policy; and
- d. I express no opinion with respect to (i) consents to, or restrictions upon, governing law, jurisdiction, venue, arbitration, remedies or judicial relief; (ii) advance waivers of claims, defenses, rights granted by law, or notice, opportunity for hearing, evidentiary requirements, statutes of limitation, trial by jury or at law, or other procedural rights; (iii) waivers of broadly or vaguely stated rights; (iv) covenants not to compete; (v) provisions for exclusivity, election or cumulation of rights or remedies; (vi) provisions authorizing or validating conclusive or discretionary determinations; (vii) grants of setoff rights; (viii) provisions for the payment of attorneys' fees where such payment is contrary to law or public policy, and I call to your attention the provisions of Sections 1717 and 1717.5 of the California Civil Code, which limit and create obligations for the payment of attorneys' fees; (ix) proxies, powers and trusts; (x) provisions prohibiting, restricting, or requiring consent to assignment or transfer of any right or property; (xi) provisions for liquidated damages, default interest, late charges, monetary penalties, make-whole premiums or other economic remedies to the extent such are deemed to constitute a penalty; (xii) provisions permitting, upon acceleration of any indebtedness, collection of that portion of the stated principal amount thereof which might be determined to constitute unearned interest thereon; and (xiii) the severability, if invalid, of provisions to the above effects.

With your consent, I have assumed (a) that the Loan Agreement has been duly authorized, executed and delivered by CIRM, (b) that the Loan Agreement constitutes the legally valid and binding obligations of CIRM, enforceable against CIRM in accordance with its terms, and (c) that the status of the Loan Agreement as legally valid and binding obligation of the CIRM is not affected by any (i) breaches of, or defaults under, agreements or instruments, (ii) violations of statutes, rules, regulations or court or governmental orders, or (iii) failures to obtain required consents, approvals or authorizations from, or make required registrations, declarations or filings with, governmental authorities; provided that with respect to each of the foregoing, I make no such assumption to the extent I have opined as to such matters with respect to the Company.

My opinion set forth above is limited to the matters expressly set forth in this letter, and no opinion is implied, or may be inferred, beyond those matters expressly stated. This opinion speaks only as to law and facts in effect or existing as of the date hereof and I undertake no obligation or responsibility to update or supplement this opinion to reflect any facts or circumstances that may hereafter come to my attention or any changes in any law that may hereafter come to my attention in any law that may hereafter occur.

This opinion is intended solely for your benefit and is not to be made available to or be relied upon by any other person, firm or entity without my prior written consent.

Very truly yours,

By:

David J. Earp, J.D., Ph.D.
Chief Legal Officer, SVP Corporate Transactions

Loan Administration Policy (Approved by Office of Administrative Law 1/2011)

CIRM Loan Administration Policy

Preface

The California Institute for Regenerative Medicine (CIRM) issues Requests for Applications for research grants, inviting applications from non-profit and for-profit organizations. Beginning in early 2009, CIRM intends to supplement its grant funding by offering research loans to for-profit organizations. This policy covers the procedures that will apply to research loans.

The Independent Citizen's Oversight Committee (ICOC), CIRM's governing board, has adopted the CIRM Grants Administration Policy for Academic and Non-Profit Institutions (Non-Profit GAP). The Non-Profit GAP applies generally to grant funding of scientific and medical research. The ICOC has also adopted the CIRM Grants Administration Policy for For-Profit Organizations (For-Profit GAP), which is applicable to for-profit organizations that apply for or receive CIRM funding through grants. The For-Profit GAP largely incorporates the Non-Profit GAP. Where differences between for-profit and non-profit organizations warrant different treatment, the For-Profit GAP provides the modified policies that apply to for-profit applicants and grant recipients.

This Loan Administration Policy (LAP) takes a similar approach, working from the Non-Profit GAP and setting out the modified policies that apply to CIRM loan funding of for-profit organizations. Note that this LAP does not incorporate the For-Profit GAP, which continues to apply to for-profit organizations to the extent that CIRM funds them through grants.

I. INCORPORATION BY REFERENCE

The Non-Profit GAP and all appendices, as they may be amended from time to time, are hereby made applicable to for-profit organizations that apply for or receive CIRM loans, to the extent that they do not conflict with the policies stated herein. Where differences between grants and loans warrant different treatment, this LAP provides the modified sections that apply to loans. All other provisions of the Non-Profit GAP apply to loans. When Non-Profit GAP provisions are applied to loans, "Loan" replaces "Grant" and "Loan Recipient" replaces "Grantee."

The loan administration policy statement may be updated periodically by CIRM. Any new or amended regulations adopted by the ICOC will be applied only to loans awarded after the amendments are adopted, unless CIRM and the Loan Recipient agree otherwise. All revisions to the LAP will be posted on the CIRM website (<http://www.cirm.ca.gov>).

CIRM's right to enforce the provisions of this LAP shall survive the end of the term of the loan, and should CIRM no longer exist, those rights may be enforced by the State of California.

C. Defined terms

The following definitions supplement the definitions provided in the Non-Profit GAP.

| | |
|----------------------------|---|
| Accrued Interest | Interest owed on the Loan. |
| Change of Control | In the event of a sale, merger, transfer, exchange or other disposition (whether of assets, stock or otherwise) of a majority or controlling ownership position. |
| Borrower | A For-Profit Organization that is responsible for repayment of a Loan. The Borrower may or may not be the Loan Recipient. |
| CIRM-funded Project | The research project described in the Notice of Loan Award |
| Company-Backed Loan | A loan which the Loan Recipient organization is obligated to repay, notwithstanding the status of the CIRM-funded project. |
| Earned Interest | Interest that a Loan Recipient earns on unspent funds that it has received from CIRM. |
| Loan | A funding mechanism with repayment provisions providing money and/or property to an eligible entity to assist the Loan Recipient in carrying out an approved project or activity. Loans may be Company-Backed or Product-Backed. |
| Loan Balance | Amount determined by adding (1) the amount CIRM has distributed to the Loan Recipient pursuant to the Loan, and (2) Accrued Interest to date, and subtracting (3) any prepayment of the Loan Balance. |
| Loan Period | The time between the date of CIRM's first release of funds pursuant to the Loan Award and the date when the loan must be repaid. This repayment deadline is different from the end of the research project – see "Project Period." |
| Loan Recipient | An Organization that is the Recipient of an Award and that is legally responsible and accountable for the use of the funds provided and for the performance of the CIRM-funded Project or Activity. The Loan Recipient is the entire legal entity even if a particular component is designated in the NLA. The Loan Recipient may or may not be the Borrower. |
| Notice of Loan Award (NLA) | The document that notifies the Loan Recipient and others that an Award has been made, contains or references all terms and conditions of the Award as well as the Loan Recipient's and PI's agreement to those terms and conditions, and documents the commitment of CIRM funds. |
| Product-Backed Loan | A Loan which the Loan Recipient organization is obligated to repay, subject to suspension or forgiveness of all or part of the loan based on the status of the CIRM-funded project. |

D. Types of support

1. CIRM may offer support in the form of Grants or Loans. Eligibility for each type of funding will be decided on a case-by-case basis prior to issuance of the Request for Applications (“RFA”). Unless otherwise determined by the Finance Subcommittee of the ICOC, based on the recommendation of the President, CIRM will not offer loans in connection with RFAs for which the ICOC has budgeted less than \$3 million per award.
2. The ICOC may provide that For-Profit Applicants are only eligible for Loans, or that they can choose between Grants and Loans. When a For-Profit Organization receives a Loan, that organization is both the Loan Recipient and the Borrower.
3. The ICOC may permit Non-Profit Applicants to apply for Loans, but only if the Application includes a Co-PI from a For-Profit Organization that agrees to be the Borrower. The Non-Profit Applicant would be the Loan Recipient.
4. An RFA may place other restrictions or conditions on eligibility, such as requiring the Investigational New Drug application (“IND”) holder of a CIRM Funded Project to be the Loan Recipient.

This section supplements Section I.D. of the Non-Profit GAP.

E. Roles and Responsibilities

3. Financial Services Provider:

CIRM will engage the services of external financial services providers to perform specified functions related to the evaluation and administration of loans. Unless otherwise provided in an RFA, the Loan Recipient shall be required to cover certain or all costs incurred on CIRM’s behalf by the Financial Services Provider.

II. LOAN APPLICATION AND REVIEW PROCESS

A. Eligibility

1. PI and PD Eligibility

Principal Investigators (“PI”) or Program Directors (“PD”) from For-Profit applicants and Loan Recipients must be employed primarily by the For-Profit organization (i.e., at least 50% time) at the time of award and during the entire project period.

This requirement supplements the requirements of section II.A.1. of the Non-Profit GAP.

V. PAYMENT AND USE OF FUNDS

B. Costs and Activities

1. Allowable Project Costs and Activities

Allowable travel-related expenses include costs for transportation, lodging, subsistence, and related items incurred by key personnel on project-related business. Reimbursement for transportation expenses shall be based on the most economical mode of transportation (e.g., coach fare) and the most commonly traveled route consistent with the authorized purpose of the trip. Reimbursed lodging and subsistence expenses must be ordinary and necessary to accomplish the official business purpose of the trip. Excluding travel for clinical research or regulatory affairs, travel-related expenses shall be limited to an annual allowance of \$5,000 per person per CIRM award.

This section supersedes paragraph 4, section V.B.1. of the Non-Profit GAP.

3. Facilities Costs

Facilities costs cover general operating costs of the Loan Recipient's facilities that will house all elements of the funded project or activity. A fixed rate for facilities costs to for-profits organizations will be specified on a per-RFA basis. The fixed facilities cost rate shall be no higher than the average of the Category A and B facilities costs reported per fiscal year for Academic and Non-Profit Organizations.

This section supersedes section V.B.3. of the Non-Profit GAP.

5. Indirect Costs

Indirect costs will be up to 25 percent of allowable direct research funding costs awarded by CIRM (i.e., project costs and facilities costs), exclusive of the costs of equipment, consulting and subcontract amounts in excess of \$25,000, and will be specified on a per-RFA basis.

This section supersedes section V.B.5. of the Non-Profit GAP.

6. Interest Earned on CIRM Funds

Loan Recipients with Company-Backed Loans are not required to account to CIRM for interest earned on funds that CIRM advanced pursuant to the Loan award. Loan Recipients with Product-Backed Loans must reinvest and account for interest earned as provided in the Non-Profit GAP. Interest earned on CIRM funds does not increase or decrease the amount required to be repaid.

D. Prior Approval Requirements

5. Relinquishment of Award and Award Transfer

A Loan Recipient may at any time relinquish an Award by submitting a relinquishing statement that includes a) a statement of reasons for relinquishing the award; b) an estimate of the unexpended balance of any funds paid to the Loan Recipient; c) and an assurance that all unexpended funds will either be returned to CIRM, or in the case of an Award transfer, transferred to a new Loan Recipient within 90 days of the date of relinquishment. In the case of a transfer, the relinquishing Loan Recipient may be required to transfer CIRM-funded equipment purchased with the Award.

With prior approval, and at the request of the Loan Recipient organization, the continuation of CIRM loan activities may be transferred to a different eligible organization in California in the event that:

- a. the PI transfers organizations
- b. the program is sold to another organization
- c. the CIRM Loan Recipient is acquired by another organization

The CIRM Loan Recipient must submit to CIRM a written request and justification that the prospective transferee organization has the intent and means to continue the proposed research – including access to intellectual property rights available at the original Loan Recipient. The request must be submitted at least 90 days before the proposed effective date of award transfer. If the initial request to transfer the award is approved, final approval will be contingent upon the current Loan Recipient relinquishing rights to the Loan. Furthermore, the Loan Recipient may be required to transfer to the new organization any equipment purchased under the Loan. Before the transfer can take place, the original Loan Recipient must submit to CIRM a relinquishing statement that includes an estimate of the unexpended balance of any funds paid to the Loan Recipient and an assurance that all unexpended funds will be transferred to the new Loan Recipient or returned to CIRM within 90 days of the relinquishing date.

The transferee Loan Recipient must submit to CIRM a letter that states its intention to assume responsibility for the Award based on the approved application, including all applicable provisions of this Loan Administration Policy for For-Profit Organizations and CIRM's intellectual property regulations, and the following items:

- a. New application face page with original signatures
- b. Detailed budget(s) for the remaining project period (including the estimated unexpended balance from the original Loan Recipient)

- c. Biographical sketches for new key personnel
- d. Other support for new key personnel
- e. Facilities and resources
- f. Public policy assurances (e.g., human subjects, animal, biohazard), where applicable.

CIRM will issue a new Notice of Loan Award (“NLA”) to the PI and the transferee Loan Recipient when all required documents have been received and the transfer has been approved by CIRM. Transfer of the Award is effective when the NLA is signed by the PI and the Authorized Organizational Official of the transferee Loan Recipient and returned to and received by CIRM. Payment will not be issued until the Award transfer is effective.

As part of the new NLA, the transferee Loan Recipient assumes all loan repayment obligations of the relinquishing Loan Recipient. If the request to transfer the Award of a CIRM-funded program is not approved, CIRM may provide written notification of termination of the Award. The Loan Recipient will be required to submit a final report on the project and a final financial report within 90 days of the effective date of Award termination. All unexpended funds as of 30 days of the date of Award termination must be returned to CIRM within 120 days of termination of the Award. Further, the Loan Recipient shall continue to be responsible for all ongoing obligations of the award under CIRM’s intellectual property regulations.

This section supersedes section V.D.5. of the Non-Profit GAP.

H. Reporting Requirements

3. Other Reports

During the Loan Period, Loan Recipients must provide written notification to CIRM within 30 days of the occurrence of any of the post-Award changes described below:

Termination of a program that is currently funded by CIRM. The Loan Recipient organization will be required to submit a final report on the project and a final financial report within 90 days after the effective date of award termination. All unexpended funds as of 30 days after the date of award termination must be returned to CIRM within 60 days after termination of the award. Further, the Loan Recipient organization shall continue to be responsible for all ongoing obligations of the award under CIRM’s intellectual property regulations.

This section supersedes section V.H.3. of the Non-Profit GAP.

5. Reporting Related to Loan Terms

In addition to other reporting requirements, Loan Recipients and Borrowers must notify CIRM of any event that would trigger accelerated Loan repayment pursuant to section VII.F. Loan Recipients and Borrowers shall also report initial public offerings and follow-on financing.

I. Project Close-Out

Close-out marks the end of the CIRM-funded Project. Project close-out has no effect on the date when Loan repayment is due. CIRM will close out a CIRM-funded Project as soon as possible after the project period end date or the end date of any authorized extension. Close-out includes timely submission of all required reports and reconciling amounts due the Loan Recipient or CIRM. CIRM may withhold funds from the Loan Recipient for future or concurrent Awards if a project close-out is pending the submission of overdue reports.

As part of close-out of a project funded by a Product-Backed Loan, the Loan Recipient and Borrower must submit a plan for continued development of the project. CIRM approval of the plan is necessary to complete close-out, and will be based on whether the plan, in the reasonable judgment of the President of CIRM, appropriately balances the considerations specified in Section 125290.30, subdivision (h), of the Health and Safety Code.

Close-out of a project does not cancel any requirements for property accountability, record retention, reporting or financial accountability. Following close-out, the Loan Recipient remains obligated to return funds due as a result of later refunds, corrections, or other transactions, and CIRM may recover amounts based on the results of an audit covering any part of the funding period. In addition, the Loan Recipient is obligated to report to CIRM after project close-out any patents filed, patents issued, licenses granted, or income received that resulted from CIRM-funded research. (See CIRM's Intellectual Property and Revenue Sharing regulations.)

This section supersedes section V.I. of the Non-Profit GAP.

J. Failure of Compliance

If the Loan Recipient or PI fails to comply with the terms and conditions of a Loan Award, CIRM may take any of the actions that it could take for failure of compliance with a Grant Award, as described in section V.J. of the Non-Profit GAP. If CIRM determines that the failure justifies recovery of previously awarded funds, the Loan Recipient is fully liable for that obligation, without regard to whether the Loan is Company-Backed or Product-Backed.

If a Loan Recipient is required to return funds due to failure of compliance, the returned funds will be deducted from the Loan Balance. Interest that accrued on those funds before they were returned to CIRM will not be deducted from the Loan Balance. Recovery of funds for failure of compliance does not affect CIRM's interest in the warrants issued when those funds were released.

This section supplements section V.J. of the Non-Profit GAP.

VII. LOAN TERMS

A. Company-Backed and Product-Backed Loans

CIRM will offer two types of Loans: Product-Backed Loans and Company-Backed Loans. Company-Backed Loans must be repaid to CIRM, with accrued interest, at the end of the Loan Period, regardless of whether the CIRM-Funded Project results in any revenues. Repayment of a Product-Backed Loan is predicated upon the success of the product being developed.

The following are guidelines for Loan Terms. Specific terms will be determined in each RFA by the Finance Subcommittee of the ICOC, based on the recommendation of the President, as appropriate for each RFA. If the Finance Subcommittee does not modify these guidelines for a specific RFA, the terms set forth herein shall apply to the RFA.

Funding of the loan will occur at intervals set forth in the Notice of Loan Award and only upon satisfaction of conditions set forth in the Notice of Loan Award. A delay in meeting timelines will not automatically result in acceleration or termination of the loan, but it could result in a delay or suspension in the disbursement of additional funds.

B. Interest Rate

Unless otherwise provided in the RFA,

- i. The interest rate for a 5 year loan term shall be LIBOR plus 2%.
- ii. For each additional year of the Loan Term beyond the 5th year, the interest rate of the Loan shall increase by: 1% in year 6; 2% in year 7; 3% in year 8; 4% in year 9; and 5% in year 10.
- iii. The interest rate shall not exceed the maximum interest rate permitted by law.

Interest **shall be** compounded annually, from the date on which CIRM disburses funds to the Loan Recipient.

C. Warrants

1. Requirement

a. Company-Backed Loans: A Loan Recipient that is awarded a Company-Backed Loan shall provide warrants to CIRM equal to the lesser of 20% of Loan Recipient's shares, fully diluted and

- iv. 10% of the Loan Amount if Loan Recipient shows a profit for previous 2 years

- v. 25% of the Loan Amount -if Loan Recipient has BOTH: (a) raised in prior financings since its inception three times the total amount of the loan; AND (b) has entered into a contractual arrangement (still in effect) with a biotechnology or pharmaceutical company which requires the payment of licensing revenues or milestone payments predicated on the success of a funded project (regardless of whether it is a CIRM Funded Project).
- vi. 50% of the Loan Amount if Loan Recipient has met only one of the two requirements set forth above in section C.1(a)(v)
- vii. 75% of the Loan Amount if none of the criteria set forth above in Section C.1(a)(v) are satisfied

b. Product-Backed Loans: A Loan Recipient that is awarded a Product-Backed Loan shall provide warrants to CIRM equal to the lesser of 20% of Loan Recipient's shares, fully diluted and

- i) 50% of the Loan Amount if the Loan Amount is less than 50% of the total funds required to complete the CIRM-funded Project as set forth in the Notice of Loan Award.
- ii) 60% of the Loan Amount if the Loan Amount is less than 75% of the total funds required to complete the CIRM-Funded Project as set forth in the Notice of Loan Award.
- iii) 100% of the Loan Amount if the Loan Amount represents more than 75% of the total funds required to complete the CIRM-Funded Project as set forth in the Notice of Loan Award.
- iv) For the purposes of Section C.1(b)(i), (ii) and (iii), the "total funds required to complete the CIRM-funded Project" shall be determined as of the date of the execution of the Notice of Loan Award and shall be calculated using the indirect cost reimbursement rate specified in the Grants Administration Policy.

2. Warrant terms

If the Borrower is publicly held, the warrant strike price will be the closing price of the Borrower's common or preferred stock reported for the business day immediately before each CIRM disbursement of funds, depended upon whether CIRM selects common or preferred stock warrants. For privately held Borrowers, the warrant strike price will be set at the share price from the most recent round of equity financing before each disbursement of CIRM funds. If there has been no previous round, the warrants will be floated until the next round. The warrants are transferable, may be exercised at any time, and expire 10 years from the date on which they are issued. Warrants may be of either common or preferred stock, as determined by CIRM in its sole discretion.

D. Loan Period

The term of CIRM loans shall be 5 years, subject to modification on an RFA by RFA basis by the Finance Subcommittee, based on the recommendation of the President. The Loan Recipient may extend the term of the loan up to a maximum term of 10 years, provided that it agrees to be bound by the provisions set forth below in Section H. A term of more than ten years shall require the approval of the Finance Subcommittee, based upon the recommendation of the President.

E. Prepayment and Repayment at End of Loan Period

Unless the repayment obligation has been accelerated, suspended or forgiven, the Loan Balance is due and payable to CIRM on the last day of the Loan Period. A Borrower may prepay the full amount of the Loan Balance, with accumulated interest, at any time, without penalty.

F. Loan Acceleration

In the event of any change of control, CIRM shall have the right but not the obligation to accelerate repayment of the Loan. This decision shall be made by the Finance Subcommittee, based on the recommendation of the President. If the proposed change of control is not a matter of public knowledge, the Finance Subcommittee shall consider the matter in closed session to protect the confidentiality of the proposal.

G. Suspension and Forgiveness of Product-Backed Loans

1. Project Abandonment

At any time prior to the end of the Loan Period, the Borrower may apply for suspension of all or part of the Loan, based on a showing that it has abandoned the project funded by CIRM. A project will be considered abandoned if, during the Project Period, CIRM has terminated the project or discontinued funding at a Go/No-Go decision point specified in the RFA and/or NLA. At or after the end of the Project Period, a project will be considered abandoned if the Borrower has determined that it is not commercially feasible to continue development of the product.

2. Suspension of Repayment

To apply for suspension of repayment, the Borrower must show that it has complied with all CIRM reporting requirements and audit requests. The Borrower must also submit a plan for access to and exploitation of any CIRM-Funded Invention* or CIRM-Funded Technology* arising from the Loan-funded project. Suspension of repayment will not be granted unless, in the judgment of the President of CIRM, the plan appropriately balances the considerations specified in Section 125290.30, subdivision (h), of the Health and Safety Code.

The Borrower must also agree to terms for repayment of the Loan Balance if the Borrower resumes development of the project or otherwise derives revenue from CIRM-Funded Invention* or CIRM-Funded Technology* arising from the Loan-funded project. Suspension of repayment will not be granted unless the terms for resumption and amount of repayment are approved by the Finance Subcommittee of the ICOC, which will determine whether the proposed terms, under the circumstances of the project, appropriately balance the considerations specified in Section 125290.30, subdivision (h), of the Health and Safety Code. If further activity results in a repayment obligation under the agreed-upon terms, the Borrower must promptly notify CIRM and make whatever payments are owed under those terms.

3. Loan Forgiveness

Any Loan Balance which has not become due and payable 15 years after the end of the Project Period will be forgiven.

H. Conditions and Notice for Extension of Loan

A Loan Recipient may extend the term of its five-year loan according to the conditions of this Section. The Loan Recipient must provide notice of its intent to extend the loan term at least 90 days prior to end of the Loan Term. The term may be extended on a year by year basis up to 10 years in the sole discretion of Loan Recipient, subject to satisfaction of scientific and financial milestones, the absence of an event of acceleration, and compliance with terms of Notice of Loan Award. Payment of interest Accrued for a Five (5)-year Loan will occur as follows:

- A. Years 1 -5: interest accrues, no payment due
- B. Year 6: Recipient owes 25% of unpaid, accrued interest paid out over the 6th year in 4 equal quarterly payments; remaining interest is accrued
- C. Year 7: Recipient owes 25% of unpaid, accrued interest paid out over the 7th year in 4 equal quarterly payments; remaining interest is accrued
- D. Year 8: Recipient owes 25% of unpaid, accrued interest paid out over the 8th year in 4 equal quarterly payments; remaining interest is accrued
- E. Year 9: Recipient owes 25% of unpaid, accrued interest paid out over the 9th year in 4 equal payments; remaining interest is accrued.
- F. Year 10: Recipient owes 25% of unpaid, accrued interest paid out over the first 3 quarters in 3 equal payments; principal and remaining unpaid accrued interest are due at end of year 10.

* Term defined in CIRM's Intellectual Property and Revenue Sharing Regulations

I. Subordination

In the case of a Product-Backed Loan, unless additional debt is used to support the CIRM-Funded Project, CIRM will not subordinate to company-wide debt without the consent of the Finance Subcommittee, based on the recommendation of the President. Such consent may not be unreasonably withheld.

J. Loan Application Process

1. CIRM Loan Application Form

By the application deadline for an RFA that offers Loan funding, a Loan applicant must submit a Loan application form. The applicant must indicate its preference among available Loan terms for that RFA, e.g., Product-Backed or Company- Backed, etc. If an Application seeks a Company-Backed Loan for a project with scientific merit, the ICOC may deny the Application if the applicant does not meet the credit standards for such Loans. Accordingly, applicants that prefer Company-Backed Loans must indicate whether they would accept Product- Backed Loan funding as an alternative. If a Loan applicant is a Non-Profit Organization, the loan application form must be submitted by the proposed Borrower.

2. Financial Feasibility Review

CIRM will assign each Loan applicant (or Borrower) to a Financial Services Provider. Each applicant or Borrower will work directly with a Financial Services Provider to provide the financial and business information that the Financial Services Provider needs to evaluate the applicant's ability to manage and repay CIRM funds. The Financial Services Provider will collect from the applicant a processing fee to offset the cost of financial feasibility review.

**APPENDIX B – CIRM RFA-10-03: Targeted Clinical Development Awards
California Institute for Regenerative Medicine**

| | | | |
|--|--------------------|-----------------------|-----------------------|
| Grant Number: | CT1-05168 | Budget Period: | Annual as of 8/1/2011 |
| Grantee Name: | Geron Corporation | | |
| Grantee ID: | PR-Y0009A-SF | Project Period Start: | 8/1/2011 |
| Principal Investigator: | Dr. Jane Lebkowski | Project Period End: | 7/31/2014 |
| Project Title: Evaluation of Safety and Preliminary Efficacy of Escalating Doses of GRNOPC1 in Subacute Spinal Cord Injury | | | |

Milestone achievement is an important indicator of progress and is a major factor in review of progress reports. The milestones summarized below replace the milestones proposed in the original Application. "Progress Milestones" identify activities or outcomes to be completed by a specified date. They will be used as a basis for review of progress reports and at progress evaluation meetings. "No Go Milestones" state conditions that permit CIRM to suspend or permanently cease disbursements under this Award. Milestones may only be modified with Prior Approval from CIRM.

| Year 1: May 2011 to July 2012 * | |
|--|---|
| Progress Milestones | Comments and potential activity modifications |
| 1. Complete enrollment and * of first * patients by *. | * |
| 2. Develop safety package with data to 30 days post transplant for first * patients, * by *. | |
| 3. Complete enrollment and at least * of * (projected * patients) by *. | |

*: Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Year 1: May 2011 to July 2012

*

| Progress Milestones | Comments and potential activity modifications |
|---|--|
| 4. Obtain FDA and first site IRB clearance to * by *. 5. Obtain IRB clearance * by * 6. Complete enrollment * of * patient *. | * |

*: Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Year 1: May 2011 to July 2012

*

| Progress Milestones | Comments and potential activity modifications |
|--|--|
| 7. Complete in-life phase of final preclinical study to support * patients by *. | * |
| 8. File package with FDA seeking permission for * patients *. | |
| 9. Obtain FDA clearance to initiate * patients *. | |
| 10. Obtain IRB clearance at *. | |

Year 1: May 2011 to July 2012

Manufacturing Process

| Progress Milestones | Comments and potential activity modifications |
|--|--|
| 11. Manufacture at least * vials (net of release testing and retains) of GMP material passing release specifications by *. | * |

Year 2: August 2012 to July 2013

*

| Progress Milestones | Comments and potential activity modifications |
|--|--|
| 1. Complete enrollment * of * patients in* by *. | * |
| 2. Complete enrollment and * of at least * patients in * by *. | * |

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Year 2: August 2012 to July 2013

*

| Progress Milestones | Comments and potential activity modifications |
|---|--|
| 3. Obtain IRB clearance at * clinical sites by *. 4. Complete enrollment of at least * patients in * by *. 5. Complete at least * patients in *, file safety package with FDA seeking permission to * by *. | * |

Year 2: August 2012 to July 2013

*

| Progress Milestones | Comments and potential activity modifications |
|--|--|
| 6. Obtain FDA clearance & IRB clearance * patients * by *. | * |

*: Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

**Year 2: August 2012 to July 2013
Manufacturing Process**

| Progress Milestones | Comments and potential activity modifications |
|--|--|
| 7. Manufacture total of at least * vials (net of release testing and retains) of GMP material passing release specifications * | * |

**Year 3: August 2013 to July 2014

| Progress Milestones | Comments and potential activity modifications |
|--|--|
| 1. Complete enrollment * of * patients * by *. | * |

*: Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Year 3: August 2013 to July 2014

*

| Progress Milestones | Comments and potential activity modifications |
|--|--|
| 2. Obtain FDA clearance and IRB clearance to * patients *. 3. Complete enrollment and * of at least * patients in * by *. 4. Complete * of at least * patients * by *. | * |

Year 3: August 2013 to July 2014

*

| Progress Milestones | Comments and potential activity modifications |
|--|--|
| 5. Obtain IRB clearance at * by *. 6. Complete enrollment * patients in * by *. | * |

*: Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

**Year 3: August 2013 to July 2014
Manufacturing Process**

| Progress Milestones | Comments and potential activity modifications |
|--|--|
| 7. Manufacture total of at least * vials (net of release testing and retains) of GMP material passing release specifications during *. | * |

“No go” milestones for program:

1. Failure to enroll at least * patients by *.
2. Failure to enroll at least * patients *.
3. FDA communications suggest * within the project period.
4. FDA communications suggest *.
5. Serious safety issues observed in a clinical trial as assessed by DMC, FDA and/or sponsor which lead to termination of all clinical studies.

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**RFA 10-03 CIRM Targeted Clinical Development Awards Part B - Appendix C
CIRM Funded Budget (CT1-05168) Jane Lebkowski/Geron Corporation**

By Activity

| ID | Activity | Total Funds Requested from CIRM | | | Total |
|-----|--|---------------------------------|----------------------------|----------------------------|---------------|
| | | Year 1 (5/1/11-7/31/12) | Year 2 (8/1/12-7/31/13) | Year 3 (8/1/13-7/31/14) | |
| 1* | | | | | |
| 2* | | \$ | *\$ | *\$ | *\$ |
| 3* | | \$ | *\$ | *\$ | *\$ |
| 4* | | \$ | *\$ | *\$ | *\$ |
| 5* | | \$ | *\$ | *\$ | *\$ |
| 6* | | \$ | *\$ | *\$ | *\$ |
| 7 | | \$ | *\$ | *\$ | *\$ |
| 8* | | \$ | *\$ | *\$ | *\$ |
| 9* | | | | | |
| 10* | | \$ | *\$ | *\$ | *\$ |
| 11* | | \$ | *\$ | *\$ | *\$ |
| 12* | | \$ | *\$ | *\$ | *\$ |
| 13* | | \$ | *\$ | *\$ | *\$ |
| 14* | | \$ | *\$ | *\$ | *\$ |
| 15 | | \$ | *\$ | *\$ | *\$ |
| 16* | | \$ | *\$ | *\$ | *\$ |
| 17* | | | | | |
| 18* | | \$ | *\$ | *\$ | *\$ |
| 19* | | \$ | *\$ | *\$ | *\$ |
| 20* | | \$ | *\$ | *\$ | *\$ |
| 21* | | \$ | *\$ | *\$ | *\$ |
| 22* | | \$ | *\$ | *\$ | *\$ |
| 23 | | \$ | *\$ | *\$ | *\$ |
| 24* | | \$ | *\$ | *\$ | *\$ |
| 25* | | | | | |
| 26* | | \$ | *\$ | *\$ | *\$ |
| 27* | | \$ | *\$ | *\$ | *\$ |
| 28* | | \$ | *\$ | *\$ | *\$ |
| 29* | | \$ | *\$ | *\$ | *\$ |
| 30* | | \$ | *\$ | *\$ | *\$ |
| 31 | | \$ | *\$ | *\$ | *\$ |
| 32* | | \$ | *\$ | *\$ | *\$ |
| 33* | | | | | |
| 34* | | \$ | *\$ | *\$ | *\$ |
| 35* | | \$ | *\$ | *\$ | *\$ |
| 36* | | \$ | *\$ | *\$ | *\$ |
| 37* | | \$ | *\$ | *\$ | *\$ |
| 38* | | \$ | *\$ | *\$ | *\$ |
| 39* | | \$ | *\$ | *\$ | *\$ |
| 40 | | \$ | *\$ | *\$ | *\$ |
| 41* | | \$ | *\$ | *\$ | *\$ |
| 42* | | | | | |
| 43* | | \$ | *\$ | *\$ | *\$ |
| 44* | | \$ | *\$ | *\$ | *\$ |
| 45* | | \$ | *\$ | *\$ | *\$ |
| 46 | | \$ | *\$ | *\$ | *\$ |
| 47* | | \$ | *\$ | *\$ | *\$ |
| 48 | CIRM Funded PROJECT COSTS | | | | |
| 49 | PI TOTAL CIRM funded Direct Project Costs | \$ 6,764,267 | \$ 5,513,345 | \$ 3,609,643 | \$ 15,887,254 |
| 50 | CIRM Funded FACILITIES AND INDIRECT COSTS | | | | |
| 51 | PI TOTAL CIRM Facilities Costs | \$ 2,224,079 | \$ 1,783,145 | \$ 1,050,615 | \$ 5,057,840 |
| 52 | PI TOTAL CIRM Indirect Costs | \$ 1,715,718 | \$ 1,375,569 | \$ 810,475 | \$ 3,901,762 |
| 53 | PI TOTAL CIRM FUNDED PROJECT COSTS | \$ 10,704,064 | \$ 8,672,059 | \$ 5,470,733 | \$ 24,846,856 |

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**RFA 10-03 CIRM Targeted Clinical Development Awards Part B - Appendix C
CIRM Funded Budget (CT1-05168) Jane Lebkowski/Geron Corporation**

| By Budget Category | Year 1 | Year 2 | Year 3 | Total |
|---|----------------------|--------------------|--------------------|----------------------|
| 1* | | | | |
| 2* | \$ | *\$ | *\$ | *\$ |
| 3* | \$ | *\$ | *\$ | *\$ |
| 4* | \$ | *\$ | *\$ | *\$ |
| 5* | \$ | *\$ | *\$ | *\$ |
| 6* | \$ | *\$ | *\$ | *\$ |
| 7* | \$ | *\$ | *\$ | *\$ |
| 8* | | | | |
| 9* | \$ | *\$ | *\$ | *\$ |
| 10* | \$ | *\$ | *\$ | *\$ |
| 11* | \$ | *\$ | *\$ | *\$ |
| 12* | \$ | *\$ | *\$ | *\$ |
| 13* | \$ | *\$ | *\$ | *\$ |
| 14* | \$ | *\$ | *\$ | *\$ |
| 15* | | | | |
| 16* | \$ | *\$ | *\$ | *\$ |
| 17* | \$ | *\$ | *\$ | *\$ |
| 18* | \$ | *\$ | *\$ | *\$ |
| 19* | \$ | *\$ | *\$ | *\$ |
| 20* | \$ | *\$ | *\$ | *\$ |
| 21* | \$ | *\$ | *\$ | *\$ |
| 22* | | | | |
| 23* | \$ | *\$ | *\$ | *\$ |
| 24* | \$ | *\$ | *\$ | *\$ |
| 25* | \$ | *\$ | *\$ | *\$ |
| 26* | \$ | *\$ | *\$ | *\$ |
| 27* | \$ | *\$ | *\$ | *\$ |
| 28* | \$ | *\$ | *\$ | *\$ |
| 29* | | | | |
| 30* | \$ | *\$ | *\$ | *\$ |
| 31* | \$ | *\$ | *\$ | *\$ |
| 32* | \$ | *\$ | *\$ | *\$ |
| 33* | \$ | *\$ | *\$ | *\$ |
| 34* | \$ | *\$ | *\$ | *\$ |
| 35* | \$ | *\$ | *\$ | *\$ |
| 36* | | | | |
| 37* | \$ | *\$ | *\$ | *\$ |
| 38* | \$ | *\$ | *\$ | *\$ |
| 39* | \$ | *\$ | *\$ | *\$ |
| 40* | \$ | *\$ | *\$ | *\$ |
| 41* | \$ | *\$ | *\$ | *\$ |
| 42* | \$ | *\$ | *\$ | *\$ |
| 43* | | | | |
| 44* | \$ | *\$ | *\$ | *\$ |
| 45* | \$ | *\$ | *\$ | *\$ |
| 46* | \$ | *\$ | *\$ | *\$ |
| 47* | \$ | *\$ | *\$ | *\$ |
| 48* | \$ | *\$ | *\$ | *\$ |
| 49 PI TOTAL: CIRM Funded PROJECT COSTS | \$ 6,764,267 | \$5,513,344 | \$3,609,643 | \$ 15,887,254 |
| 50 PI TOTAL Exclusions | \$ 409,756 | \$ 418,642 | \$ 607,885 | \$ 1,436,283 |
| 51 PI TOTAL Adjusted PROJECT COSTS | \$ 6,354,511 | \$5,094,701 | \$3,001,758 | \$ 14,450,971 |
| 52 PI TOTAL CIRM Facilities Costs | \$ 2,224,079 | \$1,783,145 | \$1,050,615 | \$ 5,057,840 |
| 53 PI TOTAL CIRM Indirect Costs | \$ 1,715,718 | \$1,375,569 | \$ 810,475 | \$ 3,901,762 |
| 54 PI TOTAL CIRM FUNDED PROJECT COSTS | \$ 10,704,064 | \$8,672,059 | \$5,470,734 | \$ 24,846,856 |

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**RFA 10-03 CIRM Targeted Clinical Development Awards Part B - Appendix C
CIRM Funded Budget (CT1-05168) Jane Lebkowski/Geron Corporation**

TOTAL PROJECT BUDGET SUMMARY

| ID | Activity | Consultants | | | | | Total Project Costs |
|-----|---|-------------|------|--------------|--------|----------|---------------------|
| | | FTE | \$\$ | Subcontracts | Travel | Supplies | |
| * | | | | | | | |
| 1* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 2* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 3* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| * | | | | | | | |
| 4* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 5* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 6* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| * | | | | | | | |
| 7* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 8* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 9* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| * | | | | | | | |
| 10* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 11* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 12* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| * | | | | | | | |
| 13* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 14* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 15* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| * | | | | | | | |
| 16* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 17* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| 18* | | \$ | *\$ | *\$ | *\$ | *\$ | *\$ |
| | TOTAL PROJECT COST | | | | | | |
| 19 | TOTAL DIRECT PROJECT COSTS (CIRM plus Applicant) | | | | | | \$ |
| 20 | TOTAL CIRM facilities/ Indirect costs | | | | | | \$ |
| 21 | Applicant overhead costs | | | | | | \$ |
| 22 | TOTAL PROJECT COST | | | | | | \$ |

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EMPLOYMENT AGREEMENT

This Employment Agreement (this “**Agreement**”) is entered into as of the 29th day of September, 2011, by and between John A. Scarlett, M.D. (“**Executive**”) and Geron Corporation, a Delaware corporation (the “**Company**”).

WHEREAS, the Company desires to employ Executive to provide personal services to the Company, and wishes to provide Executive with certain compensation and benefits in return for Executive’s services; and

WHEREAS, Executive wishes to be employed by the Company and provide personal services to the Company in return for certain compensation and benefits;

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, it is hereby agreed by and between the parties hereto as follows:

**ARTICLE I
DEFINITIONS**

For purposes of the Agreement, the following terms are defined as follows:

1.1 “Board” means the Board of Directors of the Company.

1.2 “Cause” means the occurrence of any one or more of the following:

(a) any willful act or omission by Executive constituting material dishonesty, fraud or other malfeasance against the Company;

(b) Executive’s conviction of a felony under the laws of the United States or any state thereof or any other jurisdiction in which the Company conducts business;

(c) Executive’s debarment by the United States Food and Drug Administration from working in or providing services to any pharmaceutical or biotechnology company under the Generic Drug Enforcement Act of 1992, or other ineligibility under any law or regulation to perform Executive’s duties to the Company; or

(d) Executive’s breach of any of the material policies of the Company.

1.3 “Change in Control” shall have the meaning set forth in the Plan.

1.4 “Code” means the Internal Revenue Code of 1986, as amended.

1.5 “Company” means Geron Corporation, a Delaware corporation, and any successor thereto.

1.6 “Comparable Employment” means employment on terms which provide Executive with (a) the same or greater rate of base salary as in effect immediately prior to Executive’s termination, (b) the same, an equivalent or a higher job title and level of responsibility as Executive had immediately prior to Executive’s termination, (c) the equivalent or a higher bonus opportunity as the bonus opportunity for the calendar year preceding the calendar year in which Executive’s termination occurs, and (d) a principal work location that is (i) no more than (A) forty-five (45) miles from Executive’s principal work location immediately prior to Executive’s termination with housing support and travel reimbursement no less favorable than the reimbursement provided pursuant to Section 3.5 of this Agreement and (B) thirty (30) miles farther from Executive’s principal weekday residence than Executive’s principal work location was immediately prior to Executive’s termination or (ii) located within thirty (30) miles of Executive’s permanent residence, which as of the date of this Agreement is located in Austin, Texas.

1.7 “Covered Termination” means an Involuntary Termination Without Cause that occurs at any time, *provided* that such termination constitutes a “separation from service” within the meaning of Section 409A of the Code and the regulations promulgated thereunder, including without limitation Treasury Regulation Section 1.409A-1(h) (a “**Separation from Service**”).

1.8 “Involuntary Termination Without Cause” means Executive’s dismissal or discharge other than (i) for Cause or (ii) following an involuntary or voluntary filing of a petition under Chapters 7 or 11 of Title 11 of the United States Code Section 101 et. seq., an assignment for the benefit of creditors, a liquidation of the Company’s assets in a formal proceeding or otherwise or any other event of insolvency by the Company, in any case, without an offer of Comparable Employment by the Company or a successor, acquirer, or affiliate of the Company. For the purposes of this Agreement, the termination of Executive’s employment due to Executive’s death or disability will not constitute a termination for Cause.

1.9 “Plan” means the Company’s 2011 Equity Incentive Award Plan, as amended.

ARTICLE II EMPLOYMENT BY THE COMPANY

2.1 Position and Duties. Subject to the terms set forth herein, the Company shall employ Executive in the position of Chief Executive Officer, such employment to commence no later than September 29, 2011 (the date Executive commences employment hereunder, the “**Commencement Date**”). During the term of Executive’s employment with the Company, Executive will report to the Board or its designee. Executive shall serve in an employee capacity and shall perform such duties as are assigned to Executive by the Board and, except as otherwise instructed by the Board, such other duties as are customarily associated with the position of Chief Executive Officer. During the term of Executive’s employment with the Company, Executive will devote Executive’s best efforts and substantially all of Executive’s business time and attention to the business and affairs of the Company (except for vacation periods as set forth herein and reasonable periods of illness or other incapacities permitted by the Company’s general employment policies or as otherwise set forth in this Agreement). The Company shall appoint Executive as a member of the Board and, during the period of time Executive serves as Chief Executive Officer hereunder, shall nominate Executive for reelection as a member of the Board and use its best efforts to cause Executive to be so elected.

2.2 Employment at Will. Both the Company and Executive acknowledge and agree that Executive's employment with the Company is "at-will" and not for any specified time, and may be terminated at any time by Executive or the Company, with or without cause, and with or without prior notice; *provided, however*, that if Executive's employment with the Company is terminated, Executive will be eligible to receive certain severance payments and benefits as set forth in Article IV below.

2.3 Employment Policies. The employment relationship between the parties hereto shall be governed by the general employment policies and practices of the Company, including but not limited to those policies relating to the protection of confidential information and assignment of inventions. In the event of a conflict between the terms of this Agreement and the Company's general employment policies or practices, this Agreement shall control.

ARTICLE III COMPENSATION

3.1 Base Salary. During the term of Executive's employment with the Company, Executive shall receive an annual base salary of \$550,000, subject to increase in the sole discretion of the Board (the "**Base Salary**"), payable in accordance with the regular payroll practices of the Company.

3.2 Bonus. Executive shall be eligible to earn, for each fiscal year of the Company ending during the term of Executive's employment with the Company, an annual discretionary cash bonus (an "**Annual Bonus**") targeted at sixty percent (60%) of Executive's Base Salary. The Annual Bonus shall be paid on the date on which annual bonuses are paid to the Company's senior executives generally, but in no event later than March 15th of the fiscal year following the year in which the Annual Bonus is earned.

3.3 Stock Option. As soon as practicable following the Commencement Date, the Company shall grant Executive an option to purchase one million (1,000,000) shares of Company common stock (the "**Option**") having an exercise price equal to the closing trading price of a share of Company common stock on the date of grant. The Option shall vest with respect to 1/8th of the shares initially subject thereto on the six-month anniversary of the Commencement Date and with respect to 1/48th of the shares initially subject thereto on each monthly anniversary of the Commencement Date thereafter, subject to Executive's continued service to the Company through the applicable vesting date, *provided*, that upon the occurrence of a Change in Control, subject to Executive's continued service to the Company through the date of such Change in Control, the Option shall vest and become exercisable with respect to one hundred percent (100%) of the unvested shares subject thereto. The Option shall be exercisable in full on the date of grant subject to Executive entering into a restricted stock purchase agreement with respect to any unvested shares. Executive shall be permitted to exercise any or all of the Option, whether or not vested. The Option otherwise shall be subject to and governed in all respects by the terms of the Plan and the option agreement to be entered into between the Company and Executive.

3.4 Standard Company Benefits; Vacation. Executive shall be entitled to all rights and benefits for which Executive is eligible under the terms and conditions of the Company's benefit and compensation plans, practices, policies and programs, as in effect from time to time, that are provided by the Company to its senior executives generally. Executive will be eligible for vacation as an executive under the Company's vacation policy, as such policy may be modified from time to time.

3.5 Housing Allowance and Reimbursement For Personal Travel. During Executive's employment so long as his primary residence is located in Austin, Texas, the Company will provide Executive with reimbursement for out-of-pocket rent of not more than \$2,000 per month (the "Housing Allowance") actually incurred by Executive for his San Francisco Bay Area housing. In addition, during Executive's employment so long as his primary residence is located in Austin, Texas, the Company will reimburse Executive for the actually incurred, reasonable out-of-pocket costs of his weekly commute between the San Francisco Bay Area and Austin, Texas; provided that in no event shall such amounts provided to Executive pursuant to this sentence exceed in the aggregate \$20,000 per year. Any reimbursement pursuant to this Section 3.5 shall be subject to the Company's policies for reimbursement as may be in place from time-to-time. To the extent that any reimbursements payable pursuant to this Agreement are subject to the provisions of Section 409A of the Code, such reimbursements shall be paid to Executive no later than December 31 of the year following the year in which the expense was incurred, the amount of expenses reimbursed in one year shall not affect the amount eligible for reimbursement in any subsequent year, and Executive's right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

ARTICLE IV SEVERANCE BENEFITS AND RELEASE

4.1 Severance Benefits.

(i) Payment of Accrued Obligations Upon Termination of Employment. Upon a termination of Executive's employment for any reason at any time following the Commencement Date, the Company shall pay to in a single lump-sum cash payment within thirty (30) days following the date of termination, the aggregate amount of Executive's (A) earned but unpaid Base Salary, (B) incurred but unreimbursed business expenses and (C) accrued but unpaid vacation pay (collectively, the "**Accrued Obligations**").

(ii) Severance Upon Covered Termination. If Executive's employment terminates due to a Covered Termination at any time after the Commencement Date, then, in addition to the Accrued Obligations:

(a) Executive shall be paid any unpaid Annual Bonus to which Executive would have become entitled for any fiscal year of the Company that ends on or before the termination date had Executive remained employment through the payment date, payable in a single lump-sum payment on the date on which annual bonuses are paid to the Company's senior executives generally for such fiscal year, but in no event later than March 15th following the end of the fiscal year to which the Annual Bonus relates;

(b) Executive shall be paid an aggregate amount equal to twenty-four (24) months of Executive's Base Salary in effect on the date of termination, payable to Executive in a single lump-sum amount on the sixtieth (60th) day following the termination date;

(c) Executive and Executive's covered dependents will be eligible to continue their health care benefit coverage as permitted by COBRA (Internal Revenue Code Section 4980B) at the same cost to Executive as in effect immediately prior to the Covered Termination for the one (1)-year period following the Covered Termination, and be entitled to maintain coverage for Executive and Executive's eligible dependents at Executive's own expense for the balance of the period that Executive is entitled to coverage under COBRA; and

(d) the Option, along with any subsequent options or other exercisable equity interest in the Company held by Executive shall remain outstanding and exercisable through the earlier of (i) the second anniversary of the date of termination or (ii) the original expiration date of the option or other equity interest.

Notwithstanding the foregoing, the amounts payable under this Article IV, other than the Annual Bonus and the extended exercisability set forth in Section 4.1(d), shall be reduced by the amount of severance or other cash compensation, if any, payable under the Company's Change of Control Severance Plan. For the avoidance of doubt, all amounts payable under this Agreement shall be subject to applicable federal, state, local or foreign tax withholding requirements.

4.2 Parachute Payments. If any payment or benefit Executive would receive from the Company or otherwise in connection with a Change in Control ("**Payment**") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) be subject to the excise tax imposed by Section 4999 of the Code (the "**Excise Tax**"), then such Payment shall be reduced to the Reduced Amount. The "**Reduced Amount**" shall equal either (x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount, after taking into account all applicable federal, state and local employment and income taxes and the Excise Tax (in each case, computed at the highest applicable marginal rate), results in Executive's receipt, on an after-tax basis, of the greater amount of the Payment. If payments or benefits constituting "parachute payments" must be reduced so that the Payment equals the Reduced Amount, such reduction shall occur in the following order unless Executive elects in writing, and the Company approves, a different order: (i) reduction of cash payments; (ii) cancellation of accelerated vesting of any stock awards; and (iii) reduction of non-cash employee benefits. In the event that acceleration of vesting of stock award compensation is reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of Executive's stock awards, such that the award granted on the latest date preceding the Change in Control shall be cancelled first, unless Executive elects in writing, and the Company approves, a different order.

The Company, for general audit purposes, shall engage a nationally recognized public accounting firm (the “**Accounting Firm**”) to perform the foregoing calculations. The Company shall bear all expenses with respect to the calculations and determinations by such Accounting Firm required to be made hereunder. The Accounting Firm engaged to make the determinations hereunder shall provide its calculations, together with detailed supporting documentation, to the Company and Executive within fifteen (15) calendar days after the date on which Executive’s right to a Payment is triggered (if requested at that time by the Company or Executive) or such other time as requested by the Company or Executive. If the Accounting Firm determines that no Excise Tax is payable with respect to a Payment, either before or after the application of the Reduced Amount, it shall furnish to the Company and Executive an opinion reasonably acceptable to Executive that no Excise Tax will be imposed with respect to such Payment. Any good faith determinations of the Accounting Firm made hereunder shall be final, binding and conclusive upon the Company and Executive.

4.3 Release. Notwithstanding the foregoing, Executive’s right to receive the amounts provided for in Sections 4.1(ii) and 4.2 above shall be subject to and conditioned upon Executive’s execution and non-revocation of a release of claims in substantially the form attached hereto as Exhibit A (the “**Release**”) (as such form may be modified to take into account changes in the law) within fifty (50) days following the termination date. Such Release shall specifically relate to all of Executive’s rights and claims in existence at the time of such execution and shall confirm Executive’s obligations under the Proprietary Information Agreement (as defined below). Executive shall have a certain period of time to consider whether to execute such Release, as set forth in the Release, and Executive may revoke such Release within seven (7) business days after execution. In the event Executive does not execute such Release within the applicable period, or if Executive revokes such Release within the subsequent seven (7) business day period, none of the payments and benefits set forth in Sections 4.1(ii) and 4.2 above shall be payable to Executive under this Agreement.

4.4 Six-Month Delay. Notwithstanding any provision to the contrary in this Agreement, if Executive is at the time of Executive’s Separation from Service a “specified employee” within the meaning of Section 409A(a)(2)(B)(i) of the Code, then, to the extent delayed commencement of all or any portion of the benefits and payments to which Executive is entitled under this Agreement is required in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, such benefits and payments shall not be paid to Executive until the earlier of (a) the first business day following the expiration of the six (6)-month period following Executive’s Separation from Service or (b) the first business day following the date of Executive’s death. Upon the expiration of the applicable period, all payments deferred pursuant to this Section 4.4 shall be paid in a single lump sum to Executive (or Executive’s estate or beneficiaries, if applicable), without interest, and any remaining payments due under this Agreement shall be paid as otherwise provided herein. For purposes of Section 409A of the Code and the Department of Treasury regulations issued thereunder, Executive’s right to receive the payments and benefits payable pursuant to the Agreement shall be treated as a right to receive a series of separate payments and accordingly, each payment shall at all times be considered a separate and distinct payment.

4.5 Mitigation. Executive shall not be required to mitigate the amount of any payment provided under this Agreement by seeking other employment or otherwise, nor shall the amount of any payment provided for under this Agreement be reduced by any compensation earned by Executive as a result of employment by another employer or by any retirement benefits received by Executive after the date of termination or otherwise.

**ARTICLE V
PROPRIETARY INFORMATION OBLIGATIONS**

5.1 Agreement. Executive agrees that, concurrently with the execution of this agreement, Executive shall execute the Company's Proprietary Information and Inventions Agreement attached hereto as Exhibit B (the "**Proprietary Information Agreement**").

5.2 Remedies. Executive acknowledges that Executive's duties under the Proprietary Information Agreement shall survive termination of Executive's employment with the Company and the termination of this Agreement. Executive acknowledges that any remedy at law for any breach or threatened breach by Executive of the provisions of the Proprietary Information Agreement would be inadequate, and Executive therefore agrees that the Company shall be entitled to injunctive relief in case of any such breach or threatened breach.

**ARTICLE VI
OUTSIDE ACTIVITIES**

6.1 No Other Employment. Except with the prior written consent of the Board, Executive shall not, during the term of Executive's employment with the Company, undertake or engage in any other employment, occupation or business enterprise. Notwithstanding the foregoing, during the term of Executive's employment with the Company, Executive may (a) undertake or engage in other employment, occupation or business enterprise in which Executive is a passive investor, and/or (b) engage in civic and not-for-profit activities, in each case, so long as such activities do not materially interfere with the performance of Executive's duties hereunder.

6.2 No Conflicting Business Interests. During the term of Executive's employment with the Company, except on behalf of the Company, Executive shall not, directly or indirectly, whether as an employee, officer, director, stockholder, partner, proprietor, associate, representative, consultant, or in any other capacity whatsoever, engage in, become financially interested in, be employed by or have any business connection with any other person, corporation, firm, partnership or other entity whatsoever known by Executive to compete directly with the Company, throughout the world, in any line of business engaged in (or planned to be engaged in) by the Company; *provided, however,* that notwithstanding anything to the contrary herein, Executive may own securities of any competitor corporation as a passive investor, so long as Executive's direct holdings in any one such corporation do not, in the aggregate, constitute more than one percent (1%) of the voting stock of such corporation at any time.

**ARTICLE VII
NONINTERFERENCE**

While employed by the Company and for one (1) year immediately following the date on which Executive terminates employment or otherwise ceases to provide services to the Company, Executive agrees not to interfere with the business of the Company by soliciting or attempting to solicit any employee of the Company to terminate such employee's employment in order to become an employee, consultant or independent contractor to or for any competitor of the Company. Executive's duties under this Article VII shall survive termination of Executive's employment with the Company and the termination of this Agreement.

**ARTICLE VIII
GENERAL PROVISIONS**

8.1 Notices. Any notices provided hereunder must be in writing and shall be deemed effective upon the earlier of (i) personal delivery (including personal delivery by telex) or (ii) the third (3rd) day after being mailed by first class mail, addressed to the Company at its primary office location and to Executive at Executive's address then listed on the Company payroll, or at such other address as the parties may later designate in writing.

8.2 Section 409A. To the extent applicable, this Agreement shall be interpreted in accordance with Section 409A of the Code and Department of Treasury regulations and other interpretative guidance issued thereunder, including without limitation any such regulations or other such guidance that may be issued after the Commencement Date ("**Section 409A**"). Notwithstanding any provision of this Agreement to the contrary, in the event that following the Commencement Date, the Company determines in good faith that any compensation or benefits payable under this Agreement may not be either exempt from or compliant with Section 409A, the Company may adopt such amendments to this Agreement or adopt other policies or procedures (including amendments, policies and procedures with retroactive effect), or take any other commercially reasonable actions necessary or appropriate to preserve the intended tax treatment of the compensation and benefits payable hereunder, including without limitation actions intended to (i) exempt the compensation and benefits payable under this Agreement from Section 409A, and/or (ii) comply with the requirements of Section 409A, provided, that this Section 8.2 does not, and shall not be construed so as to, create any obligation on the part of the Company to adopt any such amendments, policies or procedures or to take any other such actions or to create any liability on the part of the Company for any failure to do so.

8.3 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision hereof and this Agreement will continue in full force and effect without such provision.

8.4 Waiver. If either party should waive any breach of any provisions of this Agreement, such party shall not be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

8.5 Complete Agreement. This Agreement, together with the exhibits attached hereto and the Proprietary Information Agreement, constitutes the entire agreement between Executive and the Company and is the complete, final, and exclusive embodiment of their agreement with regard to the subject matter herein (except for the Plan, any successor thereto or the Company's Change of Control Severance Plan). This Agreement supersedes any prior agreement between Executive and the Company or any predecessor employer in its entirety. Executive and the Company acknowledge and agree that this Agreement is entered into without reliance on any promise or representation other than those expressly contained herein and cannot be modified or amended except in a writing signed by a duly-authorized officer of the Company.

8.6 Counterparts. This Agreement may be executed in one or more counterparts, each of which will have the same force and effect as an original, but all of which taken together will constitute one and the same Agreement.

8.7 Headings. The headings of the sections hereof are inserted for convenience of reference only and shall not be deemed to constitute a part of this Agreement nor to affect the meaning or interpretation of any part of this Agreement.

8.8 Successors and Assigns. This Agreement is intended to be binding on, inure to the benefit of and be enforceable by Executive and the Company and their respective successors, assigns, heirs, executors and administrators, except that Executive may not assign any of Executive's duties or rights hereunder without the prior written consent of the Company, which consent shall not be withheld unreasonably.

8.9 Arbitration. In the event of any contractual, statutory or tort dispute or claim relating to or arising out of Executive's employment relationship with the Company (including but not limited to any claims of wrongful termination or age, sex, race, or other discrimination, but not including workers' compensation claims), Executive and the Company agree that all such disputes will be finally resolved by binding arbitration conducted by a single neutral arbitrator associated with the American Arbitration Association in Menlo Park, California. Executive and the Company hereby waive their respective rights to have any such disputes or claims tried to a judge or jury. However, the Company agrees that this arbitration provision will not apply to any claim, by either Executive or the Company, for injunctive relief. The administrative costs of any arbitration proceeding between Executive and the Company and the fees and costs of the arbitrator shall be borne by the Company.

8.10 Attorneys' Fees. If either party hereto brings any action to enforce its respective rights hereunder, each party in any such action shall be responsible for its own attorneys' fees and costs incurred in connection with such action.

8.11 Acknowledgement. Executive acknowledges that Executive (a) has had the opportunity to discuss this matter with and obtain advice from independent counsel of Executive's own choice and has been advised to do so by the Company, (b) has carefully read and fully understands all the provisions of this Agreement, and (c) is knowingly and voluntarily entering into this Agreement. Executive represents that Executive (i) is familiar with the restrictive covenants set forth in the Proprietary Information Agreement and (ii) is fully aware of his obligations thereunder.

8.12 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the law of the State of California, without regard to the principles of conflict of laws thereof.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have executed this Agreement on the on the day and year first above written.

**GERON CORPORATION,
a Delaware corporation**

By: /s/ Hoyoung Huh
Hoyoung Huh, M.D., Ph.D.
Executive Chairman

Date: September 29, 2011

Acknowledged, accepted and agreed this 29th day of September, 2011:

/s/ John A. Scarlett
John A. Scarlett, M.D.

EXHIBIT A

General Release

EXHIBIT B

Proprietary Information and Inventions Agreement

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

I, John A. Scarlett, Chief Executive Officer of Geron Corporation, certify that:

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

Date: November 3, 2011

/s/ JOHN A. SCARLETT

John A. Scarlett

Chief Executive Officer

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

I, David L. Greenwood, President and Chief Financial Officer of Geron Corporation, certify that:

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

Date: November 3, 2011

/s/ DAVID L. GREENWOOD

David L. Greenwood

President and Chief Financial Officer

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

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

- (i) the accompanying quarterly report on Form 10-Q of the Company for the quarter ended September 30, 2011 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 3, 2011

/s/ JOHN A. SCARLETT

John A. Scarlett

Chief Executive Officer

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

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

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

- (i) the accompanying quarterly report on Form 10-Q of the Company for the quarter ended September 30, 2011 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 3, 2011

/s/ DAVID L. GREENWOOD

David L. Greenwood

President and Chief Financial Officer

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