GERON CORP
Form 10-Q
May 02, 2019

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 March 31, 2019

OR

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

For the transition period from to .

Commission File Number: 0-20859

GERON CORPORATION

(Exact name of registrant as specified in its charter)

| DELAWARE | 75-2287752 |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |
| 149 COMMONWEALTH DRIVE, SUITE 2070, MENLO PARK, CA | 94025 |
| (Address of principal executive offices) | (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 every Interactive Data File required to be submitted 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 such files). Yes No

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

| | |
|---|---|
| Large accelerated filer | Accelerated filer |
| Non-accelerated filer | Smaller reporting company |
| Emerging growth company | |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the

Exchange Act.

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

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

| Title of each class: | Trading symbol(s): | Name of each exchange on which registered: |
|---|---|---|
| Common Stock, $0.001 par value | GERN | The Nasdaq Stock Market LLC |

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

| Class: | Outstanding at April 29, 2019: |
|---|---|
| Common Stock, $0.001 par value | 186,516,047 shares |

GERON CORPORATION

QUARTERLY REPORT ON FORM 10-Q

FOR THE QUARTER ENDED MARCH 31, 2019

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PART I. FINANCIAL INFORMATION

ITEM 1. CONDENSED FINANCIAL STATEMENTS (UNAUDITED)
GERON CORPORATION

CONDENSED BALANCE SHEETS

(IN THOUSANDS)

| | MARCH 31, 2019 (UNAUDITED) | DECEMBER 31, 2018 (NOTE 1) |
|---|---|---|
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | $ 6,800 | $ 10,575 |
| Restricted cash | 270 | 269 |
| Marketable securities | 145,180 | 152,714 |
| Interest and other receivables | 976 | 1,168 |
| Prepaid assets | 2,723 | 1,332 |
| Total current assets | 155,949 | 166,058 |
| Noncurrent marketable securities | 17,871 | 18,582 |
| Property and equipment, net | 89 | 59 |
| Operating lease, right-of-use asset | 571 | — |
| Other assets | 1,186 | 585 |
| | $ 175,666 | $ 185,284 |
| | | |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| Current liabilities: | | |
| Accounts payable | $ 913 | $ 982 |
| Accrued compensation and benefits | 1,661 | 2,642 |
| Amount due to Janssen Biotech, Inc. | 2,071 | 2,610 |
| Operating lease liability | 571 | — |
| Accrued liabilities | 1,037 | 1,317 |
| Total current liabilities | 6,253 | 7,551 |
| Commitments and contingencies | | |
| Stockholders' equity: | | |
| Common stock | 186 | 186 |
| Additional paid-in capital | 1,190,651 | 1,189,194 |
| Accumulated deficit | (1,021,523) | (1,011,464) |
| Accumulated other comprehensive gain (loss) | 99 | (183) |
| Total stockholders' equity | 169,413 | 177,733 |
| | $ 175,666 | $ 185,284 |

See accompanying notes.

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GERON CORPORATION

CONDENSED STATEMENTS OF OPERATIONS

(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)

(UNAUDITED)

| | THREE MONTHS ENDED MARCH 31, | |
|---|---|---|
| | 2019 | 2018 |
| Revenues: | | |
| License fees and royalties | $57 | $318 |
| | | |
| Operating expenses: | | |
| Research and development | 5,906 | 2,440 |
| General and administrative | 5,452 | 5,315 |
| Total operating expenses | 11,358 | 7,755 |
| Loss from operations | (11,301) | (7,437) |
| Interest and other income | 1,162 | 394 |
| Change in fair value of equity investment | 98 | (125) |
| Other expense | (18) | (18) |
| Net loss | $(10,059) | $(7,186) |
| | | |
| Basic and diluted net loss per share | $(0.05) | $(0.04) |
| | | |
| Shares used in computing basic and diluted net loss per share | 186,393,128 | 160,525,947 |

See accompanying notes.

GERON CORPORATION

CONDENSED STATEMENTS OF COMPREHENSIVE LOSS

(IN THOUSANDS)

(UNAUDITED)

| | THREE MONTHS ENDED MARCH 31, | |
|---|---|---|
| | 2019 | 2018 |
| Net loss | $(10,059) | $(7,186) |
| Net unrealized gain (loss) on marketable securities | 282 | (124) |
| Comprehensive loss | $(9,777) | $(7,310) |

See accompanying notes.

GERON CORPORATION

CONDENSED STATEMENTS OF STOCKHOLDERS' EQUITY

(IN THOUSANDS, EXCEPT SHARE DATA)

(UNAUDITED)

| | Common Stock Shares | Amount | Additional Paid-In Capital | Accumulated Deficit | Accumulated Other Comprehensive Gain (Loss) | Total Stockholders' Equity |
|---|---|---|---|---|---|---|
| Balance at December 31, 2017 | 159,877,239 | $ 160 | $1,089,684 | $(985,840) | $ (207) | $ 103,797 |
| Cumulative effect of accounting principle change | — | — | — | 1,393 | — | 1,393 |
| Net loss | — | — | — | (7,186) | — | (7,186) |
| Other comprehensive loss | — | — | — | — | (124) | (124) |
| Issuance of common stock in connection with at market offering, net of issuance costs of $48 | 776,788 | 1 | 1,552 | — | — | 1,553 |
| Stock-based compensation related to issuance of common stock and options in exchange for services | 8,308 | — | 71 | — | — | 71 |
| Stock-based compensation for equity-based awards to employees and directors | — | — | 1,614 | — | — | 1,614 |
| 401(k) contribution | — | — | 10 | — | — | 10 |
| Balance at March 31, 2018 | 160,662,335 | $ 161 | $1,092,931 | $(991,633) | $ (331) | $ 101,128 |
| | | | | | | |
| Balance at December 31, 2018 | 186,392,682 | $ 186 | $1,189,194 | $(1,011,464) | $ (183) | $ 177,733 |
| Net loss | — | — | — | (10,059) | — | (10,059) |
| Other comprehensive income | — | — | — | — | 282 | 282 |
| Stock-based compensation related to issuance of common stock in | 13,365 | — | 22 | — | — | 22 |

| | | | | | | |
|---|---|---|---|---|---|---|
| exchange for services | | | | | | |
| Stock-based compensation for equity-based awards to employees and directors | — | — | 1,426 | — | — | 1,426 |
| 401(k) contribution | — | — | 9 | — | — | 9 |
| Balance at March 31, 2019 | 186,406,047 | $ 186 | $1,190,651 | $(1,021,523) | $ 99 | $ 169,413 |

See accompanying notes.

GERON CORPORATION

CONDENSED STATEMENTS OF CASH FLOWS

(IN THOUSANDS)

(UNAUDITED)

| | THREE MONTHS ENDED MARCH 31, | |
|---|---|---|
| | 2019 | 2018 |
| Cash flows from operating activities: | | |
| Net loss | $(10,059) | $(7,186) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Depreciation and amortization | 15 | 16 |
| Accretion and amortization on investments, net | (482) | 24 |
| Change in fair value of equity investment, including foreign currency translation | (103) | 125 |
| Stock-based compensation for services by non-employees | 22 | 71 |
| Stock-based compensation for employees and directors | 1,426 | 1,614 |
| Amortization related to 401(k) contributions | 9 | 10 |
| Changes in assets and liabilities: | | |
| Current and noncurrent assets | (1,532) | 89 |
| Current liabilities | (2,034) | (2,131) |
| Net cash used in operating activities | (12,738) | (7,368) |
| | | |
| Cash flows from investing activities: | | |
| Purchases of property and equipment | (45) | — |
| Purchases of marketable securities | (44,092) | (19,768) |
| Proceeds from maturities of marketable securities | 53,101 | 17,160 |
| Net cash provided by (used in) investing activities | 8,964 | (2,608) |
| | | |
| Cash flows from financing activities: | | |
| Proceeds from issuances of common stock, net of issuance costs | — | 1,553 |
| Net cash provided by financing activities | — | 1,553 |
| Net decrease in cash, cash equivalents and restricted cash | (3,774) | (8,423) |
| Cash, cash equivalents and restricted cash at the beginning of the period | 10,844 | 16,603 |
| Cash, cash equivalents and restricted cash at the end of the period | $7,070 | $8,180 |

See accompanying notes.

GERON CORPORATION

NOTES TO CONDENSED FINANCIAL STATEMENTS

MARCH 31, 2019

(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 financial statements 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, all adjustments (consisting only of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the three months ended March 31, 2019 are not necessarily indicative of the results that may be expected for the year ending December 31, 2019 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, 2018, included in the Company’s Annual Report on Form 10-K. The accompanying condensed balance sheet as of December 31, 2018 has been derived from audited financial statements at that date.

### Net Loss Per Share

Basic net income (loss) per share is calculated by dividing net income (loss) by the weighted-average number of shares of common stock outstanding during the periods presented, without consideration for potential common shares. Diluted net income per share would be calculated by adjusting the weighted-average number of shares of common stock outstanding for the dilutive effect of potential common shares outstanding for the periods presented, as determined using the treasury-stock method. Potential dilutive securities consist of outstanding stock options and a warrant to purchase our common stock. Diluted net loss per share excludes potential dilutive securities outstanding for all periods presented as their effect would be anti-dilutive. Accordingly, basic and diluted net loss per share is the same for all periods presented in the accompanying condensed statements of operations. Since we incurred a net loss for the three months ended March 31, 2019 and 2018, the diluted net loss per share calculation excludes potential dilutive securities of 32,714,257 and 26,245,422, respectively, related to outstanding stock options and warrant as their effect would have been anti-dilutive.

### Use of Estimates

The accompanying financial statements have been prepared in accordance with U.S. generally accepted accounting principles, or GAAP. The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, we evaluate our estimates, including those related to accrued liabilities, revenue recognition, fair value of marketable securities and equity investments, income taxes, and stock-based compensation. We base our estimates on historical experience and on various other market specific and relevant assumptions that we believe to be reasonable under the circumstances. Actual results could differ from those estimates.

### Fair Value of Financial Instruments

Cash Equivalents and Marketable Securities

We consider all highly liquid investments with an original maturity of three months or less to be cash equivalents. We are subject to credit risk related to our cash equivalents and marketable securities. Our marketable debt securities include commercial paper and corporate notes.

We classify our marketable debt 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 statements of operations. We recognize a charge when the declines in the fair values below the amortized cost bases 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 before recovery of the amortized cost basis. Declines in market value judged as other-than-temporary result in a charge to interest and other income. We have not recorded any other-than-temporary

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NOTES TO CONDENSED FINANCIAL STATEMENTS

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impairment charges on our available-for-sale securities for the three months ended March 31, 2019 and 2018. See Note 2 on Fair Value Measurements.

Equity Investments

With the adoption of ASU No. 2016-01, Financial Instruments - Overall: Recognition and Measurement of Financial Assets and Financial Liabilities, or ASU 2016-01, beginning January 1, 2018, we measure our investment in equity securities at fair value at each reporting period. Changes in fair value resulting from observable price changes are included in change in fair value of equity investment and changes in fair value resulting from foreign currency translation are included in other expense in our condensed statements of operations.

Leases

At the inception of an arrangement, we determine whether the arrangement is or contains a lease based on the unique facts and circumstances present. Operating leases are included in operating lease, right-of-use assets and lease liabilities in our condensed balance sheets. Right-of-use assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease liabilities and their corresponding right-of-use assets are recorded based on the present value of remaining lease payments over the expected lease term. The interest rate implicit in lease contracts is typically not readily determinable. As such, to calculate the net present value of lease payments, we apply our incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment as of the lease commencement date. We may adjust the right-of-use assets for certain adjustments, such as initial direct costs paid or incentives received. In addition, we include any options to extend or terminate the lease in the expected lease term when it is reasonably certain that we will exercise any such option. Lease expense is recognized on a straight-line basis over the expected lease term.

For lease agreements entered into after January 1, 2019 that include lease and non-lease components, such components are generally accounted for separately. For our office space lease, as a result of us having elected to adopt the package of practical expedients under accounting transition guidance, we account for the lease and non-lease components, such as common area maintenance, as a single lease component. We have also elected not to recognize on our condensed balance sheets leases with terms of one year or less. See “New Accounting Pronouncements – Recently Adopted” in this Note 1 on Summary of Significant Accounting Policies for additional information on the adoption of the new accounting standard for leases.

Revenue Recognition

Beginning January 1, 2018, we recognize revenue in accordance with the provisions of Accounting Standards Codification Topic 606, Revenue from Contracts with Customers, or Topic 606. In determining the appropriate amount and timing of revenue to be recognized under this guidance, we perform the following five steps: (i) identify the contract(s) with our customer; (ii) identify the promised goods or services in the agreement and determine whether they are performance obligations, including whether they are distinct in the context of the agreement; (iii) measure the

transaction price, including the constraint on variable consideration; (iv) allocate the transaction price to the performance obligations based on stand-alone selling prices; and (v) recognize revenue when (or as) we satisfy each performance obligation.

A performance obligation is a promise in an agreement to transfer a distinct good or service to the customer and is the unit of account in Topic 606. Significant management judgment is required to determine the level of effort required and the period over which completion of the performance obligations is expected under an agreement. If reasonable estimates regarding when performance obligations are either complete or substantially complete cannot be made, then revenue recognition is deferred until a reasonable estimate can be made. Revenue is then recognized over the remaining estimated period of performance using the cumulative catch-up method.

We allocate the total transaction price to each performance obligation based on the estimated relative stand-alone selling prices of the promised goods or services underlying each performance obligation. Estimated selling prices for license rights are calculated using an income approach model and include the following key assumptions, judgments and estimates: the development timeline, revenue forecast, commercialization expenses, discount rate and probabilities of technical and regulatory success.

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NOTES TO CONDENSED FINANCIAL STATEMENTS

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(UNAUDITED)

Following is a description of the principal activities from which we generate revenue. License fees and royalty revenue primarily represent amounts earned under agreements that out-license our technology to various companies.

License and/or Collaboration Agreements

We have entered into several license agreements with various oncology, diagnostics, research tools and biologics production companies. Economic terms in these agreements may include non-refundable upfront license payments in cash or equity securities, annual license maintenance fees, cost sharing arrangements, milestone payments, royalties on future sales of products, or any combination of these items. Non-refundable upfront fees, annual license maintenance fees and funding of research and development activities are considered fixed, while milestone payments and royalties are identified as variable consideration.

Licenses of Intellectual Property. If we determine the license to intellectual property is distinct from the other performance obligations identified in the agreement and the licensee can use and benefit from the license, we recognize revenue from non-refundable upfront fees allocated to the license upon the completion of the transfer of the license to the licensee. For such licenses, we recognize revenue from annual license maintenance fees upon the start of the new license period. For licenses that are bundled with other performance obligations, we assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue from non-refundable upfront fees or annual license maintenance fees. At each reporting period, we reassess the progress and, if necessary, adjust the measure of performance and related revenue recognition.

Milestone Payments. At the inception of each agreement that includes milestone payments, we evaluate whether the milestones are considered probable of being achieved and estimate the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the value of the associated milestone is included in the transaction price. For milestones that we do not deem to be probable of being achieved, the associated milestone payments are fully constrained and the value of the milestone is excluded from the transaction price with no revenue being recognized. Milestone payments that are not within our control, such as regulatory-related accomplishments, are not considered probable of being achieved until those accomplishments have been communicated by the relevant regulatory authority. Once the assessment of probability of achievement becomes probable, we recognize revenue for the milestone payment. At each reporting period, we assess the probability of achievement of each milestone under our current agreements.

Royalties. For agreements with sales-based royalties, including milestone payments based on the level of sales, where the license is deemed to be the predominant item to which the royalties relate, we recognize revenue at the later of (a) when the related sales occur, or (b) when the performance obligation, to which some or all of the royalty has been allocated, has been satisfied (or partially satisfied). At each reporting period, we estimate the sales incurred by each licensee based on historical experience and accrue the associated royalty amount.

Cost Sharing Arrangements. Research and development and other expenses being shared by both parties under an agreement are recorded as earned or owed based on the performance obligations by both parties under the respective

agreement. For arrangements in which we and our collaboration partner in the agreement are exposed to significant risks and rewards that depend on the commercial success of the activity, we recognize payments between the parties on a net basis and record such amounts as a reduction or addition to research and development expense. For arrangements in which we have agreed to perform certain research and development services for our collaboration partner and are not exposed to significant risks and rewards that depend on the commercial success of the activity, we recognize the respective cost reimbursements as revenue under the collaborative agreement over time in a manner proportionate to the costs we incurred to perform the services using the input method.

Restricted Cash

Restricted cash consists of funds maintained in a separate certificate of deposit account for credit card purchases.

Research and Development Expenses

Research and development expenses consist of expenses incurred in identifying, developing and testing product candidates resulting from our independent efforts as well as efforts associated with collaborations. These expenses include, but are not limited to, in-process research and development acquired in an asset acquisition and deemed to have no alternative future use, payroll and personnel expense, lab supplies, non-clinical studies, clinical trials, including support for investigator-sponsored clinical trials, raw

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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, our proportionate share of research and development costs under cost sharing arrangements with collaboration partners and research-related overhead. Research and development costs are expensed as incurred, including costs incurred under our collaboration and/or license agreements.

Until the sponsorship responsibilities for imetelstat transfer from Janssen to us, including the U.S. Investigational New Drug, or IND, application and all foreign regulatory applications, Janssen will continue conducting ongoing clinical trials of imetelstat during the transition of the program to us. For the clinical development activities being conducted by Janssen under the collaboration and license agreement, or Collaboration Agreement, which was terminated effective September 28, 2018, we monitor patient enrollment levels and related activities to the extent possible through discussions with Janssen personnel and base our estimates of clinical trial costs on the best information available at the time. However, additional information may become available to us which would allow us to make a more accurate estimate in future periods. In this event, we may be required to record adjustments to research and development expenses in future periods when the actual level of activity becomes more certain.

Depreciation and Amortization

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

Stock-Based Compensation

We recognize stock-based compensation expense based on grant-date fair values of service-based instruments on a straight-line basis over the requisite service period, which is generally the vesting period. For performance-based stock options with vesting based on the achievement of certain strategic milestones, stock-based compensation expense 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 stock-based compensation expense is recognized until such time as the performance condition is considered probable of being met, if at all. If that assessment of probability of the performance condition changes, the impact of the change in estimate would be recognized in the period of the change. The following table summarizes the stock-based compensation expense included in operating expenses on our condensed statements of operations related to stock options and employee stock purchases for the three months ended March 31, 2019 and 2018 which was allocated as follows:

| | Three Months Ended March 31, |
|---|---|

| (In thousands) | 2019 | 2018 |
|---|---|---|
| Research and development | $240 | $155 |
| General and administrative | 1,186 | 1,459 |
| Stock-based compensation expense included in operating expenses | $1,426 | $1,614 |

As stock-based compensation expense recognized in our condensed statements of operations for the three months ended March 31, 2019 and 2018 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 data and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. We have not recognized any stock-based compensation expense for performance-based stock options in our condensed statements of operations for the three months ended March 31, 2019 and 2018, as the achievement of specified strategic milestones was not considered probable at that time.

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Stock Options

We grant service-based and performance-based options under our equity plans to employees, non-employee directors and consultants. The service-based vesting period for employee options is generally four years from the date of the option grant. Performance-based options vest upon the achievement of specified strategic milestones. The fair value of service-based and performance-based options granted during the three months ended March 31, 2019 and 2018 has been estimated at the date of grant using the Black Scholes option-pricing model with the following assumptions:

| | Three Months Ended March 31, | |
|---|---|---|
| | 2019 | 2018 |
| Dividend yield | 0% | 0% |
| Expected volatility range | 0.925 to 0.980 | 0.821 |
| Risk-free interest rate range | 2.24% to 2.56% | 2.55% |
| Expected term range | 5.25 yrs to 6.44 yrs | 5.25 yrs |

Employee Stock Purchase Plan

The fair value of employees' purchase rights during the three months ended March 31, 2019 and 2018 has been estimated using the Black Scholes option-pricing model with the following assumptions:

| | Three Months Ended March 31, | |
|---|---|---|
| | 2019 | 2018 |
| Dividend yield | 0% | 0% |
| Expected volatility range | 1.333 to 1.653 | 0.437 to 0.475 |
| Risk-free interest rate range | 2.56% to 2.63% | 1.53% to 1.76% |
| Expected term range | 6 mos to 12 mos | 6 mos to 12 mos |

Dividend yield is based on historical cash dividend payments. The expected volatility is based on historical volatilities of our stock since traded options on our common 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 and post-vesting cancellation 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.

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 stock-based awards in our condensed statements of operations.

Segment Information

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

Recent Accounting Pronouncements

New Accounting Pronouncements – Recently Adopted

In February 2016, the Financial Accounting Standards Board, or FASB, issued ASU 2016-02, Leases (Topic 842), or ASU 2016-02. ASU 2016-02 requires an entity to recognize a right-of-use asset and lease liability for all lease arrangements with terms of more than 12 months, measured at the present value of the lease payments. Recognition, measurement and presentation of expenses will depend on classification as a finance or operating lease. In July 2018, the FASB issued ASU 2018-11, Leases (Topic

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842): Targeted Improvements, or ASU 2018-11. In issuing ASU 2018-11, the FASB decided to provide another transition method in addition to the existing transition method by allowing entities to initially apply the new leases standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption.

We adopted Topic 842 on January 1, 2019 using the modified retrospective approach as allowed under ASU 2018-11, and we elected to utilize the available practical expedients. Financial results for the reporting periods beginning after January 1, 2019 are presented under Topic 842, while prior period amounts have not been adjusted and continue to be reported in accordance with our historical accounting under Accounting Standards Codification Topic 840, Leases, or Topic 840.

In connection with the adoption of Topic 842 as of January 1, 2019, we recorded an operating lease, right-of-use asset and a corresponding operating lease liability of approximately $736,000 for the net present value of remaining lease payments of our current operating lease for our office space. The adoption of Topic 842 did not have a material impact on our condensed statements of operations. See Note 4 on Operating Lease for further discussion of our operating lease obligation.

As of January 1, 2019 we also adopted ASU 2018-07, Improvements to Nonemployee Share-Based Payment Accounting, or ASU 2018-07, to simplify the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. The new guidance applies to nonemployee awards issued in exchange for goods or services used or consumed in an entity’s own operations. Since all of our share-based payments to nonemployees were fully vested as of January 1, 2019, the adoption of ASU 2018-07 did not have a material impact on our financial statements.

In August 2018, the Securities and Exchange Commission issued Release No. 33-10532 that amends and clarifies certain financial reporting requirements. The principal change to our financial reporting is the inclusion of the annual disclosure requirement of changes in stockholders’ equity in Rule 3-04 of Regulation S-X to interim periods. With the adoption of this new rule on January 1, 2019, condensed statements of stockholders’ equity for the current reporting period and the corresponding prior period are presented.

New Accounting Pronouncements – Issued But Not Yet Adopted

In June 2016, the FASB issued ASU 2016-13, Measurement of Credit Losses on Financial Instruments, or ASU 2016-13. The main objective of ASU 2016-13 is to provide financial statement users with more decision-useful information about an entity's expected credit losses on financial instruments and other commitments to extend credit at each reporting date. To achieve this objective, the amendments in this update replace the incurred loss impairment methodology currently used today with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to develop credit loss estimates. Subsequent to issuing ASU 2016-13, the FASB issued ASU 2018-19, Codification Improvements to Topic 326, Financial Instruments - Credit Losses, for the purpose of clarifying certain aspects of ASU 2016-13. ASU 2018-19 has the same effective date and transition requirements as ASU 2016-13. ASU 2016-13 will be effective for fiscal years beginning after

December 15, 2019, using a modified retrospective approach. Early adoption is permitted. We do not expect the adoption of this standard to have a material impact on our financial statements.

In August 2018, the FASB issued ASU 2018-13, Disclosure Framework — Changes to the Disclosure Requirements for Fair Value Measurement, which modifies the disclosure requirements on fair value measurements. The new standard is effective for fiscal years beginning after December 15, 2019, and early adoption is permitted. We plan to adopt ASU 2018-13 as of January 1, 2020. While we continue to assess the potential impact of this standard, we do not expect the adoption of this standard to have a material impact on our financial statements.

In November 2018, the FASB issued ASU 2018-18, Collaborative Arrangements (Topic 808): Clarifying the Interaction Between Topic 808 and Topic 606. The amended guidance precludes presenting consideration from a transaction in a collaborative arrangement as revenue from contracts with customers if the counterparty is not a customer for that transaction. The new guidance is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted. We plan to adopt ASU 2018-18 as of January 1, 2020. We do not expect the adoption of ASU 2018-18 to have a material impact on our financial statements given the termination of the Collaboration Agreement in September 2018.

GERON CORPORATION

NOTES TO CONDENSED FINANCIAL STATEMENTS

MARCH 31, 2019

(UNAUDITED)

2. FAIR VALUE MEASUREMENTS

Cash Equivalents and Marketable Securities

Cash equivalents, restricted cash and marketable securities by security type at March 31, 2019 were as follows:

| (In thousands) | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Estimated Fair Value |
|---|---|---|---|---|
| Included in cash and cash equivalents: | | | | |
| Money market funds | $ 4,750 | $ — | $ — | $ 4,750 |
| | | | | |
| Restricted cash: | | | | |
| Certificate of deposit | $ 270 | $ — | $ — | $ 270 |
| Marketable securities: | | | | |
| Commercial paper (due in less than one year) | $ 56,474 | $ 45 | $ (19) | $ 56,500 |
| Corporate notes (due in less than one year) | 88,648 | 45 | (13) | 88,680 |
| Corporate notes (due in one to two years) | 17,830 | 46 | (5) | 17,871 |
| | $ 162,952 | $ 136 | $ (37) | $ 163,051 |

Cash equivalents, restricted cash and marketable securities by security type at December 31, 2018 were as follows:

| (In thousands) | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Estimated Fair Value |
|---|---|---|---|---|
| Included in cash and cash equivalents: | | | | |
| Money market funds | $ 7,003 | $ — | $ — | $ 7,003 |
| | | | | |
| Restricted cash: | | | | |
| Certificate of deposit | $ 269 | $ — | $ — | $ 269 |
| Marketable securities: | | | | |
| Commercial paper (due in less than one year) | $ 57,594 | $ 22 | $ (29) | $ 57,587 |
| Corporate notes (due in less than one year) | 95,238 | 7 | (118) | 95,127 |
| Corporate notes (due in one to two years) | 18,647 | — | (65) | 18,582 |
| | $ 171,479 | $ 29 | $ (212) | $ 171,296 |

Cash equivalents and marketable securities with unrealized losses that have been in a continuous unrealized loss position for less than 12 months and 12 months or longer at March 31, 2019 and December 31, 2018 were as follows:

| | Less Than 12 Months | | 12 Months or Longer | | Total | |
|---|---|---|---|---|---|---|
| (In thousands) | Estimated Fair Value | Gross Unrealized Losses | Estimated Fair Value | Gross Unrealized Losses | Estimated Fair Value | Gross Unrealized Losses |
| As of March 31, 2019: | | | | | | |
| Commercial paper (due in less than one year) | $15,792 | $ (19) | $— | $ — | $15,792 | $ (19) |
| Corporate notes (due in less than one year) | 27,115 | (5) | 13,226 | (8) | 40,341 | (13) |
| Corporate notes (due in one to two years) | 1,999 | (5) | — | — | 1,999 | (5) |
| | $44,906 | $ (29) | $13,226 | $ (8) | $58,132 | $ (37) |
| As of December 31, 2018: | | | | | | |
| Commercial paper (due in less than one year) | $22,628 | $ (29) | $— | $ — | $22,628 | (29) |
| Corporate notes (due in less than one year) | 66,557 | (82) | 14,221 | (36) | 80,778 | (118) |
| Corporate notes (due in one to two years) | 18,582 | (65) | — | — | 18,582 | (65) |
| | $107,767 | $ (176) | $14,221 | $ (36) | $121,988 | $ (212) |

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The gross unrealized losses related to commercial paper and corporate notes as of March 31, 2019 and December 31, 2018 were due to changes in interest rates and not credit risk. We determined that the gross unrealized losses on our marketable securities as of March 31, 2019 and December 31, 2018 were temporary in nature. We review our investments quarterly to identify and evaluate whether any investments have indications of possible other-than-temporary 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 amortized cost basis 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 before recovery of the amortized cost basis. We currently do not intend to sell these securities before recovery of their amortized cost bases.

Fair Value on a Recurring Basis

We categorize financial instruments recorded at fair value on our condensed balance sheets 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 an 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. Below is a description of the valuation methodologies used for financial instruments measured at fair value on our condensed balance sheets, including the category for such financial instruments.

Money market funds are categorized as Level 1 within the fair value hierarchy as their fair values are based on quoted prices available in active markets. Commercial paper, corporate notes and equity investments are categorized as Level 2 within the fair value hierarchy as their fair values are estimated by using pricing models, quoted prices of securities with similar characteristics or discounted cash flows.

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The following table presents information about our financial instruments that are measured at fair value on a recurring basis as of March 31, 2019 and December 31, 2018 and indicates the fair value category assigned.

| | Fair Value Measurements at Reporting Date Using | | | |
|---|---|---|---|---|
| (In thousands) | Quoted Prices in Active Markets for Identical Assets Level 1 | Significant Other Observable Inputs Level 2 | Significant Unobservable Inputs Level 3 | Total |
| As of March 31, 2019: | | | | |
| Money market funds[1] | $4,750 | $ — | $ — | $4,750 |
| Commercial paper[2] | — | 56,500 | — | 56,500 |
| Corporate notes[2][3] | — | 106,551 | — | 106,551 |
| Equity investment[4] | — | 688 | — | 688 |
| Total | $4,750 | $ 163,739 | $ — | $168,489 |
| As of December 31, 2018: | | | | |
| Money market funds[1] | $7,003 | $ — | $ — | $7,003 |
| Commercial paper[2] | — | 57,587 | — | 57,587 |
| Corporate notes[2][3] | — | 113,709 | — | 113,709 |
| Equity investment[4] | — | 585 | — | 585 |
| Total | $7,003 | $ 171,881 | $ — | $178,884 |

(1) Included in cash and cash equivalents on our condensed balance sheets.
(2) Included in current portion of marketable securities on our condensed balance sheets.
(3) Included in noncurrent portion of marketable securities on our condensed balance sheets.
(4) Included in other assets on our condensed balance sheets. See further discussion below of this equity investment.

Equity Investment

In December 2007, we received 13,842,625 ordinary shares in Sienna in connection with a license we granted to them for our human telomerase reverse transcriptase, or hTERT, technology for use in human diagnostics. Upon receipt, the shares were recorded at a zero cost basis under the cost method of accounting. With the adoption of ASU 2016-01 on January 1, 2018, our equity investment in Sienna must be reported at fair value at each reporting date and any resulting change in fair value is recognized in our condensed statements of operations. As of March 31, 2019, the fair value of our shares in Sienna was $688,000. For the three months ended March 31, 2019 and 2018, we recognized an increase in fair value of equity investment of $98,000 and a decrease in fair value of $108,000, respectively, related to

observable price changes. For the three months ended March 31, 2019 and 2018, we also recognized a gain of $5,000 and a loss of $17,000, respectively, related to foreign currency translation, which are included in other expense in our condensed statements of operations.

3. FORMER COLLABORATION AGREEMENT

On November 13, 2014, we and Janssen entered into the Collaboration Agreement under which we granted to Janssen exclusive worldwide rights to develop and commercialize imetelstat for all human therapeutic uses, including hematologic myeloid malignancies. Under the Collaboration Agreement, Janssen has been conducting two clinical trials of imetelstat: a Phase 2 trial in myelofibrosis, referred to as IMbark, and a Phase 2/3 trial in myelodysplastic syndromes, referred to as IMerge. Development costs for IMbark and IMerge were shared between us and Janssen on a 50/50 basis. Additionally, under the terms of the Collaboration Agreement, we remained responsible for prosecuting, at Janssen's direction, the patents licensed to Janssen at the time we entered into the Collaboration Agreement, with costs shared between us and Janssen on a 50/50 basis.

Janssen terminated the Collaboration Agreement effective September 28, 2018. Upon the effective date of termination, we regained the global rights to the imetelstat program and plan to continue development of imetelstat on our own. As a result of the termination of the Collaboration Agreement, we will not receive any further milestone payments or royalties from Janssen for the development or commercialization of imetelstat, including any clinical development or sales milestones, and Janssen has no further obligations to us or any third parties, such as clinical sites or vendors, to fund any potential future imetelstat clinical trials. Under the

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termination provisions of the Collaboration Agreement, Janssen is required to provide certain operational support for the imetelstat program during transition of the program to us. The transition process is expected to occur through September 2019 to enable the orderly transfer of all ongoing clinical, regulatory, medical affairs and non-clinical activities to us, including the transfer of the sponsorship of ongoing imetelstat clinical trials from Janssen to us. Each company is responsible for its own costs incurred related to transition activities unless otherwise specified in the Collaboration Agreement. In addition, we expect Janssen will be able to supply imetelstat to us until September 2020 while we establish our own manufacturing supply chain, and such supply will be charged to us at Janssen's cost plus a premium.

Until the sponsorship responsibilities for imetelstat transfer from Janssen to us, including the U.S. Investigational New Drug, or IND, application and all foreign regulatory applications, Janssen will continue conducting ongoing clinical trials of imetelstat. Since September 28, 2018, our responsibility for imetelstat development costs incurred by Janssen, including continuing conduct of ongoing clinical trials of imetelstat, and costs for the prosecution of patents that were licensed to Janssen under the Collaboration Agreement increased from 50% to 100%. As of March 31, 2019, the amount due to Janssen of $2,071,000 on our condensed balance sheet primarily represents the amount owed to Janssen for operational support of the imetelstat program for the three months ended March 31, 2019.

4. OPERATING LEASE

As described in Note 1 on Summary of Significant Accounting Policies – New Accounting Pronouncements Recently Adopted, we adopted Topic 842 as of January 1, 2019. Prior period amounts have not been adjusted and continue to be reported in accordance with historical accounting under Topic 840.

We have an operating lease for our office space at 149 Commonwealth Drive, Menlo Park, California, that commenced in February 2018 and expires in January 2020. We have an option to extend the lease for one additional period of two years, which we did not include in determining the right-of-use asset or lease liability as we did not consider it reasonably certain that we would exercise such option. Since the operating lease is a net lease, as the non-lease components (i.e., common area maintenance) are paid separately from rent based on actual costs incurred, such non-lease components were not included in the right-of-use asset and liability and are reflected as an expense in the period incurred.

The components of lease costs included in operating expenses in our condensed statements of operations were as follows:

| (In thousands) | Three Months Ended March 31, 2019 | 2018 |
|---|---|---|

| | | |
|---|---|---|
| Operating lease costs | $173 | $168 |
| Variable lease costs [1] | 2 | 24 |
| Total lease costs | $175 | $192 |

(1) Variable lease costs represent non-lease components, such as common area maintenance charges.

The operating lease liability on the condensed balance sheet reflects the present value of the remaining lease payments over the remaining lease term. In determining the present value of lease payments, we applied our incremental borrowing rate based on the information available as of the January 1, 2019 adoption date. As of March 31, 2019, future minimum payments under the operating lease were as follows (in thousands):

| | |
|---|---|
| 2019 | $525 |
| 2020 | 58 |
| Total lease payments | 583 |
| Less: imputed interest | (12 ) |
| Total | $571 |

As of March 31, 2019, the weighted average remaining lease term is 10 months and the weighted average discount rate used to determine the operating lease liability was 5%.

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We have performed an evaluation of our other contracts with vendors in accordance with Topic 842 and have determined that, except for the operating lease described above and a nominal financing lease for office equipment, none of our contracts contain a lease.

5. STOCKHOLDERS' EQUITY

At Market Issuance Sales Agreement

On August 28, 2015, we entered into an At Market Issuance Sales Agreement, or the 2015 Sales Agreement, with MLV & Co. LLC, or MLV, under which we could elect to issue and sell shares of our common stock having an aggregate offering price of up to $50,000,000. Pursuant to the 2015 Sales Agreement, common stock was sold at market prices prevailing at the time of sale through MLV as our sales agent. We paid MLV an aggregate commission rate equal to up to 3.0% of the gross proceeds of the sales price per share for common stock sold through MLV under the 2015 Sales Agreement. For the three months ended March 31, 2018, we issued an aggregate of 776,788 shares of our common stock under the 2015 Sales Agreement, resulting in net cash proceeds to us of approximately $1,553,000, after deducting sales commissions and offering expenses payable by us. We completed use of the 2015 Sales Agreement in April 2018 and no further shares of common stock may be sold under the 2015 Sales Agreement.

2018 Inducement Award Plan

In December 2018, our board of directors approved the adoption of the 2018 Inducement Award Plan, or the Inducement Plan, pursuant to which we reserved 3,000,000 shares of our common stock (subject to customary adjustments in the event of a change in capital structure) to be used exclusively for grants of inducement awards to individuals who were not previously Geron employees or directors, other than following a bona fide period of non-employment. In January 2019, our Compensation Committee approved an amendment to increase the reserve of shares of our common stock under the 2018 Inducement Award Plan from 3,000,000 to 8,000,000 shares of common stock. The Inducement Plan provides for the grant of nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock units and other stock awards, and all awards under the Inducement Plan are intended to meet the standards under Rule 5635(c)(4) of the Nasdaq Listing Rules. The terms and conditions of the Inducement Plan and the inducement awards to be granted thereunder are substantially similar to our stockholder-approved 2018 Equity Incentive Plan. As of March 31, 2019, we have granted nonstatutory stock options covering an aggregate of 1,978,400 shares of our common stock at an average exercise price of $1.07 per share under the Inducement Plan.

6. SUBSEQUENT EVENT

In April 2019, we entered into an operating lease agreement for office space located at 3 Sylvan Way, Parsippany, New Jersey. The initial term of the lease is 11 years with an option to extend for an additional five years and a one-time option to terminate the lease without cause as of the 103rd month anniversary of the commencement date of the lease. We have not yet occupied the space as it is being renovated for our use. The lease term commences upon the earlier of the date of completion of the construction work or the date upon which we occupy and use the space for its intended purpose. Since we do not yet have control of the space, as defined by Topic 842, during the construction

period and do not expect to gain control of the space until on or near the construction completion date, we will not record a right-of-use asset and corresponding lease liability until we occupy the space, which we expect to occur by the end of the third quarter of 2019. Upon the commencement of the lease, the aggregate minimum future lease payments for the initial lease term is approximately $3,700,000, net of a seven-month rent abatement period. Under the lease, we are also obligated to pay certain variable expenses separately from the base rent, including electricity and common area maintenance. Such costs will be expensed in the period they are incurred.

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, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. In some cases, forward-looking statements can be identified by the use of terminology such as "may," "expects," "plans," "intends," "will," "should," "projects," "believes," "predicts," "anticipates," "potential" or "continue," or the negative thereof or other comparable terminology. 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 business 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 financial statements and notes thereto included in Part I, Item 1 of this Form 10-Q and with the sections entitled "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in our Annual Report on Form 10-K for the year ended December 31, 2018, as filed with the Securities and Exchange Commission, or SEC, on March 7, 2019.

Business Overview

We are a late-stage clinical biopharmaceutical company that is focused on the development and commercialization of innovative therapeutics for hematologic myeloid malignancies. We have global rights to imetelstat, a first-in-class telomerase inhibitor, that was discovered and developed at Geron. We believe clinical data from two Phase 2 clinical trials of imetelstat (IMerge and IMbark, discussed below) conducted by Janssen Biotech, Inc., or Janssen, support further development of imetelstat in hematologic myeloid malignancies. We are working with Janssen to transition the entire imetelstat program to us. In connection with the transition of the imetelstat program, we expect sponsorship of the U.S. IND for the ongoing imetelstat clinical trials, IMerge and IMbark, to be transferred from Janssen to us by the end of the second quarter of 2019. See further discussion below regarding our past and current relationship with Janssen.

We plan to open patient screening and enrollment by mid-year of 2019 in a Phase 3 clinical trial (Part 2 of IMerge) to evaluate imetelstat in transfusion dependent patients with Low or Intermediate-1 risk myelodysplastic syndromes, or MDS, who have relapsed after or are refractory to prior treatment with an erythropoiesis stimulating agent, or ESA, have not received prior treatment with either a hypomethylating agent or lenalidomide and do not have a deletion 5q chromosomal abnormality. To be eligible for IMerge, patients were required to be transfusion dependent, defined as requiring at least four units of packed red blood cells over an eight week period during the 16 weeks before entry into the trial. This target population of lower risk MDS patients depend on serial red blood cell transfusions to manage symptoms of anemia and fatigue. However, dependency on transfusions is associated with poor survival, because of toxicity due to iron overload, as well as potential infections and allergic reactions. The ultimate goal for most trials of investigational agents in lower risk MDS is to enable patients to become transfusion independent for as long as possible.

In December 2018, we reported results from a combined cohort of 38 patients (comprised from an initial cohort of 13 patients and an expansion cohort of 25 patients) in the Phase 2 portion of IMerge, using a clinical data cut-off date of October 26, 2018, in which 37% of patients in the combined cohort experienced red blood cell transfusion independence for at least 8 consecutive weeks, or an 8-week RBC-TI rate, and 26% of patients in the combined cohort experienced red blood cell transfusion independence for at least 24 consecutive weeks, or a 24-week RBC TI-rate. Patients in the combined cohort had a high transfusion burden, with a baseline median red blood cell transfusion burden of eight units per eight weeks (range of four to 14 units), an indicator of a hard to treat population. These results compare favorably to currently used treatments in a similar patient population, such as hypomethylating agents, or HMAs, which have a reported 8-week RBC-TI rate of 17%, or lenalidomide, which has a reported 8-week RBC-TI rate of 27%. In addition, among the patients in the combined cohort who achieved durable transfusion independence in the Phase 2 portion of IMerge, as reflected by achieving a 24-week RBC-TI, all showed a hemoglobin rise of ≥3.0 g/dL compared to baseline during the transfusion-free interval. We believe these data suggest potential disease-modifying activity of imetelstat treatment. We expect more mature data from the Phase 2 portion of IMerge to be available in 2019 and anticipate submitting such data for presentation at a future medical conference in 2019.

Regarding our myelofibrosis, or MF, program, in December 2018, we reported data from the IMbark Phase 2 clinical trial, including the median overall survival of 29.9 months observed in the 9.4 mg/kg dosing arm using a data cut-off date of October 22, 2018, in comparison to the median overall survival of 14 – 16 months for patients previously treated with janus kinase, or JAK, inhibitors, as reported in medical literature. We plan to discuss the IMbark data with experts in MF, as well as regulatory authorities, to consider how these results compare with other therapies currently available to MF patients, and to gain a better understanding of the potential significance of these results to patients and physicians. Because IMbark is the first clinical trial to apply rigorous, objective eligibility criteria to define patients considered relapsed or refractory to JAK inhibitors, we believe feedback from these discussions could provide important information on the feasibility, scope and design, including possible outcome measures, of any potential future clinical trials for imetelstat in Intermediate-2 or High-risk MF patients who have relapsed after or are refractory to prior treatment with a JAK inhibitor. We expect to outline our decision whether to continue late-stage development of imetelstat in MF by the end of the third quarter of 2019. This decision will be influenced by our assessment of what would be required to achieve clinical and regulatory success in MF, including the cost and duration of any potential clinical trials.

Status of Former Collaboration Agreement with Janssen

On November 13, 2014, we entered into a collaboration and license agreement, or the Collaboration Agreement, pursuant to which we granted Janssen the exclusive rights to develop and commercialize imetelstat worldwide for all indications in oncology, including hematologic myeloid malignancies, and all other human therapeutic uses. Janssen terminated the Collaboration Agreement effective September 28, 2018. Upon the effective date of termination, we regained the global rights to the imetelstat program. As a result of the termination of the Collaboration Agreement, we will not receive any further milestone payments or royalties from Janssen for the development or commercialization of imetelstat, including any clinical development or sales milestones, and Janssen has no further obligations to us or any third parties, such as clinical sites or vendors, to fund any of the ongoing or any potential future imetelstat clinical trials.

Under the termination provisions of the Collaboration Agreement, Janssen is required to provide certain operational support for the imetelstat program through September 2019 during transition of the program to us. Each company is responsible for its own costs incurred related to transition activities unless otherwise specified in the Collaboration Agreement. We expect the transition process to be completed by September 2019 to enable the orderly transfer of all ongoing clinical, regulatory, medical affairs and non-clinical activities to us, including transfer of the sponsorship of ongoing imetelstat clinical trials from Janssen to us. We also expect Janssen will be able to supply imetelstat to us until September 2020 while we establish our own manufacturing supply chain. Such supply will be charged to us at Janssen’s cost plus a premium.

Until the sponsorship responsibilities for imetelstat transfer from Janssen to us, including the U.S. Investigational New Drug, or IND, application, and all foreign regulatory applications, Janssen will continue conducting IMbark and the Phase 2 portion of IMerge. Patients currently enrolled in IMbark and the Phase 2 portion of IMerge continue to receive treatment and follow-up under the respective trial protocols. After September 28, 2018, the effective termination date of the Collaboration Agreement, our responsibility for imetelstat development costs, including ongoing conduct of IMbark and the Phase 2 portion of IMerge, and costs for the prosecution of patents that were licensed to Janssen under the Collaboration Agreement increased from 50% to 100%.

For a further discussion of the former Collaboration Agreement with Janssen, see Note 3 on Former Collaboration Agreement in Notes to Condensed Financial Statements of this Form 10-Q. Information about the transition of the imetelstat program from Janssen to us should be reviewed in the context of the section entitled “Risks Related to Transition of the Imetelstat Program from Janssen to Geron” included in Part II, Item 1A, “Risk Factors” of this Form 10-Q.

Financial Overview

We had approximately $170.1 million in cash, cash equivalents, restricted cash and current and noncurrent marketable securities as of March 31, 2019. We will require substantial additional capital in order to further advance the imetelstat program, including conducting the research and development and clinical and regulatory activities necessary to bring imetelstat to market, such as completing the planned Phase 3 portion of IMerge and potential clinical trials in other indications, and establishing sales and marketing capabilities to commercialize imetelstat in the United States on our own, if regulatory approval is granted. If approved for marketing by regulatory authorities, we plan to seek potential commercialization partners for territories outside of the United States. While we reported a small profit for the year ended December 31, 2015 due to our recognition of revenue in connection with the upfront payment from Janssen under the Collaboration Agreement, until 2015 we had never been profitable, and have not reported any profit since. We have incurred significant net losses since our inception in 1990, resulting principally from costs incurred in connection with our research and development activities and from general and administrative costs associated with our operations. As of March 31, 2019, we had an accumulated deficit of approximately $1.0 billion. Since our inception, we primarily have financed our

operations through the sale of equity securities, interest income on our marketable securities and payments we received under our collaborative and licensing arrangements.

Substantially all of our revenues to date have been payments under collaborative agreements, and milestones, royalties and other revenues from our licensing arrangements. We currently have no source of product revenue. The significance of future losses, future revenues and any potential future profitability will depend primarily on the clinical and commercial success of imetelstat. In any event, imetelstat will require significant additional clinical testing prior to possible regulatory approval in the United States and other countries. In addition, as a result of the termination of the Collaboration Agreement, we expect research and development expenses, general and administrative expenses, and losses to substantially increase in future periods as we undertake sole financial responsibility for the imetelstat development program. We do not expect imetelstat to be commercially available for many years, if at all.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

There have been no significant changes in our critical accounting policies and estimates during the three months ended March 31, 2019, as compared to the critical accounting policies and estimates disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018, other than the adoption of the new accounting pronouncement on January 1, 2019 as described below.

Our condensed financial statements have been prepared in accordance with U.S. generally accepted accounting principles for interim financial information. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Note 1 of Notes to Condensed Financial Statements of this Form 10-Q describes the significant accounting policies used in the preparation of the condensed 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 historically have been minor and have been included in the condensed 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 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.

New Accounting Pronouncement – Recently Adopted

Leases

We adopted Topic 842 on January 1, 2019 using the modified retrospective approach as allowed under ASU 2018-11, and we elected to utilize the available practical expedients. Financial results for the reporting periods beginning after January 1, 2019 are presented under Topic 842, while prior period amounts have not been adjusted and continue to be reported in accordance with our historical accounting under Accounting Standards Codification Topic 840, Leases, or Topic 840.

In connection with the adoption of Topic 842 as of January 1, 2019, we recorded an operating lease, right-of-use asset and a corresponding operating lease liability for the net present value of remaining lease payments of our current operating lease for our office space. To calculate the net present value of lease payments, we apply our incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term an amount equal to

the lease payments in a similar economic environment as of the lease commencement date. We may adjust the right-of-use asset for certain adjustments, such as initial direct costs paid or incentives received. In addition, we include any options to extend or terminate the lease in the expected lease term when it is reasonably certain that we will exercise any such option. Lease expense is recognized on a straight-line basis over the expected lease term. The adoption of Topic 842 did not have a material impact on our condensed statements of operations. See Note 4 on Operating Lease in Notes to Condensed Financial Statements of this Form 10-Q for further discussion of our operating lease obligation.

RESULTS OF OPERATIONS

Our results of operations have fluctuated from period to period and may continue to fluctuate in the future, especially in light of the termination of the Collaboration Agreement with Janssen effective September 28, 2018. Results of operations for any period may be unrelated to results of operations for any other period. Thus, historical results should not be viewed as indicative of future operating results. For example, in 2015 we reported net income for the first time due to recognition of revenue in connection with the upfront payment from Janssen under the Collaboration Agreement. Effective September 28, 2018, the Collaboration Agreement with Janssen was terminated. As a result, we will not receive any further milestone payments or royalties from Janssen for the development or commercialization of imetelstat. In addition, we expect to incur increasing operating losses in the future as we undertake sole financial

responsibility for the development of imetelstat to enable potential commercialization of imetelstat in the United States and other countries. We are subject to risks common to companies in our industry and at our stage of development, including, but not limited to, risks inherent in research and development efforts, including the transition of the imetelstat program from Janssen to us, the development, manufacture, regulatory approval for and commercialization of, imetelstat, uncertainty of non-clinical and clinical trial results or regulatory approvals or clearances, the future development of imetelstat by us, including any future efficacy or safety results that may cause the benefit-risk profile of imetelstat to become unacceptable, our need for future capital, enforcement of our patent and proprietary rights, reliance upon our consultants, licensees, investigators and other third parties, and potential competition. In order for imetelstat to be commercialized, we must conduct non-clinical tests and clinical trials to demonstrate the safety and efficacy of imetelstat, 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 revenue based on sales of imetelstat for many years, if at all.

Revenues

We have entered into several license or collaboration agreements with companies involved with oncology, diagnostics, research tools and biologics production, whereby we have granted certain rights to our non-imetelstat related technologies. In connection with these agreements, we are eligible to receive license fees, option fees, milestone payments and royalties on future sales of products, or any combination thereof.

We recognized license fee revenues of $248,000 for the three months ended March 31, 2018 related to our various agreements. No comparable amounts were recognized for the three months ended March 31, 2019. The decrease in license fee revenues for the three months ended March 31, 2019 compared to the same period in 2018 reflects a reduction in the number of active license agreements in the first quarter of 2019 for research licenses related to our human telomerase reverse transcriptase, or hTERT, technology as a result of patent expirations on the underlying technology. We recognized royalty revenues of $57,000 for the three months ended March 31, 2019, compared to $70,000 for the same period in 2018. The decrease in royalty revenues for the three months ended March 31, 2019 compared to the same period in 2018 reflects expiration of licenses which eliminated the obligation to remit royalties on product sales.

Future license fee and royalty revenues are dependent on additional agreements being signed, if any, current agreements being maintained and the underlying patent rights for the licenses remaining active. We expect license fee and royalty revenues under our license agreements related to our hTERT technology to be lower in 2019 than in previous years, and to be eliminated by the end of 2019, due to upcoming patent expirations on such technology. Current revenues may not be predictive of future revenues.

Research and Development Expenses

During the three months ended March 31, 2019 and 2018, imetelstat was the sole research and development program we supported. For the imetelstat research and development program, we incur direct external, personnel related and other research and development costs. For the three months ended March 31, 2019, direct external expenses included costs for our contract research organization, or CRO, and consultants and 100% of clinical development costs incurred by Janssen for operational support of the imetelstat program during the transition period. For the three months ended March 31, 2018, direct external expenses primarily consisted of our 50% share of clinical development costs incurred by Janssen under the Collaboration Agreement. Personnel related expenses primarily consist of salaries and wages, stock-based compensation, payroll taxes and benefits for Geron employees involved with ongoing research and development efforts. Other research and development expenses primarily consist of research related overhead associated with allocated expenses for rent and maintenance of facilities and other supplies.

Research and development expenses were $5.9 million for the three months ended March 31, 2019, compared to $2.4 million for the same period in 2018. The increase in research and development expenses for the three months ended March 31, 2019 compared to the same period in 2018 primarily reflects higher direct external costs for clinical development activities conducted by Janssen for the imetelstat program during the transition period and for our CRO and consultants to support the transition of the imetelstat program from Janssen to us and increased personnel related expenses for additional development headcount.

Research and development expenses for the three months ended March 31, 2019 and 2018 were as follows:

| (In thousands) | Three Months Ended March 31, 2019 | 2018 |
|---|---|---|
| | (Unaudited) | |
| Direct external expenses | $4,091 | $1,887 |
| Personnel related expenses | 1,522 | 414 |
| All other expenses | 293 | 139 |
| Total research and development expenses | $5,906 | $2,440 |

Since cost sharing between Janssen and us for imetelstat clinical development ceased on September 28, 2018, the effective date of termination of the Collaboration Agreement, we expect research and development expenses to increase in future periods as we undertake sole financial responsibility for the imetelstat development program, including all ongoing or potential future clinical trials, engage third parties and other service providers to conduct clinical trials of imetelstat, and hire additional senior personnel to oversee the program. Under the terms of the Collaboration Agreement, Janssen is required to provide operational support for the imetelstat program, including continuing to conduct ongoing imetelstat clinical trials, during transition of the program to us. We reimburse Janssen for 100% of the costs for such operational support. However, costs associated with transition activities, such as transfer of the sponsorship of ongoing imetelstat clinical trials, moving databases and related systems and transmitting regulatory files, are being incurred by each company, unless otherwise specified in the Collaboration Agreement. We expect the transition process to be completed by the end of September 2019. In addition, we expect Janssen will be able to supply imetelstat to us until September 2020 while we establish our own manufacturing supply chain. Such supply will be charged to us at Janssen’s cost plus a premium.

At this time, we cannot provide reliable estimates of how much time or investment will be necessary to advance imetelstat toward commercialization. For a more complete discussion of the risks and uncertainties associated with the development of imetelstat, see the sub sections entitled “Risks Related to the Development of Imetelstat” and “Risks Related to Regulatory Approval and Commercialization of Imetelstat” in Part II, Item 1A entitled “Risk Factors” and elsewhere in this Form 10 Q.

General and Administrative Expenses

General and administrative expenses were $5.5 million for the three months ended March 31, 2019, compared to $5.3 million for the same period in 2018. The increase in general and administrative expenses for the three months ended March 31, 2019 compared to the same period in 2018 primarily reflects recruitment expenses for new members for the board directors. We expect general and administrative expenses to increase in the future since the cost sharing between Janssen and us for patent prosecution expenses related to the imetelstat program ceased upon termination of the Collaboration Agreement, and we expect to hire additional personnel to support our research and development activities for imetelstat.

Interest and Other Income

Interest and other income was $1.2 million for the three months ended March 31, 2019, compared to $394,000 for the same period in 2018. The increase in interest and other income for the three months ended March 31, 2019 compared

to the same period in 2018 primarily reflects higher yields on our marketable securities portfolio and the increase in the size of our marketable securities portfolio resulting from the receipt of net cash proceeds from issuances of common stock pursuant to our At Market Issuance Sales Agreement, or the 2015 Sales Agreement, with MLV & Co. LLC, or MLV, and our At Market Issuance Sales Agreement, or the 2018 Sales Agreement, with B. Riley FBR, Inc., or B. Riley FBR in the first half of 2018. Interest earned in future periods will depend on the size of our marketable securities portfolio and prevailing interest rates.

Change in Fair Value of Equity Investment

With the adoption of ASU 2016-01 on January 1, 2018, we remeasure the fair value of our equity investment in Sienna at each reporting date and any resulting change in fair value based on observable price changes is included in our condensed statements of operations. For the three months ended March 31, 2019, the increase in the fair value of our equity investment in Sienna resulting from observable price changes in Sienna’s stock was $98,000, compared to a loss of $125,000 for the same period in 2018. The fair value of our equity investment in Sienna fluctuates based on changes in Sienna’s stock price and is therefore subject to volatility that could adversely affect our future operating results.

Other Expense

Other expense was $18,000 for each of the three months ended March 31, 2019 and 2018. Other expense reflects changes in the fair value of our equity investment in Sienna resulting from foreign currency translation and bank charges related to our cash operating accounts and marketable securities portfolio. Other expense for the three months ended March 31, 2019 included a gain of $5,000 related to foreign currency translation for our equity investment in Sienna, compared to a loss of $17,000 for the same period in 2018. The fair value of our equity investment in Sienna fluctuates based on changes in the exchange rate between the U.S. dollar and Australian dollar and is therefore subject to volatility that could adversely affect our future operating results.

LIQUIDITY AND CAPITAL RESOURCES

As of March 31, 2019, we had cash, restricted cash, cash equivalents, and current and noncurrent marketable securities of $170.1 million, compared to $182.1 million at December 31, 2018. The net decrease in cash, restricted cash, cash equivalents, and current and noncurrent marketable securities during the three months ended March 31, 2019 was the result of cash being used for operations. We estimate that our existing capital resources and future interest income will be sufficient to fund our current level of operations through at least the next 12 months. However, we expect to experience negative cash flow for the foreseeable future as we undertake sole financial responsibility for the development of the imetelstat program on our own.

We have an investment policy to invest our cash 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 and commercial paper. Our investment portfolio does not contain securities with exposure to sub-prime mortgages, collateralized debt obligations, asset-backed securities or auction rate securities and, to date, we have not recognized any other-than-temporary impairment charges 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, access to our invested cash and cash equivalents may be impacted by adverse conditions in the financial and credit markets.

In August 2015, we entered into the 2015 Sales Agreement with MLV, under which we could elect to issue and sell shares of our common stock having an aggregate offering price of up to $50 million. Pursuant to the 2015 Sales Agreement, common stock was sold at market prices prevailing at the time of sale through MLV as our sales agent. We paid MLV an aggregate commission rate equal to up to 3.0% of the gross proceeds of the sales price per share for common stock sold through MLV under the 2015 Sales Agreement. From January 2018 through April 2018, we sold an aggregate of 13,195,106 shares of our common stock under the 2015 Sales Agreement, resulting in net cash proceeds to us of approximately $47.7 million after deducting sales commissions and offering expenses payable by us. Under the 2015 Sales Agreement, we sold a cumulative total of 13,809,336 shares of our common stock resulting in net cash proceeds to us of approximately $48.7 million after deducting sales commissions and offering expenses payable by us. No further shares of common stock may be sold under the 2015 Sales Agreement.

In May 2018, we entered into the 2018 Sales Agreement with B. Riley FBR, pursuant to which we may elect to issue and sell shares of our common stock having an aggregate offering price of up to $100 million in such quantities and on such minimum price terms as we set from time to time through B. Riley FBR as our sales agent. Pursuant to the 2018 Sales Agreement, B. Riley FBR sells our common stock at market prices prevailing at the time of sale for which B. Riley FBR receives an aggregate commission rate equal to up to 3.0% of the gross proceeds. We sold an aggregate of 10,083,079 shares of our common stock under the 2018 Sales Agreement in 2018, resulting in net cash proceeds to us of approximately $38.4 million after deducting sales commissions and offering expenses payable by us. As of December 31, 2018 and March 31, 2019, approximately $60.5 million of our common stock remained available for issuance under the 2018 Sales Agreement. The 2018 Sales Agreement will expire upon the earlier of the remaining

common stock being sold or May 2021.

We will require substantial additional capital in order to further advance the imetelstat program, including conducting the research and development and clinical and regulatory activities necessary to bring imetelstat to market, such as completion of the planned Phase 3 portion of IMerge and potential clinical trials in other indications, and to establish sales and marketing capabilities to commercialize imetelstat in the United States on our own, if regulatory approval is granted. Because the outcome of any clinical activities and/or regulatory approval process is highly uncertain, we cannot reasonably estimate whether any development activities we may undertake will succeed, and we may never recoup our investment in any imetelstat development, which would adversely affect our financial condition and our business and business prospects, and might cause us to cease operations. Our future capital requirements are difficult to forecast and will depend on many factors, including:

- the accuracy of the assumptions underlying our estimates for our capital needs;
- the progress, timing, magnitude, scope and costs of clinical development, manufacturing and potential commercialization of imetelstat, including the number of indications being pursued, subject to clearances and approvals by the United States Food and Drug Administration, or FDA, and other regulatory authorities;

- the scope, progress, duration, results and costs of current and future clinical trials, including the planned Phase 3 portion of IMerge, as well as non-clinical studies and assessments, of imetelstat;
- the costs, timing and outcomes of regulatory reviews or other regulatory actions related to imetelstat, including obtaining regulatory clearances and approvals in the United States and in other countries;
- the costs of preparing, filing and prosecuting patent applications and maintaining, enforcing and defending intellectual property-related claims;
- the costs of manufacturing imetelstat, including our ability to meaningfully reduce those manufacturing costs;
- the costs of multiple third-party vendors and service providers, including our CRO, to pursue the development, manufacturing and commercialization of imetelstat;
- our ability to establish, enforce and maintain collaborative or other strategic arrangements for research, development, clinical testing and manufacturing of imetelstat and potential future commercialization and marketing;
- our ability to successfully market and sell imetelstat, if imetelstat receives future regulatory approval or clearance, in the United States and other countries;
- our need to hire additional qualified employees and consultants to support the development and potential commercialization of imetelstat;
- the costs and timing of building a U.S. sales force to market and sell imetelstat, should it receive regulatory clearance;
- the sales price for imetelstat;
- the availability of coverage and adequate third-party reimbursement for imetelstat;
- the extent and scope of our general and administrative expenses, including expenses associated with potential future litigation; and
- the costs of maintaining and operating facilities in California and New Jersey, including higher expenses for travel, telecommunications and administrative oversight.

As a result of the termination of the Collaboration Agreement effective September 28, 2018, we are responsible for funding all clinical development, manufacturing, intellectual property maintenance and potential commercial activities for imetelstat. In order to further advance the imetelstat program, including completion of the planned Phase 3 portion of IMerge and potential clinical trials in other indications, we will need to raise substantial additional capital or establish additional collaborative arrangements with third-party collaborative partners, which may not be possible. In addition, as a result of the termination of the Collaboration Agreement, we will not receive any further milestone payments or royalties from Janssen for the development or sale of imetelstat, including any clinical development milestones. If we are unable to raise additional capital or establish alternative collaborative arrangements with third-party collaborative partners for imetelstat, the development of imetelstat may be further delayed, altered or abandoned, which might cause us to cease operations. Additional financing through public or private equity financings, including pursuant to our 2018 Sales Agreement with B. Riley FBR, capital lease transactions or other financing sources may not be available on acceptable terms, or at all. We may raise equity capital at a stock price or on other terms that could result in substantial dilution of ownership for our stockholders. 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. In this regard, volatility and instability in the global financial markets and political climate could adversely affect our ability to raise additional funds through financings and the terms upon which we may raise those funds.

In addition, we may seek additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our stockholders may be diluted, and the terms may include liquidation or other preferences that materially and adversely affect the rights of our stockholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through alliance, collaboration or licensing arrangements with third parties, we may have to

relinquish valuable rights to imetelstat or our technologies or grant licenses on terms that are not favorable to us.

We cannot assure you that our existing capital resources, future interest income, and potential future sales of our common stock, including under our 2018 Sales Agreement with B. Riley FBR, will be sufficient to fund our operating plans. We will need additional funds to meet operational needs and capital requirements to advance the imetelstat program in clinical development and potential

commercialization, and our need for additional funds may arise sooner than planned. If adequate funds are not available on a timely basis, if at all, we may be unable to pursue further development or potential commercialization of imetelstat, which could adversely affect our business and we might cease operations.

Cash Flows from Operating Activities. Net cash used in operations for the three months ended March 31, 2019 and 2018 was $12.7 million and $7.4 million, respectively. The increase in net cash used in operations for the three months ended March 31, 2019 compared to the same period in 2018 primarily reflects the net result of higher payments for research and development expenses in connection with the transition of the imetelstat program from Janssen to us and increases in development headcount.

Cash Flows from Investing Activities. Net cash provided by investing activities for the three months ended March 31, 2019 was $9.0 million. Net cash used in investing activities for the three months ended March 31, 2018 was $2.6 million. The increase in net cash provided by investing activities in 2019 compared to 2018 primarily reflects a higher rate of maturities than purchases of marketable securities in 2019.

Cash Flows from Financing Activities. Net cash provided by financing activities for the three months ended March 31, 2019 and 2018 was none and $1.6 million, respectively. In the first quarter of 2018, we sold common stock under the 2015 Sales Agreement with MLV. No similar sales were conducted in the first quarter of 2019.

Contractual Obligations

During the three months ended March 31, 2019, there have been no material changes to the contractual obligations previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018.

Off-Balance Sheet Arrangements

We have not engaged in any off-balance sheet arrangements, including the use of structured finance, special purpose entities or variable interest entities.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

During the three months ended March 31, 2019, there were no material changes to our market risk disclosures as set forth in Part II, Item 7A, “Quantitative and Qualitative Disclosures About Market Risk” in our Annual Report on Form 10-K for the year ended December 31, 2018.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, prior to the filing of this quarterly report. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that, as of the end of the period covered by this quarterly report, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter to which this report relates that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating disclosure controls and procedures, our management recognizes that any system of controls, however well designed and operated, can provide only reasonable assurance, and not absolute assurance, that the desired control 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. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met and, as set forth above, our Chief Executive Officer and our Chief Financial Officer have concluded, based on their evaluation as of the end of the

period covered by this quarterly report, that our disclosure controls and procedures were effective to provide reasonable assurance that the objectives of our disclosure control system were met.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS
TBD.

ITEM 1A. RISK FACTORS
Our business is subject to various risks and uncertainties that may have a material adverse effect on our business, financial condition or results of operations. You should carefully consider the risks and uncertainties described below, together with all of the other information included in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K for the year ended December 31, 2018, or the Form 10-K. Our business faces significant risks and uncertainties, and those described below may not be the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us or that we currently believe are immaterial may also significantly impair our business, financial condition or results of operations. If any of these risks or uncertainties occur, our business, financial condition or results of operations could suffer, the market price of our common stock could decline and you could lose all or part of your investment in our common stock. We have marked with an asterisk (*) those risks described below that reflect substantive changes from, or additions to, the risks described under Part I, Item 1A, “Risk Factors” included in the Form 10-K.

RISKS RELATED TO THE DEVELOPMENT OF IMETELSTAT

Our future success depends solely on imetelstat, our only product candidate, and we cannot be certain that we will be able to continue to develop imetelstat or advance imetelstat to subsequent clinical trials, or that we will be able to receive regulatory approval for imetelstat on a timely basis, or at all.

Imetelstat is our sole product candidate, upon whose success we are wholly dependent. We do not have any other products or product candidates. Our ability to develop imetelstat to and through regulatory approval and commercial launch is subject to significant risks and uncertainties, including, among other things, our ability to:

- cause the IND for imetelstat to be maintained without such IND being placed on full or partial clinical hold by the United States Food and Drug Administration, or FDA;
- generate additional safety and efficacy data from existing and potential future clinical trials of imetelstat, providing a positive benefit-risk profile that supports the continued and future development of imetelstat in hematologic myeloid malignancies;
- ascertain that the use of imetelstat does not result in significant systemic or organ toxicities, including hepatotoxicity, or other safety issues resulting in an unacceptable benefit-risk profile;
- develop clinical plans for, and successfully enroll and complete, potential future clinical trials of imetelstat in hematologic myeloid malignancies, including the planned Phase 3 portion of IMerge;
- collaborate successfully with clinical trial sites, academic institutions, clinical research organizations, or CROs, contractors, physician investigators and other third parties;
- obtain required regulatory clearances and approvals for imetelstat; for example, it is uncertain:
  - whether the FDA and regulatory authorities in other countries will require us to obtain and submit additional non-clinical, manufacturing, or clinical data to proceed with any potential future clinical trials,
  - how the FDA and other regulatory authorities will interpret safety and efficacy data from any clinical trial, including from IMbark or IMerge,
  - what scope and type of clinical development and other data will be required before the FDA and other regulatory authorities might grant us marketing approval, if any, and

what the length of time and cost for us will be to complete any such requirements;

- enter into and maintain arrangements with third parties to provide services needed to further research and develop imetelstat, including maintaining the agreement with our CRO, or to manufacture imetelstat, in each case at commercially reasonable costs;
- enter into and maintain arrangements with third parties, or establish internal capabilities, to provide sales, marketing and distribution functions in compliance with applicable laws;
- obtain appropriate coverage and reimbursement levels for the cost of imetelstat from governmental authorities, private health insurers and other third-party payors;
- maintain and enforce adequate intellectual property protection for imetelstat;
- maintain adequate financial resources and personnel to advance imetelstat to and through potential future clinical trials, regulatory approval and commercial launch; and
- obtain funding necessary to fund our operations and to advance the development of imetelstat on commercially reasonable terms, including completion of the planned Phase 3 portion of IMerge and potential clinical development of other indications.

If we are not able to successfully achieve the above-stated goals and overcome other challenges that we may encounter in the research, development, manufacturing and potential commercialization of imetelstat, we may be forced to abandon our development of imetelstat, which would severely harm our business and prospects, and might cause us to cease operations.

Commencement of potential future clinical trials of imetelstat, including the planned Phase 3 portion of IMerge, and completion of the extension phase of IMbark and the Phase 2 portion of IMerge, could be interrupted, further delayed or abandoned for a variety of reasons.

Currently, there are two active clinical trials of imetelstat, the extension phase of IMbark and the Phase 2 portion of IMerge. Completion of these clinical trials, and the commencement of any potential future clinical trials of imetelstat, including the planned Phase 3 portion of IMerge, could be interrupted, delayed or abandoned for a variety of reasons, including as a result of failures or delays in:

- the comprehensive transition of the imetelstat program from Janssen to us, as discussed in more detail under the heading, “Risks Related to Transition of the Imetelstat Program from Janssen to Geron”;
- demonstrating sufficient safety and efficacy of imetelstat in IMerge and any potential future clinical trials, without safety issues, side effects or dose-limiting toxicities, including any additional or more severe safety issues in addition to those that have been observed to date in previous or ongoing clinical trials related to imetelstat, whether or not in the same indications or therapeutic areas;
- obtaining or maintaining regulatory clearances in the United States or other countries to conduct clinical trials, such as obtaining or maintaining regulatory clearances to commence, conduct or modify current or potential future clinical trials of imetelstat, in a timely manner, or at all, which could, for example, cause the anticipated commencement of the planned Phase 3 portion of IMerge to be delayed beyond mid-year 2019 or prevent us from commencing or completing the planned Phase 3 portion of IMerge;
- maintaining the IND for imetelstat without such IND being placed on full or partial clinical hold, suspended or subject to other requirements by the FDA or other regulatory authorities;
- properly (i) completing the extension phase of IMbark, including collecting data about serious adverse events and overall survival from the extension phase of IMbark; (ii) completing the Phase 2 portion of IMerge, including assessing the durability of RBC-TI responses; and (iii) designing, commencing, enrolling, conducting and completing the planned Phase 3 portion of IMerge, and promptly or adequately reporting data from such trials;
- determining, after consultations with experts in MF and discussions with regulatory authorities, whether the results from the IMbark primary analysis provide a feasible registration path, if any, for imetelstat in Intermediate-2 or High risk MF patients who have relapsed after or are refractory to prior treatment with a JAK inhibitor;
- obtaining or accessing necessary clinical data in accordance with appropriate clinical or quality practices to ensure complete data sets;

- responding to safety findings by the data review committees of current clinical trials, including the extension phase of IMbark and the Phase 2 portion of IMerge, and safety or futility findings by the data review committees of potential future clinical trials of imetelstat, such as the planned Phase 3 portion of IMerge, based on emerging data occurring during such

clinical trials, such as significant systemic or organ toxicities, including severe cytopenias, hepatotoxicity, fatal bleeding with or without any associated thrombocytopenia, patient injury or death, or other safety issues, resulting in an unacceptable benefit-risk profile;
- obtaining funding on commercially reasonable terms necessary to advance the development of imetelstat;
- manufacturing sufficient quantities of imetelstat, or other clinical trial materials, in a manner that meets the quality standards of the FDA and other regulatory authorities, and responding to any disruptions to drug supply, clinical trial materials or quality issues that may arise;
- ensuring the ability to manufacture imetelstat at acceptable costs for potential Phase 3 clinical trials and commercialization;
- obtaining sufficient quantities of any study-related treatments, materials (including comparator products, placebo or combination therapies) or ancillary supplies;
- obtaining acceptance by regulatory authorities of manufacturing changes, as well as successfully implementing any such manufacturing changes;
- complying with current and future regulatory requirements, policies or guidelines, including domestic and international laws and regulations pertaining to fraud and abuse, transparency, and the privacy and security of health information;
- reaching agreement on acceptable terms and on a timely basis, if at all, with collaborators and vendors located in the United States or foreign jurisdictions, including our CRO, laboratory service providers and clinical trial sites, on all aspects of clinical development;
- obtaining timely review and clearances by regulatory authorities of future protocol amendments which may be sought for the planned Phase 3 portion of IMerge and potential future clinical trials of imetelstat, including responding to questions or comments from these authorities in a timely and adequate manner, which could, for example, cause the anticipated commencement of the planned Phase 3 portion of IMerge to be delayed beyond mid-year 2019 or prevent us from commencing or completing the planned Phase 3 portion of IMerge; and
- obtaining institutional review board or ethics committee approval of clinical trial protocols or protocol amendments, including any future refinements to the trial design we may seek for the planned Phase 3 portion of IMerge, which could, for example, cause the anticipated commencement of the planned Phase 3 portion of IMerge to be delayed beyond mid-year 2019 or prevent us from commencing or completing the planned Phase 3 portion of IMerge.

Failures or delays with respect to any of these events could adversely affect our ability to continue or successfully complete the extension phase of IMbark or the Phase 2 portion of IMerge or to commence potential future clinical trials of imetelstat, including the planned Phase 3 portion of IMerge, which could increase development costs, or interrupt, further delay or halt our development or potential commercialization of imetelstat, any of which could severely and adversely affect our financial results, business and business prospects, and the future of imetelstat, and might cause us to cease operations.

Imetelstat may cause, or have attributed to it, undesirable or unintended side effects or other adverse events that further delay or prevent the commencement and/or completion of clinical trials for imetelstat, further delay or prevent its regulatory approval, or limit its commercial potential.

Imetelstat may cause, or have attributed to it, undesirable or unintended side effects or other adverse events affecting its safety or efficacy that could interrupt, further delay or halt current or potential future clinical trials of imetelstat. For example, adverse events and dose-limiting toxicities observed in previous clinical trials of imetelstat include:

- hematologic toxicities, such as profound and/or prolonged thrombocytopenia or neutropenia, including one case of febrile neutropenia after prolonged myelosuppression with intracranial hemorrhage resulting in patient death, which the investigator assessed as possibly related to imetelstat;
- bleeding events, with or without thrombocytopenia;
- liver function test, or LFT, abnormalities, the clinical significance and long-term consequences of which are currently undetermined;

- gastrointestinal events;
- infections;
- muscular and joint pain;

- fatigue; and
- infusion reactions.

Such adverse events and other safety issues, including deaths, were also observed in IMbark and the Phase 2 portion of IMerge. If patients in any potential future clinical trials of imetelstat, including the planned Phase 3 portion of IMerge, experience similar or more severe adverse events, or new or unusual adverse events, or if the FDA or other regulatory authorities determine that efficacy and safety data in current or potential future clinical trials of imetelstat do not support an adequate benefit-risk profile to justify continued treatment of patients, then the FDA or other regulatory authorities may again place the IND for imetelstat on clinical hold, as occurred in March 2014.

Further, clinical trials by their nature examine the effect of a potential therapy in a sample of the potential future patient population. As such, clinical trials conducted with imetelstat, to date and in the future, may not uncover all possible adverse events that patients treated with imetelstat may experience. Because remaining patients in the treatment phase continue to receive imetelstat, in the extension phase of IMbark and in the Phase 2 portion of IMerge, additional or more severe toxicities or safety issues, including additional serious adverse events and dose-limiting toxicities, may be observed as patient treatment continues and more data become available. In addition, since additional data are being generated from the extension phase of IMbark and Part 1 of IMerge, the benefit-risk profile of imetelstat will continue to be assessed, including the risk of hepatotoxicity, severe cytopenias, fatal bleeding with or without any associated thrombocytopenia, patient injury or death, and any other severe adverse effects that may be associated with life-threatening clinical outcomes. If such toxicities or other safety issues in any clinical trial of imetelstat are determined by us, the FDA or any other regulatory authority to result in an unacceptable benefit-risk profile, then:

- additional information supporting the benefit-risk profile of imetelstat may be requested by the FDA or other regulatory authorities and if any such information supplied by Janssen, or by us, following the transition of the imetelstat program to us, is not deemed acceptable, current clinical trials of imetelstat could be suspended, terminated, or placed on clinical hold by the FDA or other regulatory authorities;
- the ability to retain enrolled patients in current clinical trials may be negatively affected, resulting in incomplete data sets and the inability to adequately assess the benefit-risk profile of imetelstat in a specific patient population; or
- additional, unexpected clinical trials or non-clinical studies may be required to be conducted.

The occurrence of any of these events could interrupt, further delay, or halt, any development and potential commercialization of imetelstat by us, which would have a severe adverse effect on our results of operations, financial condition, business prospects and the future of imetelstat, any of which might cause us to cease operations.

Results obtained in prior non-clinical studies and clinical trials do not predict success in later clinical trials. Likewise, preliminary data from clinical trials should be considered carefully and with caution since final data may be materially different from preliminary data, particularly as more patient data become available.*

Success in non-clinical testing and early clinical trials does not ensure that later clinical trials will be successful. We cannot be certain that any of the prior, current or potential future clinical trials of imetelstat will generate sufficient, consistent or adequate efficacy and safety data demonstrating a positive benefit-risk profile, which would be necessary to obtain regulatory approval to market imetelstat in any indication. Product candidates in later stages of clinical trials may fail to show the desired benefit-risk profile despite having progressed through non-clinical studies and initial clinical trials. Other companies in the biopharmaceutical industry have frequently suffered significant setbacks in later clinical trials, even after achieving promising results in earlier non-clinical studies or clinical trials.

Safety and efficacy data from previous or current imetelstat clinical trials in hematologic myeloid malignancies should not be relied upon as predictive or indicative of future clinical trial results. For example, complete and partial

remissions observed in the pilot study of imetelstat conducted at Mayo Clinic, or the Pilot Study, suggested potential disease-modifying activity of imetelstat in the MF patient population enrolled in the Pilot Study. However, similar activity was not observed in the MF patients enrolled in IMbark, as shown by the one partial remission observed in the IMbark primary analysis. We believe that differences in the IMbark study design when compared to the Pilot Study design, such as more restrictive patient enrollment criteria requiring either documented objective lack of response to a JAK inhibitor or evidence of progressive disease while on treatment with a JAK inhibitor, may have contributed to the data observed in IMbark differing significantly from data reported from the Pilot Study, but we cannot assure you that any future clinical trials of imetelstat in MF will yield results comparable to IMbark or the Pilot Study. In addition, the potential improvement in survival observed in the 9.4 mg/kg dosing arm in IMbark will need to be further assessed in a Phase 3 clinical trial comparing imetelstat to a control therapy, and similar results, including potential improvement in survival, if any, with respect to any patient population or patient population subgroup, may not be observed.

Similarly, in the Phase 2 portion of IMerge, the initial data review for the expansion cohort that was conducted by Janssen in the second quarter of 2018, which Janssen called a “data snapshot,” exhibited 8-week RBC-TI rate of 28%, while the 13-patient initial cohort exhibited 8-week RBC-TI rate of 54% resulting in an overall 8-week RBC-TI rate of 37% for the combined cohorts. We believe the observed difference in 8-week RBC-TI rate between the 13-patient initial cohort and the 25-patient expansion cohort may be attributable to factors such as the maturity of the data at the time of the data snapshot since the median follow-up time of the expansion cohort at the time of the data snapshot was less than half the length of time the 13-patient initial cohort had been followed when their data were first reported, or the higher overall baseline transfusion burden of the expansion cohort, but we cannot assure you that the 8-week RBC-TI rate reported for the combined cohorts in the Phase 2 portion of IMerge will improve with longer follow-up, or at all, or that the 8-week RBC-TI rate of patients to be enrolled in the planned Phase 3 portion of IMerge, if any, will be comparable to what has been reported in the 13-patient initial cohort, the 25-patient expansion cohort, or the combined cohorts. In this regard, because patients remaining in the treatment phase in the Phase 2 portion of IMerge continue to receive imetelstat, data continue to be generated from the trial and more mature data that may be reported from the Phase 2 portion of IMerge in the future may materially differ from data previously reported and continue to evolve until all patients have ceased treatment. Thus, the reported data should be considered carefully and with caution.