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# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION

**Washington, D.C. 20549**

# FORM 10-Q

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

**For the quarterly period ended March 31, 2020**

**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 001-35726**

# Radius Health, Inc.

(Exact name of registrant as specified in its charter)

| **Delaware** | **80-0145732** |
|---|---|
| (State or other jurisdiction of Incorporation or organization) | (IRS Employer Identification Number) |

**950 Winter Street**
**Waltham, Massachusetts** 02451
(Address of Principal Executive Offices and Zip Code)

**(617) 551-4000**
(Registrant's telephone number, including area code)

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, $0.0001 par value per share** | **RDUS** | **The Nasdaq Global Market** |

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 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, a 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 ☒

Number of shares of the registrant's Common Stock, $0.0001 par value per share, outstanding as of May 1, 2020: 46,388,624 shares

**RADIUS HEALTH, INC.**
**FORM 10-Q**
**FOR THE QUARTER ENDED MARCH 31, 2020**

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## PART I— FINANCIAL INFORMATION

### Item 1. Condensed Consolidated Financial Statements

**Radius Health, Inc.**
**Condensed Consolidated Balance Sheets**
(Unaudited, in thousands, except share and per share amounts)

| | March 31, 2020 | December 31, 2019 |
|---|---|---|
| | (unaudited) | |
| **ASSETS** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 40,723 | $ 69,886 |
| Restricted cash | 567 | 567 |
| Marketable securities | 97,257 | 91,015 |
| Accounts receivable, net | 30,371 | 23,289 |
| Inventory | 6,002 | 5,323 |
| Prepaid expenses | 9,244 | 12,131 |
| Other current assets | 1,214 | 846 |
| Total current assets | 185,378 | 203,057 |
| Property and equipment, net | 2,000 | 2,293 |
| Intangible assets | 6,384 | 6,583 |
| Right of use assets - operating leases | 7,304 | 6,704 |
| Other assets | 514 | 514 |
| Total assets | $ 201,580 | $ 219,151 |
| | | |
| **LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)** | | |
| Current liabilities: | | |
| Accounts payable | $ 9,192 | $ 6,030 |
| Accrued expenses and other current liabilities | 49,411 | 53,030 |
| Operating lease liability, current | 2,138 | 2,198 |
| Total current liabilities | 60,741 | 61,258 |
| | | |
| Convertible notes payable | 199,880 | 195,591 |
| Term loan | 9,939 | — |
| Operating lease liability, long term | 5,173 | 4,581 |
| Total liabilities | 275,733 | 261,430 |
| Commitments and contingencies | | |
| Stockholders' equity (deficit): | | |
| Common stock, $.0001 par value; 200,000,000 shares authorized, 46,387,437 shares and 46,189,870 shares issued and outstanding at March 31, 2020 and December 31, 2019 | 5 | 5 |
| Additional paid-in-capital | 1,200,776 | 1,194,327 |
| Accumulated other comprehensive income (loss) | (666) | 3 |
| Accumulated deficit | (1,274,268) | (1,236,614) |
| Total stockholders' equity (deficit) | (74,153) | (42,279) |
| Total liabilities and stockholders' equity (deficit) | $ 201,580 | $ 219,151 |

See accompanying notes to unaudited condensed consolidated financial statements.

**Radius Health, Inc.**
**Condensed Consolidated Statements of Operations and Comprehensive Loss**
(Unaudited, in thousands, except share and per share amounts)

| | Three Months Ended March 31, | |
|---|---|---|
| | 2020 | 2019 |
| REVENUES: | | |
| Product revenue, net | $ 47,923 | $ 29,844 |
| OPERATING EXPENSES: | | |
| Cost of sales - product | 3,861 | 3,030 |
| Cost of sales - intangible amortization | 200 | 200 |
| Research and development | 39,009 | 23,259 |
| Selling, general and administrative | 36,433 | 41,186 |
| Loss from operations | (31,580) | (37,831) |
| OTHER INCOME (EXPENSE): | | |
| Other income (expense) | 11 | 4 |
| Interest expense | (6,756) | (6,037) |
| Interest income | 671 | 1,104 |
| NET LOSS | $ (37,654) | $ (42,760) |
| OTHER COMPREHENSIVE LOSS: | | |
| Unrealized gain (loss) from available-for-sale debt securities | (669) | 474 |
| COMPREHENSIVE LOSS | $ (38,323) | $ (42,286) |
| LOSS ATTRIBUTABLE TO COMMON STOCKHOLDERS - BASIC AND DILUTED (Note 8) | $ (37,654) | $ (42,760) |
| LOSS PER SHARE: | | |
| Basic and diluted | $ (0.81) | $ (0.94) |
| | | |
| WEIGHTED AVERAGE SHARES: | | |
| Basic and diluted | 46,271,123 | 45,671,502 |

See accompanying notes to unaudited condensed consolidated financial statements.

**Radius Health, Inc.**
**Condensed Consolidated Statements of Cash Flows**
(Unaudited, in thousands)

| | Three Months Ended March 31, | |
|---|---|---|
| | 2020 | 2019 |
| CASH FLOWS USED IN OPERATING ACTIVITIES: | | |
| Net loss | $ (37,654) | $ (42,760) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Depreciation and amortization | 492 | 633 |
| Amortization of discount on marketable securities, net | (4) | (65) |
| Amortization of debt discount and debt issuance costs | 4,289 | 3,750 |
| Impairment loss on operating lease right of use assets | — | 339 |
| Stock-based compensation | 5,459 | 6,114 |
| Changes in operating assets and liabilities: | | |
| Inventory | (679) | 564 |
| Accounts receivable, net | (7,082) | (3,992) |
| Prepaid expenses | 2,887 | 1,470 |
| Other current assets | (368) | 446 |
| Operating lease right of use assets | 510 | 500 |
| Other long-term assets | — | 43 |
| Accounts payable | 3,162 | 5,654 |
| Accrued expenses and other current liabilities | (3,619) | (6,571) |
| Lease liability, operating leases | (578) | (565) |
| Other non-current liabilities | — | (24) |
| Net cash used in operating activities | (33,185) | (34,464) |
| CASH FLOWS PROVIDED BY INVESTING ACTIVITIES: | | |
| Purchases of marketable securities | (39,907) | — |
| Sales and maturities of marketable securities | 33,000 | 45,000 |
| Net cash provided by (used in) investing activities | (6,907) | 45,000 |
| CASH FLOWS PROVIDED BY FINANCING ACTIVITIES: | | |
| Proceeds from exercise of stock options and warrant exercises | — | 622 |
| Proceeds from issuance of term loan, net | 9,939 | — |
| Proceeds from issuance of shares under employee stock purchase plan | 990 | 1,027 |
| Net cash provided by financing activities | 10,929 | 1,649 |
| NET INCREASE (DECREASE) IN CASH, CASH EQUIVALENTS, AND RESTRICTED CASH | (29,163) | 12,185 |
| CASH, CASH EQUIVALENTS, AND RESTRICTED CASH AT BEGINNING OF YEAR | 70,453 | 59,881 |
| CASH, CASH EQUIVALENTS, AND RESTRICTED CASH AT END OF PERIOD | $ 41,290 | $ 72,066 |
| SUPPLEMENTAL DISCLOSURES: | | |
| Cash paid for interest | $ 4,685 | $ 4,575 |
| Receivable due from stock options exercises | $ — | $ 1,895 |
| Cash paid for amounts included in the measurement of operating lease liabilities | $ 682 | $ 685 |
| Right of use assets obtained in exchange for operating lease liability | $ 1,110 | $ 8,289 |

See accompanying notes to unaudited condensed consolidated financial statements.

**Radius Health, Inc.**
**Condensed Consolidated Statements of Stockholders' Equity (Deficit)**
(Unaudited, in thousands, except share and per share amounts)

| | Stockholders' Equity (Deficit) | | | | | |
|---|---|---|---|---|---|---|
| | Common Stock | | Additional Paid-In Capital | Accumulated Other Comprehensive Income (Loss) | Accumulated Deficit | Total Stockholders' Equity (Deficit) |
| | Shares | Amount | Amount | Amount | Amount | Amount |
| Balance at December 31, 2018 | 45,563,693 | $ 5 | $ 1,165,003 | $ (755) | $ (1,103,621) | $ 60,632 |
| Net loss | | | | | $ (42,760) | (42,760) |
| Unrealized gain from available-for-sale securities | | | | 474 | | 474 |
| Vesting of restricted shares | 73,113 | | | | | — |
| Exercise of options | 185,438 | | 1,517 | | | 1,517 |
| Exercise of warrants | 81,104 | | 1,000 | | | 1,000 |
| Issuance of common stock upon purchase by employee stock purchase plan | 63,732 | | 1,027 | | | 1,027 |
| Share-based compensation expense | | | 6,114 | | | 6,114 |
| Balance at March 31, 2019 | 45,967,080 | $ 5 | $ 1,174,661 | $ (281) | $ (1,146,381) | $ 28,004 |
| | | | | | | |
| Balance at December 31, 2019 | 46,189,870 | $ 5 | $ 1,194,327 | $ 3 | $ (1,236,614) | $ (42,279) |
| Net loss | | | | | (37,654) | (37,654) |
| Unrealized loss from available-for-sale securities | | | | (669) | | (669) |
| Vesting of restricted shares | 142,270 | | | | | — |
| Issuance of common stock upon purchase by employee stock purchase plan | 55,297 | | 990 | | | 990 |
| Share-based compensation expense | | | 5,459 | | | 5,459 |
| Balance at March 31, 2020 | 46,387,437 | $ 5 | $ 1,200,776 | $ (666) | $ (1,274,268) | $ (74,153) |

See accompanying notes to unaudited condensed consolidated financial statements.

**Radius Health, Inc.**
**Notes to Condensed Consolidated Financial Statements**
**(Unaudited)**

## 1. Organization

Radius Health, Inc. ("Radius" or the "Company") is a science-driven fully integrated biopharmaceutical company that is committed to developing and commercializing innovative endocrine therapeutics. In April 2017, the Company's first commercial product, TYMLOS® (abaloparatide) injection, was approved by the U.S. Food and Drug Administration ("FDA") for the treatment of postmenopausal women with osteoporosis at high risk for fracture defined as history of osteoporotic fracture, multiple risk factors for fracture, or patients who have failed or are intolerant to other available osteoporosis therapy. In January 2019, the European Commission adopted a decision refusing approval of the Company's European Marketing Authorisation Application ("MAA") for abaloparatide-SC. In July 2017, the Company entered into a license and development agreement with Teijin Limited ("Teijin") for abaloparatide for subcutaneous injection ("abaloparatide-SC") in Japan, under which the Company received an upfront payment and is entitled to receive milestone payments upon the achievement of certain regulatory and sales milestones, and a fixed low double-digit royalty based on net sales of abaloparatide-SC in Japan during the royalty term. The Company is developing an abaloparatide transdermal patch, or abaloparatide-patch, for potential use in the treatment of postmenopausal women with osteoporosis. In connection with its strategic plans to focus on bone health and targeted endocrine diseases, the Company is exploring all strategic options for its oncology programs, including elacestrant (RAD1901) and RAD140. The Company's investigational product candidate, elacestrant ("RAD1901"), a selective estrogen receptor degrader ("SERD"), is being developed for potential use in the treatment of hormone receptor-positive breast cancer. The Company was developing its internally discovered investigational product candidate, RAD140, a non-steroidal selective androgen receptor modulator ("SARM") for potential use in the treatment of hormone receptor-positive breast cancer.

The Company is subject to the risks associated with biopharmaceutical companies with a limited operating history, including dependence on key individuals, a developing business model, the necessity of securing regulatory approvals to market its investigational product candidates, market acceptance of the Company's investigational product candidates following receipt of regulatory approval, competition for its investigational product candidates following receipt of regulatory approval, and the continued ability to obtain adequate financing to fund the Company's future operations, including as a result of the impacts from the coronavirus disease 2019 ("COVID-19") pandemic. The Company has incurred losses and expects to continue to incur additional losses for the foreseeable future. As of March 31, 2020, the Company had an accumulated deficit of $1,274.3 million, and total cash, cash equivalents, marketable securities, and investments of $138.0 million.

The ongoing global COVID-19 pandemic has resulted in significant governmental measures being implemented to control the spread of the virus and while the Company cannot predict their scope and severity, these developments and measures have adversely affected its business, results of operations and financial condition and will likely continue to do so. The Company is closely monitoring the impact of the COVID-19 pandemic on all aspects of its business and is taking steps to minimize its impact on its business. However, the full extent to which the COVID-19 pandemic will directly or indirectly impact the Company's business, results of operations and financial condition, including sales, expenses, reserves and allowances, manufacturing, clinical trials, research and development costs and employee-related amounts, will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the duration of the outbreak, new information that may emerge concerning the severity of COVID-19 pandemic or the effectiveness of actions taken to contain the pandemic or minimize its impact, among others. Furthermore, if the Company or any of the third parties with whom it engages were to experience additional or prolonged shutdowns or other business disruptions, the Company's ability to conduct its business in the manner and on the timelines presently planned could be materially or negatively affected, which could have a material adverse impact on its business, results of operation and financial condition.

Based upon its cash, cash equivalents, marketable securities, and investments balance as of March 31, 2020, the Company believes that, prior to the consideration of revenue from the potential future sales of any of its investigational product candidates that may receive regulatory approval or proceeds from partnering and/or collaboration activities, it has sufficient capital as well as access to other capital discussed in Note 7, "Term Loan and Credit Facility to fund its development plans, U.S. commercial scale-up and other operational activities, for at least one year from the date of this filing. The Company expects to finance the future development costs of its clinical product portfolio with its existing cash and cash equivalents, marketable securities, and investments, or through strategic financing opportunities that could include, but are not limited to collaboration or partnership agreements, future offerings of its equity, or the incurrence of debt. However, there is no guarantee that any of these strategic or financing opportunities will be executed or executed on favorable terms, and some could be dilutive to existing stockholders. If the Company fails to obtain additional future capital, it may be unable to complete its clinical trials and obtain approval of certain investigational product candidates from the FDA or foreign regulatory authorities.

**2. Basis of Presentation and Significant Accounting Policies**

*Basis of Presentation*—The accompanying unaudited condensed consolidated financial statements and the related disclosures of the Company have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") for interim financial reporting and as required by Regulation S-X, Rule 10-01. Accordingly, they do not include all the information and footnotes required by U.S. GAAP for complete financial statements. In the opinion of management, all adjustments (including those which are normal and recurring) considered necessary for a fair presentation of the interim financial information have been included.

When preparing financial statements in conformity with U.S. GAAP, the Company must make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures at the date of the financial statements. Actual results could differ from those estimates. Additionally, operating results for the three months ended March 31, 2020 are not necessarily indicative of the results that may be expected for any other interim period or for the fiscal year ending December 31, 2020. Subsequent events have been evaluated up to the date of issuance of these financial statements. These interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes, which are contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2019 ("2019 Form 10-K"), filed with the Securities and Exchange Commission ("SEC") on February 27, 2020.

*Significant Accounting Policies*—The significant accounting policies identified in the Company's 2019 Form 10-K that require the Company to make estimates and assumptions include: revenue recognition, inventory obsolescence, long-lived assets and intangible assets, accounting for stock-based compensation, contingencies, tax valuation reserves, fair value measures, and accrued expenses. There were no changes to significant accounting policies during the three months ended March 31, 2020, except for the adoption of the Accounting Standards Updates ("ASU") issued by the Financial Accounting Standards Board ("FASB") detailed below.

*Accounting Standards Updates—Recently Adopted*—In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): *Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"). "). Certain amendments thereto were also issued by the FASB. ASU 2016-13 and the related amendments require that credit losses be reported using an expected losses model, representing the entity's current estimate of credit losses expected to be incurred. The previous accounting guidance, as applied by the Company through December 31, 2019, was based on an incurred losses model. The standard replaces the incurred loss impairment methodology under current U.S. GAAP with a methodology that reflects expected credit losses and requires the use of a forward-looking expected credit loss model for accounts receivables, loans, and other financial instruments. For available-for-sale debt securities with unrealized losses, ASU 2016-13 and the related amendments now requires allowances to be recorded instead of reducing the amortized cost of the investment. These amendments under ASU 2016-13 are effective for interim and annual fiscal periods beginning after December 15, 2019. The Company adopted ASU 2016-13 as of January 1, 2020 and it did not have a material impact on the Company's condensed consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement - Disclosure Framework - Changes to the Disclosure Requirement for Fair Value Measurement*, or ("ASU 2018-13"). The amendments in ASU 2018-13 modify the disclosure requirements on fair value measurements in Topic 820, Fair Value Measurement, based on the concepts in the Concepts Statement, including the consideration of costs and benefits. The amendments under ASU 2018-13 are effective for interim and annual fiscal periods beginning after December 15, 2019, with early adoption permitted. The Company adopted ASU 2018-13 on January 1, 2020 and it did not have a material impact on the Company's condensed consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, *Intangible-Goodwill and Other Internal-Use Software (Subtopic 350-40* ("ASU 2018-15"). ASU 2018-15 updates guidance regarding accounting for a cloud computing arrangement that is a service contract. The amendments under ASU 2018-15 are effective for interim and annual fiscal periods beginning after December 15, 2019, with early adoption permitted. The Company adopted ASU 2018-15 on January 1, 2020 and it did not have a material impact on the Company's condensed consolidated financial statements.

*Other* - In March 2020, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was signed into law and provides an estimated $2.2 trillion to fight the COVID-19 pandemic and stimulate the economy. The business tax provisions of the CARES Act include temporary changes to income and non-income-based tax laws. Some of the key income tax provisions include eliminating the 80% of taxable income limitations by allowing corporate entities to fully utilize net operating loss (NOL) carryforwards to offset taxable income in 2018, 2019, or 2020 and reinstating it for tax years after 2020; allowing NOLs generated in 2018, 2019, or 2020 to be carried back five years; increasing the net interest expense deduction limit to 50% of adjusted taxable income from 30% for the 2019 and 2020 tax years; allowing taxpayers with alternative minimum tax credits to claim a refund for the entire amount of the credit instead of recovering the credit through refunds over a period of years, as required by the 2017 Tax Cut and Jobs Act; and allowing entities to deduct more of their charitable cash contributions made

during calendar year 2020 by increasing the taxable income limitation to 25% from 10%. Companies are required to account for these provisions in the period that includes the March 2020 enactment date (i.e., the first quarter for calendar year-end entities). The Company has assessed the impact of these provisions and they are not material to the Company's condensed consolidated financial statements or related disclosures. Measures of the CARES Act not related to income-based taxes include allowing an employer to pay its share of Social Security payroll taxes that would otherwise be due from the date of enactment through December 31, 2020 over the following two years and allowing eligible employers subject to closure due to the COVID-19 pandemic to receive a 50% credit on qualified wages against their employment taxes each quarter, with any excess credits eligible for refunds. These measures of the CARES Act are also not material to the Company's condensed consolidated financial statements as the Company did apply for any credit during the period.

*Accounting Standards Updates, Recently Issued*—In December 2019, the FASB issued ASU 2019-12, *Simplifying the Accounting for Income Taxes* ("ASU 2019-12"). ASU 2019-12 eliminates certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interest period and the recognition of deferred tax liabilities for outside basis differences, and also clarifies and simplifies other aspects of the accounting for income taxes. The amendments under ASU 2010-12 are effective for interim and annual fiscal periods beginning after December 15, 2020, with early adoption permitted. The Company is currently evaluating the effects the adoption of ASU 2019-12 will have on its consolidated financial statements and related disclosures.

**3. Marketable Securities**

Available-for-sale marketable securities and cash and cash equivalents as of March 31, 2020 and December 31, 2019 consist of the following (in thousands):

| | March 31, 2020 | | | |
|---|---|---|---|---|
| | Amortized Cost Value | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value |
| Cash and cash equivalents: | | | | |
| Cash | $ 21,949 | $ — | $ — | $ 21,949 |
| Money market funds | 18,774 | — | — | 18,774 |
| Total | $ 40,723 | $ — | $ — | $ 40,723 |
| | | | | |
| Marketable securities: | | | | |
| Domestic corporate debt securities | $ 68,115 | $ — | $ (638) | $ 67,477 |
| Domestic corporate commercial paper | 17,410 | 5 | (54) | 17,361 |
| Agency bonds | 12,398 | 21 | — | 12,419 |
| Total | $ 97,923 | $ 26 | $ (692) | $ 97,257 |

| | December 31, 2019 | | | |
|---|---|---|---|---|
| | Amortized Cost Value | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value |
| Cash and cash equivalents: | | | | |
| Cash | $ 34,726 | $ — | $ — | $ 34,726 |
| Money market funds | 35,160 | — | — | 35,160 |
| Total | $ 69,886 | $ — | $ — | $ 69,886 |
| | | | | |
| Marketable securities: | | | | |
| Domestic corporate debt securities | $ 41,229 | $ 3 | $ (3) | $ 41,229 |
| Domestic corporate commercial paper | 24,900 | 5 | | 24,905 |
| Agency bonds | 12,391 | 1 | (3) | 12,389 |
| US treasury bonds | 12,492 | — | — | 12,492 |
| Total | $ 91,012 | $ 9 | $ (6) | $ 91,015 |

The Company reviews marketable securities whenever the fair value of an investment is less than the amortized cost and evidence indicates that an investment's carrying amount is not recoverable within a reasonable period of time. We evaluate whether the decline in fair value has resulted from credit losses or other factors. In making this assessment, we consider the extent to which fair value is less than amortized cost, any changes to the rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. If this assessment indicates that a credit loss exists, the present value of cash flows expected to be collected from the security are compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss exists and an allowance for credit losses is recorded for the credit loss on the condensed consolidated balance sheet, limited by the amount that the fair value is less than the amortized cost basis. Any impairment that is not related to credit is recognized in other comprehensive income.

Changes in the allowance for credit losses are recorded as provision for (or reversal of) credit loss expense on the condensed consolidated statement of operations. Losses are charged against the allowance when the Company believes the uncollectability of an available-for-sale debt security is confirmed or when either of the criteria regarding intent or requirement to sell is met. The unrealized losses at March 31, 2020 and December 31, 2019 are attributable to changes in interest rates and the Company does not believe any unrealized losses represent credit losses.

As of March 31, 2020 and December 31, 2019, the Company had 17 and 8 available-for-sale debt securities in an unrealized loss position, respectively, for which an allowance for credit losses has not been recorded. The following table summarizes such investments by major security type and length of time in a continuous unrealized loss position as of March 31, 2020 (in thousands).

| | Less than 12 Months | | 12 months or longer | | Total | |
|---|---|---|---|---|---|---|
| | Fair value | Unrealized losses | Fair value | Unrealized losses | Fair value | Unrealized losses |
| Available-for-sale debt securities | | | | | | |
| Corporate debt securities | 67,477 | (638) | — | — | 67,477 | (638) |
| Corporate commercial paper | 4,866 | (54) | — | — | 4,866 | (54) |
| Total available-for-sale debt securities | 72,343 | (692) | — | — | 72,343 | (692) |

**4. Fair Value Measurements**

The Company determines the fair value of its financial instruments based upon the fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Below are the three levels of inputs that may be used to measure fair value:

- Level 1—Quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.
- Level 2—Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Transfers into or out of any hierarchy level are recognized at the end of the reporting period in which the transfers occurred. There were no material transfers between any levels during the three months ended March 31, 2020. There were no material transfers between any levels during 2019.

The following table summarizes the financial instruments measured at fair value on a recurring basis in the Company's accompanying condensed consolidated balance sheets as of March 31, 2020 and December 31, 2019 (in thousands):

| | As of March 31, 2020 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| **Assets** | | | | |
| Cash and cash equivalents: | | | | |
| Cash | $ 21,949 | $ — | $ — | $ 21,949 |
| Money market funds (1) | 18,774 | — | — | 18,774 |
| Total | $ 40,723 | $ — | $ — | $ 40,723 |
| **Marketable Securities** | | | | |
| Domestic corporate debt securities (2) | $ — | $ 67,477 | $ — | $ 67,477 |
| Domestic corporate commercial paper (2) | — | 17,361 | — | 17,361 |
| Agency bonds (2) | $ — | $ 12,419 | $ — | $ 12,419 |
| Total | $ — | $ 97,257 | $ — | $ 97,257 |

| | As of December 31, 2019 | | | |
|---|---|---|---|---|
| | Level 1 | Level 2 | Level 3 | Total |
| **Assets** | | | | |
| Cash and cash equivalents: | | | | |
| Cash | $ 34,726 | $ — | $ — | $ 34,726 |
| Money market funds (1) | 35,160 | — | — | 35,160 |
| Total | $ 69,886 | $ — | $ — | $ 69,886 |
| **Marketable Securities** | | | | |
| Domestic corporate debt securities (2) | $ — | $ 41,229 | $ — | $ 41,229 |
| Domestic corporate commercial paper (2) | — | 24,905 | — | 24,905 |
| Agency bonds (2) | — | 12,389 | — | 12,389 |
| US treasury bonds (2) | $ — | $ 12,492 | $ — | $ 12,492 |
| Total | $ — | $ 91,015 | $ — | $ 91,015 |

(1) Fair value is based upon quoted market prices.

(2) Fair value is based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the assets. Inputs are obtained from various sources, including market participants, dealers and brokers.

**5. Inventory**

Inventory consisted of the following as of March 31, 2020 and December 31, 2019 (in thousands):

| | March 31, 2020 | December 31, 2019 |
|---|---|---|
| Raw materials | $ 4,304 | $ 4,093 |
| Work in process | 569 | — |
| Finished goods | 1,129 | 1,230 |
| Total inventories | $ 6,002 | $ 5,323 |

Finished goods manufactured by the Company have a 36-month shelf life from date of manufacture.

**6. Convertible Notes Payable**

On August 14, 2017, in a registered underwritten public offering, the Company issued $300 million aggregate principal amount of 3% Convertible Senior Notes due September 1, 2024 (the "Convertible Notes"). In addition, on September 12, 2017, the Company issued an additional $5.0 million principal amount of Convertible Notes pursuant to the exercise of an over-allotment option granted to the underwriters in the offering. In accordance with accounting guidance for debt with conversion and other options, the Company separately accounted for the liability component ("Liability Component") and embedded conversion option (the "Equity Component") of the Convertible Notes by allocating the proceeds between the Liability Component and the Equity Component, due to the Company's ability to settle the Convertible Notes in cash, common stock or a combination of cash and common stock, at its option. In connection with the issuance of the Convertible Notes, the Company incurred approximately $9.4 million of debt issuance costs, which primarily consisted of underwriting, legal and other professional fees, and allocated these costs to the Liability and Equity Components based on the allocation of the proceeds. Of the total $9.4 million of debt issuance costs, $4.3 million was allocated to the Equity Component and recorded as a reduction to additional paid-in capital and $5.1 million was allocated to the liability component and is now recorded as a reduction of the Convertible Notes in the Company's condensed consolidated balance sheet. The portion allocated to the liability component is amortized to interest expense using the effective interest method over seven years.

The Convertible Notes are senior unsecured obligations of the Company and bear interest at a rate of 3.00% per annum, payable semi-annually in arrears on March 1 and September 1, beginning on March 1, 2018. Upon conversion, the Convertible Notes will be convertible into cash, shares of the Company's common stock or a combination of cash and shares of the Company's common stock, at the Company's election. Prior to December 31, 2017, the Convertible Notes were not convertible except in connection with a make whole fundamental change, as defined in the respective indentures. The Convertible Notes will be subject to redemption at the Company's option, under certain restrictions as noted below, on or after September 1, 2021, in whole or in part, if the conditions described below are satisfied. The redemption of the Convertible Notes may also be subject to certain restrictions included in Note 7, "Term Loan and Credit Facility". The Convertible Notes will mature on September 1, 2024, unless earlier converted, redeemed or repurchased in accordance with their terms. Subject to satisfaction of certain conditions and during the periods described below, the Convertible Notes may be converted at an initial conversion rate of 20.4891 shares of common stock per $1,000 principal amount of the Convertible Notes (equivalent to an initial conversion price of approximately $48.81 per share of common stock).

Holders of the Convertible Notes may convert all or any portion of their notes, in multiples of $1,000 principal amount, at their option at any time prior to the close of business on the business day immediately preceding June 1, 2024 only under the following circumstances:

(1) during any calendar quarter commencing after the calendar quarter ending on December 31, 2017 (and only during such calendar quarter), if the last reported sale price of the Company's common stock for at least 20 trading days (whether consecutive or not) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;

(2) during the five-business day period after any five-consecutive trading day period (the "measurement period") in which the "trading price" per $1,000 principal amount of the Convertible Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on each such trading day;

(3) if the Company calls the Convertible Notes for redemption, until the close of business on the business day immediately preceding the redemption date; or

(4) upon the occurrence of specified corporate events.

As of March 31, 2020, none of the above circumstances had occurred and, as such, the Convertible Notes were not convertible.

Prior to September 1, 2021, the Company may not redeem the Convertible Notes. On or after September 1, 2021, the Company may redeem for cash all or part of the Convertible Notes if the last reported sale price of the Company's common stock equals or exceeds 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30-consecutive trading day period ending within five trading days prior to the date on which the Company provides notice of the redemption. The redemption price will be the principal amount of the Convertible Notes to be redeemed, plus accrued and unpaid interest to, but excluding, the redemption date. In addition, calling any Convertible Note for redemption will constitute a make-whole fundamental change with respect to that Convertible Note, in which case the conversion rate applicable to the conversion of that Convertible Note, if it is converted in connection with the redemption, will be increased in certain circumstances.

The initial carrying amount of the Liability Component of $166.3 million was calculated by measuring the fair value of a similar liability that does not have an associated convertible feature. The allocation was performed in a manner that reflected the Company's non-convertible debt borrowing rate for similar debt. The Equity Component of the Convertible Notes of $138.7 million was recognized as a debt discount and represents the difference between the proceeds from the issuance of the Convertible Notes of $305.0 million and the fair value of the Liability of the Convertible Notes of approximately $166.3 million on their respective dates of issuance. The excess of the principal amount of the Liability Component over its carrying amount (the "Debt Discount") is amortized to interest expense using the effective interest method over seven years. The Equity Component is not remeasured as long as it continues to meet the conditions for equity classification. In connection with issuance of the Convertible Notes, the Company also incurred certain offering costs directly attributable to the offering. Such costs are deferred and amortized over the term of the debt to interest expense using the effective interest method. A portion of the deferred financing costs incurred in connection with the Convertible Notes was deemed to relate to the Equity Component and was allocated to additional paid-in capital.

The outstanding balances of the Convertible Notes as of March 31, 2020 consisted of the following (in thousands):

| | 2024 Convertible Notes |
|---|---|
| Liability component: | |
| Principal | $ 305,000 |
| Less: debt discount and issuance costs, net | (105,120) |
| Net carrying amount | $ 199,880 |
| Equity component: | $ 134,450 |

The Company determined the expected life of the Convertible Notes was equal to its seven-year term. The effective interest rate on the Liability Components of the Convertible Notes for the period from the date of issuance through March 31, 2020 was 13.04%. As of March 31, 2020, the "if-converted value" did not exceed the remaining principal amount of the Convertible Notes. The fair values of the Convertible Notes are based on data from readily available pricing sources which utilize market observable inputs and other characteristics for similar types of instruments, and, therefore, the Convertible Notes are classified within Level 2 in the fair value hierarchy. The fair value of the Convertible Notes, which differs from their carrying value, is influenced by interest rates, the Company's stock price and stock price volatility. The estimated fair value of the Convertible Notes as of March 31, 2020 was approximately $215.6 million.

The following table sets forth total interest expense recognized related to the Convertible Notes during the three months ended March 31, 2020 and 2019 (in thousands):

| | Three Months Ended March 31, | |
|---|---|---|
| | 2020 | 2019 |
| Contractual interest expense | $ 2,287 | $ 2,287 |
| Amortization of debt discount | 4,134 | 3,614 |
| Amortization of debt issuance costs | 155 | 136 |
| Total interest expense | $ 6,576 | $ 6,037 |

Future minimum payments on the Company's long-term debt as of March 31, 2020 are as follows (in thousands):

| Years ended December 31, | Future Minimum Payments |
|---|---|
| 2020 | $ 4,575 |
| 2021 | 9,150 |
| 2022 | 9,150 |
| 2023 | 9,150 |
| 2024 | 314,150 |
| Total minimum payments | $ 346,175 |
| Less: interest | (41,175) |
| Less: unamortized discount | (105,120) |
| Less: current portion | — |
| Long Term Debt | $ 199,880 |

**7. Term Loan and Credit Facility**

On January 10, 2020, the Company and Radius Pharmaceuticals, Inc., a wholly-owned subsidiary of the Company (collectively, the "Borrowers"), entered into a (i) Credit and Security Agreement, as amended (Term Loan) (the "Term Credit Agreement") with MidCap Financial Trust, in its capacity as administrative agent (the "Agent") and as a lender, and the financial institutions or other entities from time to time parties thereto and (ii) Credit and Security Agreement (Revolving Loan) (the "Revolving Credit Agreement", together with the Term Credit Agreement, the "Credit Agreements"), with the Agent, and the financial institutions or other entities from time to time parties thereto.

The Credit Agreements consist of a secured term loan facility (the "Term Facility") in an aggregate amount of $55.0 million, which will be made available to the Borrowers under the following four tranches: (i) Tranche 1 - $10.0 million, available at closing; (ii) Tranche 2 - $15.0 million, available no earlier than June 25, 2020, but no later than December 31, 2020; (iii) Tranche 3 - $15.0 million, available no later than December 31, 2021, subject to the Company's satisfaction of certain conditions described in the Term Credit Agreement; and (iv) Tranche 4 - $15.0 million, available no later than December 31, 2021, subject to the Company's satisfaction of certain conditions described in the Term Credit Agreement.

The Credit Agreements also consist of a secured revolving credit facility (the "Revolving Facility", together with the Term Facility, the "Facilities") under which the Borrowers may borrow up to $20.0 million, the availability of which is determined based on a borrowing base as follows: (i) up to 85% of the net collectible value of the Borrowers' domestic accounts receivable due from eligible direct and third-party payors, plus (ii) up to 40% of the Borrowers' domestic eligible inventory, provided that the availability from eligible inventory may not exceed 20% of the total availability at any time. The Borrowers also have the right, subject to certain customary conditions, to increase the Revolving Facility by $20.0 million.

The Facilities have a maturity date of June 1, 2024. The Borrowers guarantee their obligations under the Credit Agreements. The obligations are secured by first priority liens on substantially all of the assets of the Borrowers, including, with certain exceptions, all of the capital stock of the Borrowers' subsidiaries.

The proceeds of the Term Facility may be used for (i) transaction fees in connection with the transactions contemplated by the Credit Agreements, (ii) the payment in full on the closing date of certain existing debt, and (iii) working capital needs and general corporate purposes of the Borrowers and their subsidiaries. The proceeds of the Revolving Facility may be used for (i) transaction fees in connection with the transactions contemplated by the Credit Agreements and (ii) working capital needs and general corporate purposes of the Borrowers and their subsidiaries.

Borrowings under the Term Facility will bear interest through maturity at a variable rate based upon the LIBOR rate plus 5.75%, subject to a LIBOR floor of 2.00%. Borrowings under the Revolving Facility will bear interest through maturity at a variable rate based upon the LIBOR rate plus 3.50%, subject to a LIBOR floor of 2.00%.

Subject to the terms and conditions set forth in the Credit Agreements, the Borrowers may be required to make certain mandatory prepayments prior to maturity.

The Credit Agreements contain affirmative and negative covenants customarily applicable to senior secured credit facilities, including covenants that, among other things, will limit or restrict the ability of the Borrowers, subject to negotiated exceptions, to incur additional indebtedness and additional liens on their assets, engage in mergers or acquisitions or dispose of assets, pay dividends or make other distributions, voluntarily prepay other indebtedness as noted above in Note 6, "Convertible Notes Payable," enter into transactions with affiliated persons, make investments, and change the nature of their businesses. The Credit Agreements also contains customary events of default, including subject to thresholds and grace periods, among others,

payment default, covenant default, cross default to other material indebtedness, and judgment default. In addition, the Credit Agreements require the Borrowers to maintain a minimum level of net revenue, or in the case where the Borrowers fail to maintain a minimum level of net revenue, certain levels of market capitalization and unrestricted cash. As of March 31, 2020, the Company was not in violation of any covenants contained in the Credit Agreements.

As of March 31, 2020, the Company received net proceeds of approximately $9.8 million from the term loan, net of fees and expenses of $0.2 million. The estimated fair value of the Term Facility as of March 31, 2020 was approximately $7.1 million. The outstanding balance of the Term Loan as of March 31, 2020 was (in thousands):

| | Term loan |
|---|---|
| Principal | $ 10,000 |
| Less: debt issuance costs, net | (61) |
| Net carrying amount | $ 9,939 |

The following table sets forth total interest expense recognized related to the Term Facility during the three months ended March 31, 2020 (in thousands):

| | Three Months Ended March 31, 2020 |
|---|---|
| Contractual interest expense | $ 179 |
| Amortization of debt discount | — |
| Total interest expense | $ 179 |

Future minimum payments on the Term Facility as of March 31, 2020 are as follows (in thousands):

| Years ended December 31, | Future Minimum Payments |
|---|---|
| 2020 | $ 594 |
| 2021 | 786 |
| 2022 | 786 |
| 2023 | 7,044 |
| 2024 | 3,611 |
| Total minimum payments | $ 12,821 |
| Less: interest | (2,821) |
| Less: unamortized issuance | (61) |
| Less: current portion | — |
| Long Term Debt | $ 9,939 |

**8. Net Loss Per Share**

Basic and diluted net loss per share for the periods set forth below is calculated as follows (in thousands, except share and per share amounts):

| | Three Months Ended March 31, | |
|---|---|---|
| | 2020 | 2019 |
| Numerator: | | |
| Net loss | $ (37,654) | $ (42,760) |
| | | |
| Denominator: | | |
| Weighted-average number of common shares used in loss per share - basic and diluted | 46,271,123 | 45,671,502 |
| Loss per share - basic and diluted | $ (0.81) | $ (0.94) |

The following potentially dilutive securities, prior to the use of the treasury stock method, have been excluded from the computation of diluted weighted-average shares outstanding, as they would be anti-dilutive. For the three months ended March 31, 2020 and 2019, respectively, all the Company's options to purchase common stock, warrants, and restricted stock units outstanding were assumed to be anti-dilutive as earnings attributable to common stockholders was in a loss position.

| | Three Months Ended March 31, | |
|---|---|---|
| | 2020 | 2019 |
| Options to purchase common stock | 5,132,142 | 5,773,654 |
| Warrants | — | — |
| Restricted stock units | 944,500 | 557,150 |
| Performance units | 78,000 | 79,000 |

The Company has the option to settle the conversion obligation for the Convertible Notes in cash, shares or any combination of the two. As the Convertible Notes are not convertible as of March 31, 2020, they are not participating securities and they will not have an impact on the calculation of basic earnings or loss per share. Based on the Company's net loss position, there is no impact on the calculation of dilutive loss per share during the three-month periods ended March 31, 2020 and 2019, respectively.

**9. Product Revenue Reserves and Allowances**

To date, the Company's only source of product revenue has been from the U.S. sales of TYMLOS, which it began shipping to customers in May 2017. The following table summarizes activity in each of the product revenue allowance and reserve categories for the three months ended March 31, 2020 and 2019 (in thousands):

| | Chargebacks, Discounts, and Fees | Government and other rebates | Returns | Total |
|---|---|---|---|---|
| Ending balance at December 31, 2018 | $ 3,198 | $ 7,620 | $ 411 | $ 11,229 |
| Provision related to sales in the current year | 5,589 | 13,903 | 35 | 19,527 |
| Adjustments related to prior period sales | (19) | (45) | (141) | (205) |
| Credits and payments made | (4,738) | (8,464) | (86) | (13,288) |
| Ending balance at March 31, 2019 | 4,030 | 13,014 | 219 | 17,263 |
| | | | | |
| Ending balance at December 31, 2019 | $ 5,739 | $ 17,280 | $ 1,583 | $ 24,602 |
| Provision related to sales in the current year | 8,201 | 19,080 | 1,531 | 28,812 |
| Adjustments related to prior period sales | (63) | (531) | — | (594) |
| Credits and payments made | (9,226) | (16,488) | (204) | (25,918) |
| Ending balance at March 31, 2020 | $ 4,651 | $ 19,341 | $ 2,910 | $ 26,902 |

Chargebacks, discounts, fees, and returns are recorded as reductions of trade receivables, net on the condensed consolidated balance sheets. Government and other rebates are recorded as a component of accrued expenses and other current liabilities on the condensed consolidated balance sheets.

To date, the Company has no bad debt write-offs and the Company does not currently have credit issues with any customers. There were no credit losses associated with the Company's trade receivables as of March 31, 2020.

**10. Commitments and Contingencies**

*Litigation*

From time to time, the Company may become subject to legal proceedings and claims which arise in the ordinary course of its business. The Company records a liability in its condensed consolidated financial statements for these matters when a loss is known or considered probable and the amount can be reasonably estimated. The Company reviews these estimates each accounting period as additional information is known and adjusts the loss provision when appropriate. If a matter is both probable to result in a liability and the amounts of loss can be reasonably estimated, the Company estimates and discloses the possible loss or range of loss to the extent necessary to make the condensed consolidated financial statements not misleading. If the loss is not probable or cannot be reasonably estimated, a liability is not recorded in its consolidated financial statements.

As of March 31, 2020, the Company was not party to any significant litigation.

*Manufacturing Agreements*

In June 2016, the Company entered into a Supply Agreement with Ypsomed AG ("Ypsomed"), as amended, pursuant to which Ypsomed agreed to supply commercial and clinical supplies of a disposable pen injection device customized for subcutaneous injection of abaloparatide. The Company has agreed to purchase a minimum number of devices at prices per device that decrease with an increase in quantity supplied. In addition, the Company has agreed to make milestone payments for Ypsomed's capital developments in connection with the initiation of the commercial supply of the device and to pay a one-time capacity fee. All costs and payments under the agreement are delineated in Swiss Francs. The agreement has an initial term of three years, which began on June 1, 2017, after which it automatically renews for two-year terms unless either party terminates the agreement upon 18 months' notice prior to the end of the then-current term. The Company is required to purchase a minimum number of batches for CHF 2.4 million (approximately $2.5 million) through the year ended December 31, 2022.

In June 2016, the Company entered into a Commercial Supply Agreement with Vetter Pharma International GmbH ("Vetter"), as amended, pursuant to which Vetter agreed to formulate the finished abaloparatide-SC drug product containing abaloparatide active pharmaceutical ingredient fill cartridges with the drug product, assemble the pen delivery device, and package the pen for commercial distribution. The Company agreed to purchase the cartridges and pens in specified batch sizes at a price per unit. For labeling and packaging services, the Company agreed to pay a per unit price dependent upon the number of pens loaded with cartridges that are labeled and packaged. These prices are subject to an annual price adjustment. The agreement has an initial term of five years, which began on January 1, 2016, after which, it automatically renews for two-year terms unless either party notifies the other party two years before the end of the then-current term that it does not intend to renew.

In July 2016, the Company entered into a Manufacturing Services Agreement with Polypeptide Laboratories Holding AB ("PPL"), as amended, as successor-in-interest to Lonza Group Ltd., pursuant to which PPL agreed to manufacture the

commercial and clinical supplies of abaloparatide API. The Company agreed to purchase the API in batches at a price per gram in euros, subject to an annual increase by PPL. The agreement has an initial term of six years, which began on June 28, 2016, after which, it automatically renews for three-year terms unless either party provides notice of non-renewal 24 months before the end of the then-current term. The Company is required to purchase a minimum number of batches annually, equal to approximately €2.9 million (approximately $3.2 million) per year, subject to any annual price adjustments, during the initial term, except in calendar years 2019 and 2020. The Company is not subject to the minimum purchase requirement in 2019 and 2020. The agreement has an initial term of a six years, after which, it automatically renews for three-year terms unless either party provides notice of non-renewal 24 months before the end of the then-current term.

*Related Party Transactions*

Since December 2019, an immediate family member of Jessica Hopfield (a member of the Company's Board of Directors) has been an executive officer of one of the Company's customers, AmerisourceBergen Corporation ("ABC"). The activities with ABC and its affiliates are in the ordinary course of business and were primarily for commercial distribution of TMYLOS and service fees. As of March 31, 2020, the Company recognized net revenues of approximately $23.7 million in connection with product sales of TYMLOS and paid ABC and its affiliates approximately $0.6 million for services under various commercial and services agreements. In addition, accounts receivable due from ABC of approximately $12.8 million was recorded within the Company's consolidated balance sheets as of March 31, 2020.

**11. Income Taxes**

The Company did not record a federal or state income tax provision or benefit for each of the three months ended March 31, 2020 and 2019 due to the expected loss before income taxes to be incurred for the years ended December 31, 2020 and 2019, as well as the Company's continued maintenance of a full valuation allowance against its net deferred tax assets.

**Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.**

***Cautionary Statement***

*This Quarterly Report on Form 10-Q, including in the sections titled "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and including the information incorporated by reference herein, contains, in addition to historical information, forward-looking statements. We may, in some cases, use words such as "project," "believe," "anticipate," "plan," "expect," "estimate," "intend," "continue," "should," "would," "could," "potentially," "will," "may" or similar words and expressions that convey uncertainty of future events or outcomes to identify these forward-looking statements. Forward-looking statements in this Quarterly Report on Form 10-Q may include, among other things, statements about:*

- *our expectations regarding commercialization of TYMLOS in the U.S., including our market access coverage expectations, and our ability to successfully commercialize TYMLOS in the U.S.;*
- *the therapeutic benefits and effectiveness of TYMLOS and our investigational product candidates and the potential indications and market opportunities therefor;*
- *our ability to obtain U.S. and foreign regulatory approval for our investigational product candidates, including supplemental regulatory approvals for TYMLOS, and the timing thereof;*
- *our ability to compete with other companies that are or may be developing or selling products that are competitive with TYMLOS or our investigational product candidates;*
- *anticipated trends and challenges in the market in which TYMLOS will compete and in other potential markets in which we may compete;*
- *the direct and indirect impact of COVID-19 on our business and operations, including sales, expenses, supply chain, manufacturing, research and development costs, clinical trials and employees;*
- *the impact of COVID-19 and related downturn of the U.S. and global economies;*

- *our plans with respect to collaborations and licenses related to the development, manufacture or sale of TYMLOS and our investigational product candidates, including our plans to explore all strategic options for our oncology programs, including elacestrant (RAD1901) and RAD140;*
- *our plans with respect to expanding our product portfolio;*
- *our expectations regarding the timing of our regulatory submissions;*
- *our expectations for our Phase 3 studies of elacestrant, abaloparatide-SC for men, and abaloparatide transdermal patch (abaloparatide-patch) or our other clinical trials, including projected costs, study designs or the timing for initiation, recruitment, completion, or reporting top-line data;*
- *the progress of, timing of and amount of expenses associated with our research, development and commercialization activities;*
- *the safety profile and related adverse events of TYMLOS and our investigational product candidates;*
- *the ability of our investigational product candidates to meet existing or future regulatory standards;*
- *our expectations regarding federal, state and foreign regulatory requirements;*
- *the success of our clinical studies for our investigational product candidates;*
- *our expectations as to future financial performance, expense levels, future payment obligations and liquidity sources;*
- *our ability to attract, motivate, and retain key personnel; and*
- *other factors discussed elsewhere in this Quarterly Report on Form 10-Q.*

*The outcome of the events described in these forward-looking statements is subject to known and unknown risks, uncertainties and other important factors that could cause actual results to differ materially from the results anticipated by these forward-looking statements. These important factors include our financial performance, the uncertainties inherent in the early stages of commercializing any new pharmaceutical product or the initiation, execution and completion of clinical trials, uncertainties surrounding the timing of availability of data from our clinical trials, ongoing discussions with and actions by regulatory authorities, our ability to attract and retain customers, our development activities and those other factors we discuss under the caption "Risk Factors" in Part II, Item 1A of this Quarterly Report on Form 10-Q and in Part I, "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2019. You should read these factors and the other cautionary statements made in this Quarterly Report on Form 10-Q as being applicable to all related forward-looking statements wherever they appear in this Quarterly Report on Form 10-Q. These important factors are not exhaustive and other sections of this Quarterly Report on Form 10-Q may include additional factors which could adversely impact our business and financial performance.*

You should read the following discussion of our financial condition and results of operations in conjunction with our financial statements and related notes set forth in this report. Unless the context otherwise requires, "we," "our," "us," "Radius," "Company," and similar expressions used in this Management's Discussion and Analysis of Financial Condition and Results of Operations section refer to Radius Health, Inc. and our consolidated entities.

**Executive Overview**

We are a science-driven fully integrated biopharmaceutical company that is committed to developing and commercializing innovative endocrine therapeutics.

In April 2017, our first commercial product, TYMLOS (abaloparatide) injection, was approved by the U.S. Food and Drug Administration ("FDA") for the treatment of postmenopausal women with osteoporosis at high risk for fracture defined as history of osteoporotic fracture, multiple risk factors for fracture, or patients who have failed or are intolerant to other available osteoporosis therapy. In May 2017, we commenced U.S. commercial sales of TYMLOS and as of April 1, 2020, TYMLOS was available and covered for approximately 291 million U.S. insured lives, representing approximately 99% of U.S. commercial and 83% of Medicare Part D insured lives. In July 2017, we entered into a license and development agreement with Teijin Limited ("Teijin") for abaloparatide for subcutaneous injection ("abaloparatide-SC") in Japan. Under this agreement, we received an upfront payment and are entitled to receive milestone payments upon the achievement of certain regulatory and sales milestones, and a fixed low double-digit royalty based on net sales of abaloparatide-SC in Japan during the royalty term. In March 2018, we initiated our Phase 3 ATOM study of abaloparatide-SC in men with osteoporosis which, if successful, will form the basis of a supplemental NDA seeking to expand the use of TYMLOS to treat men with osteoporosis at high risk for fracture. We expect to report top-line data from the study in the second half of 2021. In October 2018, the FDA approved a labeling supplement for TYMLOS in connection with the results from our ACTIVExtend trial to reflect that after 24 months of open-label alendronate therapy, the vertebral fracture risk reduction achieved with TYMLOS therapy was maintained. In January 2019, the European Commission adopted a decision refusing approval of our European Marketing Authorization Application ("MAA") for abaloparatide-SC. In May 2020, we announced that our bone histomorphometry study, which evaluated the early effects of TYMLOS on tissue-based indices of formation in postmenopausal women, met its primary endpoint of change from baseline to three months in mineralizing surface in the cancellous bone envelope (one of the dynamic indicators of bone formation). We expect to present data from this study in the second half of 2020.

We are developing an abaloparatide transdermal patch (“abaloparatide-patch”), for potential use in the treatment of postmenopausal women with osteoporosis. In May 2019, we received a special protocol assessment agreement from the FDA for our Phase 3 study of abaloparatide-patch. We initiated our Phase 3 wearABLe study of abaloparatide-patch in August 2019. We are implementing a revised enrollment plan for the wearABLe study that includes additional measures and resources intended to improve site recruitment efforts, as well as the addition of clinical trial sites outside the U.S., however, we may experience regulatory or ethics committee delays in some countries as a result of the impacts of COVID-19 which may delay the timing of activation of sites in such countries. At this time, we expect to complete enrollment in the later part of the third quarter of 2020 and report top-line data from the study in the second half of 2021. The wearABLe study is a single, pivotal, randomized, open label, active-controlled, bone mineral density (“BMD”) non-inferiority bridging study with a planned enrollment of approximately 470 patients with postmenopausal osteoporosis at high risk of fracture, which if successful, will support an NDA submission. The primary endpoint of the study is percentage change in lumbar spine BMD at 12 months. Non-inferiority of abaloparatide-patch to abaloparatide-SC will be concluded if the lower bound of the 2-sided 95% confidence interval for the estimated treatment difference (abaloparatide-patch minus abaloparatide-SC) in the percentage change from baseline in lumbar spine BMD at 12 months is above -2.0%. In February 2018, we entered into a Scale-Up and Commercial Supply Agreement with 3M Company (“3M”) pursuant to which 3M agreed to exclusively manufacture Phase 3 and global commercial supplies of abaloparatide-patch. In May 2020, 3M announced that it completed its sale of its drug delivery business, which manufactures clinical trial supplies of abaloparatide-patch, to Kindeva Drug Delivery (“Kindeva”), an affiliate of Altaris Capital Partners, LLC (“Altaris”). In partnership with 3M, we selected Patheon N.V., now known as Thermo Fisher Scientific, (“Thermo Fisher”) to conduct the abaloparatide-patch coating process and packaging operations. We have successfully completed development activities associated with the scale up of manufacturing to supply our ongoing abaloparatide-patch Phase 3 wearABLe study. We have also made significant progress scaling up for potential commercial batches, if our Phase 3 trial is successful and abaloparatide-patch is approved. In October 2018, we committed to fund 3M’s purchase of capital equipment totaling approximately $9.6 million in preparation for manufacturing Phase 3 and potential commercial supplies of abaloparatide-patch. Milestone payments for the equipment commenced in the fourth quarter of 2018 and are expected to be paid in full in the second quarter of 2021. In addition, there are cancelable purchase commitments in place to fund the facility build out and future purchases of capital equipment. The completion of the engineering equipment designs for critical equipment to produce the abaloparatide-patch at the commercial site is on target, and critical equipment has started to arrive and is being installed. In December 2019, we aligned with the FDA on requirements for an NDA filing.

In connection with our strategic plan to focus on bone health and targeted endocrine diseases, we are exploring all strategic options for our oncology programs, including elacestrant (RAD1901) and RAD140. Our investigational product candidate, elacestrant (RAD1901), a selective estrogen receptor degrader (“SERD”), is being developed for potential use in the treatment of hormone receptor-positive breast cancer. We initiated our Phase 3 EMERALD study of elacestrant in late November 2018. At this time, we expect to complete enrollment in the EMERALD study in the fourth quarter of 2020. The Phase 3 study is a single, randomized, open label, active-controlled Phase 3 trial of elacestrant as a second or third-line monotherapy in approximately 460 patients with estrogen receptor-positive (“ER+”) and human epidermal growth factor receptor 2-negative (“HER2-”) advanced or metastatic breast cancer who have received prior treatment with one or two endocrine therapies, including a cyclin-dependent kinase (“CDK”) 4/6 inhibitor. Patients in the study will be randomized to receive either elacestrant or the investigator’s choice of an approved hormonal agent. The primary endpoint of the study will be progression-free survival (“PFS”), which we will analyze in the overall patient population and in patients with estrogen receptor 1 gene (“ESR1”) mutations. Secondary endpoints will include evaluation of overall survival (“OS”), objective response rate (“ORR”), and duration of response (“DOR”). We believe that, depending on results, this single trial would support applications for marketing approvals for elacestrant as a second- and third-line monotherapy in the U.S., European Union (“EU”), and other markets. In November 2018, the FDA granted Fast Track designation for elacestrant for the population to be included in the Phase 3 study. We previously completed enrollment in our ongoing dose escalation Part A, and dose expansion Parts B and C, and in the 18F fluoroestradiol positron emission tomography (“FES-PET”) imaging Phase 1 studies of elacestrant in advanced metastatic breast cancer. Enrollment in Part D of the Phase 1 dose-escalation and expansion study was discontinued as the data was no longer required to support the final design of our Phase 3 study. We do not plan to initiate any further clinical development of elacestrant beyond the ongoing EMERALD study.

We developed our internally discovered investigational product candidate, RAD140, a non-steroidal selective androgen receptor modulator (“SARM”) for potential use in the treatment of hormone-receptor positive breast cancer. In September 2017, we initiated a Phase 1 study of RAD140 in patients with ER+/AR+/HER2- locally advanced or metastatic breast cancer. The clinical trial was designed to evaluate the safety and maximum tolerated dose (“MTD”) of RAD140 in approximately 40 patients. Primary safety endpoints from the trial included the incidence rate of dose-limiting toxicities, adverse events related to treatment, and tolerability as measured by dose interruptions or adjustments. In addition, pharmacokinetics, pharmacodynamics and tumor response were evaluated. In December 2019, we presented the Phase 1A data based on a data cut-off of October 31, 2019. The data showed that a total of 22 patients with advanced/metastatic breast cancer had been treated at once daily oral doses ranging from 50mg to 150mg, and that the MTD was 100mg per day. The patients were heavily pre-treated, with a

median of four prior lines of therapy for metastatic disease, including chemotherapy in all but two patients. As of February 11, 2020, one patient remained on treatment. Evidence of clinical activity was seen with a partial response in one of nine RECIST evaluable patients and pharmacodynamic data consistent with androgen receptor ("AR") modulatory activity was also seen. We do not plan to initiate any additional clinical studies of RAD140.

***Impact of COVID-19 on our Business***

We have experienced adverse impacts on our business for the quarter ended March 31, 2020 due to the global outbreak of COVID-19. The current COVID-19 pandemic has presented a substantial public health and economic challenge around the world and is affecting our employees, patients, and business operations, as well as the broader U.S. economy and financial markets. The full extent to which the COVID-19 pandemic will directly or indirectly impact our business, results of operations and financial condition will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information that may emerge concerning COVID-19, the actions taken to contain it or treat its impact and the economic impact on local, regional, and national markets.

To date, our third-party contract manufacturing and distribution partners have been able to continue to operate their facilities at or near normal levels and continue to manufacture and supply TYMLOS to our patients, and our investigational products to our clinical trial patients, and currently we do not anticipate any interruptions in supply. However, we are continuing to assess the potential impact of the COVID-19 pandemic on our business and operations, including our sales, expenses, manufacturing and clinical trials. While we currently do not anticipate any interruptions in our partners' manufacturing process, it is possible that the COVID-19 pandemic and response efforts may have an impact in the future on our third-party suppliers and contract manufacturing partners' ability to manufacture TYMLOS and our investigational products or to have such products reach all of our patients.

In March 2020, we closed our administrative offices and suspended in-person interactions by our customer-facing personnel and we are engaging with these customers virtually as we seek to continue to support healthcare professionals and patient care. We have benefited in the near term from precautionary measures taken by our customers and TYMLOS patients due to the COVID-19 pandemic, including increasing their supply of TYMLOS in anticipation of interruptions from the pandemic. Over the longer term, assuming the impacts from the COVID-19 pandemic continue, we expect to see a negative impact from such advance purchases. In addition, fewer new or existing patients visiting their healthcare provider to initiate, change or receive therapy, or new patients who are unable or unwilling to see their doctor for diagnosis and treatment due to illness, quarantine, travel restrictions or financial hardship may have a negative impact on our sales of TYMLOS. It is unknown when our offices will re-open and personal interactions with physicians and customers may resume.

Enrollment rates in our ongoing clinical trials, including our wearABLe, ATOM and EMERALD studies, have slowed as a result of the impacts of the COVID-19 pandemic and may continue to be slower than we expect. While enrollment activities are continuing in the clinical trials we have underway in sites across the globe, we cannot guarantee that COVID-19 precautions or impacts, including the slowdowns we have seen, will not directly or indirectly impact the expected timelines for our clinical trials. Our current expectations for the timing of enrollment and completion of our ongoing clinical trials, particularly for wearABLe and EMERALD, are based on our assumptions that during the second half of 2020, impacts from the COVID-19 pandemic will begin to subside as "shelter-in-place" policies and other restrictive measures are relaxed and that, as a result, enrollment rates will increase to near normal pre-pandemic levels, and for our wearABLe trial, our ex-U.S. trial sites are activated within the timelines we expect. To help mitigate the impact to our clinical trials, we are pursuing innovative approaches such as remote monitoring, remote patient visits and, where possible, supporting home delivery of investigational and commercial products used in our clinical trials.

We are monitoring the demand for TYMLOS, including the duration and degree to which we are seeing and may see future declines in customer orders or delays in starting new patients on TYMLOS due to COVID-19 related reasons, such as patients being unable or unwilling to see their doctor for diagnosis and treatment due to illness, quarantine, travel restrictions or financial hardship.

For additional information on the various risks posed by the COVID-19 pandemic, please read Item 1A. Risk Factors included in Part II of this report.

***Abaloparatide***

In April 2017, the FDA approved TYMLOS (abaloparatide-SC) for the treatment of postmenopausal women with osteoporosis at high risk for fracture defined as history of osteoporotic fracture, multiple risk factors for fracture, or patients who have failed or are intolerant to other available osteoporosis therapy. We are developing two formulations of abaloparatide: abaloparatide-SC and abaloparatide-patch.

*Abaloparatide-SC*

TYMLOS was approved in the United States in April 2017 for the treatment of postmenopausal women with osteoporosis at high risk for fracture. The first commercial sales of TYMLOS in the United States occurred in May 2017 and as of April 1, 2020, TYMLOS was available and covered for approximately 291 million U.S. insured lives, representing approximately 99% of U.S. commercial and 83% of Medicare Part D insured lives.

We are commercializing TYMLOS in the United States through our commercial organization. In the first quarter of 2020, we executed a transition of our external distribution model from full-line wholesalers to specialty distributors and specialty pharmacies. Under this distribution model, both the specialty distributors and specialty pharmacies take physical delivery of TYMLOS and pharmacies dispense TYMLOS directly to patients.

We hold worldwide commercialization rights to abaloparatide-SC, except for Japan, where we are entitled to receive milestones and royalties based on the development and commercialization of abaloparatide-SC in Japan under our license and development agreement with Teijin. In January 2019, the European Commission adopted a decision refusing approval of our MAA for abaloparatide-SC.

In July 2017, we entered into a license and development agreement with Teijin for abaloparatide-SC in Japan. Pursuant to the agreement, we received an upfront payment and may receive additional milestone payments upon the achievement of certain regulatory and sales milestones, and a fixed low double-digit royalty based on net sales of abaloparatide-SC in Japan during the royalty term. In February 2020, we elected not to exercise our option to negotiate for a co-promotion agreement with Teijin for abaloparatide-SC in Japan. Teijin is conducting a Phase 3 clinical trial of abaloparatide in Japan for the treatment of postmenopausal osteoporosis.

In March 2018, we initiated a clinical trial in men with osteoporosis which, if successful, will form the basis of a supplemental NDA seeking to expand the use of TYMLOS to treat men with osteoporosis at high risk for fracture. We expect to report top-line data from the study in the second half of 2021. The study is a randomized, double-blind, placebo-controlled trial that will enroll approximately 225 men with osteoporosis. The primary endpoint is change in lumbar spine BMD at 12 months compared with placebo. In previous clinical trials, TYMLOS has demonstrated increases in BMD in postmenopausal women. The study includes specialized high-resolution imaging to examine the effect of abaloparatide on bone structure, such as the hip, in a subset of the study participants.

In June 2018, the FDA approved a labeling supplement for TYMLOS to revise the needle length in the Instructions for Use from 8 mm to 5 mm. We believe health care providers, specialty pharmacies, and patients may prefer a shorter needle size for injectable products like TYMLOS.

In October 2018, the FDA approved a labeling supplement for TYMLOS to reflect that after 24 months of open-label alendronate therapy, the vertebral fracture risk reduction achieved with TYMLOS therapy was maintained.

In May 2020, we announced that our bone histomorphometry study, which evaluated the early effects of TYMLOS on tissue-based indices of formation in postmenopausal women, met its primary endpoint of change from baseline to 3 months in mineralizing surface in the cancellous bone envelope (one of the dynamic indicators of bone formation). We expect to present data from this study in the second half of 2020.

*Abaloparatide-patch*

We are also developing abaloparatide-patch, based on 3M’s patented Microstructured Transdermal System technology, for potential use as a short wear-time transdermal patch. We hold worldwide commercialization rights to the abaloparatide-patch technology and are developing abaloparatide-patch toward future global regulatory submissions to build upon the potential success of TYMLOS. Our development strategy for abaloparatide-patch is to bridge to the established efficacy and safety of our approved abaloparatide-SC formulation.

We commenced a human replicative clinical evaluation of the optimized abaloparatide-patch in December 2015, with the goal of achieving comparability to abaloparatide-SC. In September 2016, we presented results from this evaluation of the first and second abaloparatide-patch prototypes, demonstrating that formulation technology can modify the pharmacokinetic profile of abaloparatide, including Tmax, half-life (“T1/2”), and area under the curve (“AUC”). In March 2018, we announced that through further optimization we had achieved comparability to the abaloparatide-SC profile with a third prototype (the “current abaloparatide-patch”). The current abaloparatide-patch optimized the drug-device combination through process improvements, a finalized formulation, selection of a dose (300 µg), and the introduction of a new clinical applicator, which were designed to improve the ease of use and patient experience. In the second half of 2018, we completed further evaluation confirming that a five minute application of the current abaloparatide-patch to the thigh resulted in a pharmacokinetic exposure highly similar (AUC >90%) to abaloparatide-SC.

In May 2019, we received a special protocol assessment agreement from the FDA for our Phase 3 study of abaloparatide-patch, which means the FDA considers the study design to be adequate and well-controlled to support marketing approval provided the study endpoints are achieved. We initiated our Phase 3 wearABLe study of abaloparatide-patch in August 2019. We are implementing a revised enrollment plan for the wearABLe study that includes additional measures and resources intended to improve site recruitment efforts, as well as the addition of clinical trial sites outside the U.S., however, we may experience regulatory or ethics committee delays in some countries as a result of the impacts of COVID-19 which may delay the timing of activation of sites in such countries. At this time, we expect to complete enrollment in the wearABLe study in the later part of the third quarter of 2020 and report top-line data from the study in the second half of 2021. The wearABLe study is a single, pivotal, randomized, open label, active-controlled, BMD non-inferiority bridging study with a planned enrollment of approximately 470 patients with postmenopausal osteoporosis at high risk of fracture, which if successful, will support an NDA submission. The primary endpoint of the study is percentage change in lumbar spine BMD at 12 months. Non-inferiority of abaloparatide-patch to abaloparatide-SC will be concluded if the lower bound of the 2-sided 95% confidence interval for the estimated treatment difference (abaloparatide-patch minus abaloparatide-SC) in the percentage change from baseline in lumbar spine BMD at 12 months is above -2.0%.

In July 2019, we obtained preliminary results from a patient assessment study which evaluated self-administration of abaloparatide-patch over 29 days in 22 post-menopausal women with low bone density. Study patients were observed at a study site on the first, 15th and 29th day of the study. Top-line results showed that study patients were able to follow the instructions for use (“IFU”) and applied the patches accurately on 99.7% of all applications. The safety data from this study showed that most of the study patients had mild, transient redness at the application site. The mean subject acceptability score on a 5-point scale was 4.5, 4.6 and 4.5 on day 1, 15 and 29, respectively. The laboratory data from this study included an exploratory assessment of PINP, a biomarker that indicates bone formation. At baseline the median PINP level in this study was 50.5 ng/ml, increasing to a median value of 100.1 ng/ml at day 29, while, by comparison, the median PINP values observed with abaloparatide-SC in the ACTIVE study were 50.6 ng/ml at baseline and 100.5 ng/ml at one month.

We commenced a human replicative clinical evaluation of the optimized abaloparatide-patch in December 2015, with the goal of achieving comparability to abaloparatide-SC. In September 2016, we presented results from this evaluation of the first and second abaloparatide-patch prototypes, demonstrating that formulation technology can modify the pharmacokinetic profile of abaloparatide, including Tmax, half-life (“T1/2”), and area under the curve (“AUC”). In March 2018, we announced that through further optimization we had achieved comparability to the abaloparatide-SC profile with a third prototype (the “current abaloparatide-patch”). The current abaloparatide-patch optimized the drug-device combination through process improvements, a finalized formulation, selection of a dose (300 µg), and the introduction of a new clinical applicator, which were designed to improve the ease of use and patient experience. In the second half of 2018, we completed further evaluation confirming that a five minute application of the current abaloparatide-patch to the thigh resulted in a pharmacokinetic exposure highly similar (AUC >90%) to abaloparatide-SC.

In February 2018, we entered into the Scale-Up and Commercial Supply Agreement pursuant to which 3M agreed to exclusively manufacture Phase 3 and global commercial supplies of abaloparatide-patch. In partnership with 3M, we selected Thermo Fisher to conduct the abaloparatide-patch coating process and packaging operations. In May 2020, 3M announced that it completed its sale of its drug delivery business, which manufactures clinical trial supplies of abaloparatide-patch, to Kindeva, an affiliate of Altaris. As part of the transaction, 3M retained a minority interest in Kindeva and our Scale-Up and Commercial Supply Agreement with 3M was transferred to Kindeva.

In October 2018, we committed to fund 3M’s purchase of capital equipment totaling approximately $9.6 million in preparation for manufacturing Phase 3 and potential commercial supplies of abaloparatide-patch. Milestone payments for the equipment commenced in the fourth quarter of 2018 and are expected to be paid in full in the second quarter of 2021. In addition, there are cancelable purchase commitments in place to fund the facility build out and future purchases of capital equipment.

We have successfully completed development activities associated with the scale up of manufacturing to support our ongoing Phase 3 wearABLe study. The completion of the engineering equipment designs for critical equipment to produce abaloparatide-patch at the commercial site is on target, and critical equipment has started to arrive and is being installed. In December 2019, we aligned with the FDA on requirements for an NDA filing.

***Elacestrant (RAD1901)***

Elacestrant is a SERD that we are evaluating for potential use as a once daily oral treatment for hormone receptor-positive breast cancer. We hold worldwide commercialization rights to elacestrant. Elacestrant is currently being investigated in patients with advanced ER-positive and HER2-negative breast cancer, the most common subtype of the disease. Studies completed to date indicate that the compound has the potential for use as a single agent or in combination with other therapies for the treatment of breast cancer.

*Phase 3 - EMERALD Study*

We initiated our Phase 3 EMERALD study of elacestrant in late November 2018. At this time, we expect to complete enrollment in the EMERALD study in the fourth quarter of 2020. The Phase 3 study is a single, randomized, open label, active-controlled Phase 3 trial of elacestrant as a second- or third-line monotherapy in approximately 460 patients with ER+ and HER2- advanced or metastatic breast cancer who have received prior treatment with one or two endocrine therapies, including a CDK 4/6 inhibitor. Patients in the study will be randomized to receive either elacestrant or the investigator's choice of an approved hormonal agent. The primary endpoint of the study will be PFS, which we will analyze in the overall patient population and in patients with ESR1 mutations. Secondary endpoints will include evaluation of OS, ORR, and DOR. We believe that, depending on results, this single trial would support applications for marketing approvals for elacestrant as a second- and third-line monotherapy in the U.S., EU and other markets. In November 2018, the FDA granted Fast Track designation for elacestrant consistent with the population to be included in the Phase 3 study. We do not plan to initiate any further clinical trials of elacestrant beyond the ongoing EMERALD study.

*Phase 1 - Dose-Escalation and Expansion Study*

In December 2014, we commenced a Phase 1, multicenter, open-label, multiple-part, dose-escalation study of elacestrant in postmenopausal women with ER-positive and HER2-negative advanced breast cancer in the United States to determine the recommended dose for a Phase 2 clinical trial and to make a preliminary evaluation of the potential anti-tumor effect of elacestrant. Part A of this Phase 1 study was designed to evaluate escalating doses of elacestrant. The Part B expansion cohort was initiated at 400-mg daily dosing in March 2016 to allow for an evaluation of additional safety, tolerability and preliminary efficacy. The patients enrolled in this study were heavily pretreated ER-positive, HER2-negative advanced breast cancer patients who had received a median of 3 prior lines of therapy including fulvestrant and CDK4/6 inhibitors, and about 50% of the patients had ESR1 mutations. We have completed enrollment in the ongoing dose-escalation Part A and expansion study parts B and C. In December 2017, we opened a Part D cohort in this study to provide additional data to support the elacestrant clinical development program anticipated at that time. We discontinued recruitment in the Part D cohort as the data was no longer required to support the final design of our Phase 3 study.

In December 2017, we reported updated data from this ongoing Phase 1 dose-escalation and expansion study, which included mature data from 40 patients treated at the 400 mg dose in Parts A through C of this study. As of the study interim cut-off date of October 30, 2017, the elacestrant single agent ORR was 27.3% with six confirmed partial responses out of 22 patients with response evaluation criteria in solid tumors ("RECIST") measurable disease. The median PFS was 5.4 months and clinical benefit rate at 24 weeks was 47.4%. These results showed that elacestrant was well-tolerated with the most commonly reported adverse events being low grade nausea, dyspepsia and vomiting.

We initiated Part D of the Phase 1 dose-escalation and expansion study to evaluate the safety and preliminary efficacy of elacestrant at a 400 mg tablet dose in a population with different eligibility requirements from Parts A, B, and C of this study. In Part D, patients were required to have at least two prior lines of endocrine therapy for advanced/metastatic breast cancer, including fulvestrant, and prior treatment with a CDK 4/6 inhibitor. Ten patients of an originally planned thirty-six were enrolled in Part D. A review of the data as of October 24, 2019 showed that overall the patients in Part D were more heavily pretreated and more likely to have visceral metastases than patients in Parts A through C of this study. In addition, out of the nine patients with measurable disease, four had a best response of stable disease, two of them for greater than 24 weeks. Combined data, as of October 24, 2019, from all four study Parts (A through D) at 400 mg showed that the overall elacestrant single agent ORR was 19.4% and the median PFS was 4.5 months.

*Phase 1 - FES-PET Study*

In December 2015, we commenced a Phase 1 18-F fluoroestradiol positron emission tomography ("FES-PET") study in patients with metastatic breast cancer in the European Union, which included the use of FES-PET imaging to assess estrogen receptor occupancy in tumor lesions following elacestrant treatment.

In December 2017, we reported data from the Phase 1 FES-PET study showing that elacestrant demonstrated robust reduction in tumor ER availability in patients with advanced ER+ breast cancer who progressed on prior endocrine therapy. Seven out of eight patients dosed at the 400-mg cohort, and four out of seven patients dosed at the 200-mg cohort, had a tumor FES-PET signal intensity reduction equal to, or greater than, 75% at day 14 compared to baseline. The reduction in FES uptake supports flexibility for both 200-mg and 400-mg elacestrant dose selection for further clinical development in combination studies with various targeted agents and was similar in patients harboring mutant or wild-type ESR-1. The most commonly reported adverse events were grade 1 and 2 nausea and dyspepsia.

*Potential for use in Combination Therapy*

In July 2015, we announced that early but promising preclinical data showed that our investigational drug elacestrant, in combination with Pfizer's palbociclib, a cyclin-dependent kinase, or CDK 4/6 inhibitor, or Novartis' everolimus, an mTOR

inhibitor, was effective in shrinking tumors. In preclinical patient-derived xenograft breast cancer models with either wild type or mutant ESR1, treatment with elacestrant resulted in marked tumor growth inhibition, and the combination of elacestrant with either agent, palbociclib or everolimus, showed anti-tumor activity that was significantly greater than either agent alone. We believe that this preclinical data suggests that elacestrant has the potential to overcome endocrine resistance, is well-tolerated, and has a profile that is well suited for use in combination therapy.

In December 2017, we announced additional preclinical data that continues to demonstrate elacestrant anti-tumor activity, as a single agent and in combination, in multiple models. In these preclinical models, elacestrant demonstrated marked tumor growth inhibition, as a single agent in models treated with multiple rounds of fulvestrant and in combination with CDK 4/6 inhibitors such as palbociclib and abemaciclib and with a phosphoinositide 3-kinase inhibitor, alpelisib. In December 2018, we announced additional preclinical data that showed that elacestrant demonstrated marked tumor growth inhibition as a single agent in models harboring ESR1 point mutations, models insensitive to fulvestrant, and models insensitive to CDK 4/6 inhibitors such as palbociclib, ribociclib, or abemaciclib.

*Collaborations*

After a comprehensive partnership evaluation for elacestrant and consistent with our plan to focus on targeted endocrine diseases, we are now exploring all strategic options for elacestrant.

In July 2016, we entered into a pre-clinical collaboration with Takeda Pharmaceutical Company Limited to evaluate the combination of elacestrant with Takeda's investigational drug TAK-228, an oral mTORC 1/2 inhibitor in Phase 2b development for the treatment of breast, endometrial and renal cancer, with the goal of potentially exploring such combination in a clinical trial. In February 2020, we terminated this collaboration.

***RAD140***

RAD140 is an internally discovered SARM. The androgen receptor, or AR, is highly expressed in many ER-positive, ER-negative, and triple-negative receptor breast cancers. Due to its receptor and tissue selectivity, potent activity, oral bioavailability, and long half-life, we believe RAD140 could have clinical potential in the treatment of breast cancer. We hold worldwide commercialization rights to RAD140.

In September 2017, we initiated a Phase 1 study of RAD140 in patients with ER+/AR+/HER2- locally advanced or metastatic breast cancer. The clinical trial was designed to evaluate the safety and MTD of RAD140 in approximately 40 patients. Primary safety endpoints from the trial included the incidence rate of dose-limiting toxicities, adverse events related to treatment, and tolerability as measured by dose interruptions or adjustments. In addition, pharmacokinetics, pharmacodynamics and tumor response were also evaluated. In December 2019, we presented the Phase 1A data based on a data cut-off of October 31, 2019. The data showed that a total of 22 patients with advanced/metastatic breast cancer had been treated at once daily oral doses ranging from 50mg to 150mg, and that the MTD was 100mg per day. The patients were heavily pre-treated, with a median of four prior lines of therapy for metastatic disease, including chemotherapy in all but two patients. As of February 11, 2020, one patient remained on treatment. Evidence of clinical activity was seen with a partial response in one of nine RECIST evaluable patients and pharmacodynamic data consistent with AR modulatory activity was also seen. We do not plan to initiate any additional clinical studies of RAD140.

In July 2016, we reported that RAD140 in preclinical xenograft models of breast cancer demonstrated potent tumor growth inhibition when administered alone or in combinations with CDK 4/6 inhibitors. It is estimated that 77% of breast cancers show expression of the androgen receptor. Our data suggest that RAD140 activity at the androgen receptor leads to activation of AR signaling pathways including an AR-specific tumor suppressor and suppression of ER signaling. In April 2017, we presented these RAD140 preclinical results at a major scientific congress. In December 2018, we presented a preclinical poster further demonstrating anti-tumor activity of RAD140 in breast cancer models resistant to standard-of-care endocrine treatments.

**Financial Overview**

***Product Revenue***

Product revenue is derived from our sales of our commercial product, TYMLOS, in the United States.

***Cost of Product Revenue***

Cost of product revenue consist primarily of costs associated with the manufacturing of TYMLOS, royalties owed to our licensor for such sales, and certain period costs.

***Research and Development Expenses***

Research and development expenses consist primarily of clinical trial costs made to contract research organizations (“CROs”), salaries and related personnel costs, fees paid to consultants and outside service providers for regulatory and quality assurance support, licensing of drug compounds and other expenses relating to the manufacture, development, testing and enhancement of our product candidates. We expense our research and development costs as they are incurred.

None of the research and development expenses, in relation to our investigational product candidates, are currently borne by third parties. Abaloparatide represents the largest portion of our research and development expenses for our investigational product candidates since our inception. We began tracking program expenses for TYMLOS (abaloparatide-SC) in 2005, and program expenses from inception to March 31, 2020 were approximately $232.7 million. We began tracking program expenses for abaloparatide-patch in 2007, and program expenses from inception to March 31, 2020 were approximately $92.1 million. We began tracking program expenses for elacestrant (RAD1901) in 2006, and program expenses from inception to March 31, 2020 were approximately $121.8 million. We began tracking program expenses for RAD140 in 2008, and program expenses from inception to March 31, 2020 were approximately $17.5 million. These expenses relate primarily to external costs associated with manufacturing, preclinical studies and clinical trial costs.

Costs related to facilities, depreciation, stock-based compensation, and research and development support services are not directly charged to programs as they benefit multiple research programs that share resources.

The following table sets forth our research and development expenses that are directly attributable to the programs listed below for the three months ended March 31, 2020 and 2019 (in thousands):

| | Three Months Ended March 31, | |
|---|---|---|
| | **2020** | **2019** |
| Program-specific costs - external: | | |
| Abaloparatide-SC | $ 2,288 | $ 1,924 |
| Abaloparatide-patch | 13,732 | 2,615 |
| Elacestrant (RAD1901) | 9,095 | 5,667 |
| RAD140 | 334 | 438 |
| Total program-specific costs - external | $ 25,449 | $ 10,644 |
| | | |
| Shared-services costs - external: | | |
| R&D support costs | 3,737 | 2,855 |
| Other operating costs | 303 | 544 |
| Total shared-services costs - external | $ 4,040 | $ 3,399 |
| | | |
| Shared-services costs - internal | | |
| Personnel-related costs | 7,449 | 6,708 |
| Stock-based compensation | 1,599 | 2,072 |
| Occupancy costs | 304 | 197 |
| Depreciation expense | 168 | 239 |
| Total shared-services costs - internal | $ 9,520 | $ 9,216 |
| | | |
| Total research and development costs | $ 39,009 | $ 23,259 |

***Selling, General and Administrative Expenses***

Selling, general and administrative expenses consist primarily of salaries and related expenses for commercial operations, executive, finance and other administrative personnel, professional fees, business insurance, rent, general legal activities, including the cost of maintaining our intellectual property portfolio, and other corporate expenses.

Our results also include stock-based compensation expense as a result of the issuance of stock option, restricted stock unit, and performance unit grants to our employees, directors and consultants. The stock-based compensation expense is included in the respective categories of expense in our condensed consolidated statements of operations and comprehensive loss (i.e., research and development or general and administrative expenses). We expect to record additional non-cash compensation expense in the future, which may be significant.

***Interest Income***

Interest income reflects interest earned on our cash, cash equivalents and marketable securities.

***Interest Expense***

Interest expense consists of interest expense related to the aggregate $305.0 million principal amount of Convertible Notes the Company issued in a registered underwritten public offering on August 14, 2017 and interest expense related to the aggregate $55.0 million of Term loan entered in January 10, 2020. A portion of the interest expense on the Convertible Notes is non-cash expense relating to accretion of the debt discount and amortization of issuance costs.

**Critical Accounting Policies and Estimates**

Our management's discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission ("SEC"), and generally accepted accounting principles in the United States ("U.S. GAAP"). The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses, as well as related disclosures. We evaluate our policies and estimates on an ongoing basis, including those related to revenue recognition, accrued clinical expenses, research and development expenses, stock-based compensation and fair value measures, among others, which we discussed in our Annual Report on Form 10-K for the year ended December 31, 2019. We base our estimates on historical experience and various other assumptions that we believe are reasonable under the circumstances. Our actual results may differ from these estimates under different assumptions or conditions.

We have reviewed our policies and estimates to determine our critical accounting policies for the three months ended March 31, 2020. There were no changes to significant accounting policies during the three months ended March 31, 2020, except for the adoption of certain ASUs issued by the FASB, as disclosed above within Note 2, "Basis of Presentation and Significant Accounting Policies," in the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

**Results of Operations**

***Three Months Ended March 31, 2020 and 2019 (in thousands, except percentages)***

| | Three Months Ended March 31, | | Change | |
|---|---|---|---|---|
| | 2020 | 2019 | $ | % |
| Revenues: | | | | |
| Product revenue, net | $ 47,923 | $ 29,844 | $ 18,079 | 61 % |
| Operating expenses: | | | | |
| Cost of sales - product | 3,861 | 3,030 | 831 | 27 % |
| Cost of sales - intangible amortization | 200 | 200 | — | — |
| Research and development | 39,009 | 23,259 | 15,750 | 68 % |
| Selling, general and administrative | 36,433 | 41,186 | (4,753) | (12)% |
| Loss from operations | (31,580) | (37,831) | 6,251 | 17 % |
| Other (expense) income: | | | | |
| Other income | 11 | 4 | 7 | 175 % |
| Interest expense | (6,756) | (6,037) | (719) | (12)% |
| Interest income | 671 | 1,104 | (433) | (39)% |
| Net loss | $ (37,654) | $ (42,760) | $ 5,106 | 12 % |

*Product revenue*— We began U.S. commercial sales of TYMLOS in May 2017, following receipt of FDA marketing approval on April 28, 2017. For the three months ended March 31, 2020 we recorded approximately $47.9 million of net product revenue compared to $29.8 million for the three months ended March 31, 2019. The increase in product revenue was primarily driven by an increase in sales volume as a result of greater market penetration. Although the potential impact of the COVID-19 pandemic on our product revenue is unclear, we expect net sales of TYMLOS to be negatively impacted by the COVID-19 pandemic during the second quarter and potentially into the second half of 2020, depending on its duration.

*Cost of sales*— Cost of sales was $4.1 million for the three months ended March 31, 2020 compared to $3.2 million for the three months ended March 31, 2019. The increase in cost of sales was driven by the increase in product revenue. Although the potential impact of the COVID-19 pandemic on our cost of sales is unclear, we expect cost of sales to fluctuate in a manner consistent with net sales of TYMLOS during the duration of the COVID-19 pandemic.

*Research and development expenses*— For the three months ended March 31, 2020, research and development expense was $39.0 million compared to $23.3 million for the three months ended March 31, 2019, an increase of $15.8 million, or 68%. This increase was primarily driven by a $11.1 million increase in abaloparatide-patch program costs, a $3.4 million increase in elacestrant program costs, a $0.9 million increase in professional support costs, and a $0.4 million increase in abaloparatide-SC program costs. In addition, as a result of the COVID-19 pandemic, the enrollment rates in our ongoing clinical trials have slowed and may continue to be slower than we have planned for, which may delay the expected timelines of our clinical trials and increase related external costs.

*Selling, general and administrative expenses*— For the three months ended March 31, 2020, selling, general and administrative expense was $36.4 million compared to $41.2 million for the three months ended March 31, 2019, a decrease of $4.8 million, or 12%. This decrease was primarily the result of a $2.9 million decrease in professional support costs, a $1.4 million decrease in compensation and travel entertainment costs, and a $0.6 million decrease in occupancy and depreciation costs. These decreases were partially offset by a $0.1 million increase in other operating expenses. As we have closed our administrative offices and suspended travel and conferences by customer-facing personnel, we expect the COVID-19 pandemic will have a favorable impact on our selling, general and administrative expenses during its duration.

*Other income, net*— For the three months ended March 31, 2020, other income, net of other expense, was $11 thousand, as compared to other income, net of other expense of $4 thousand during the three months ended March 31, 2019. Other income, net of other expense, of $11 thousand for the three months ended March 31, 2020 consisted primarily of other foreign currency revaluation exchange gain. The $4 thousand of other income, net of other expense, for the three months ended March 31, 2019 was primarily due to other taxes.

*Interest income*—For the three months ended March 31, 2020, interest income was approximately $0.7 million compared to $1.1 million for the three months ended March 31, 2019, a decrease of $0.4 million, or 39%. This decrease was primarily due to the decrease in the balance of our investments as a result of investment maturities used to fund operations.

*Interest expense*—For the three months ended March 31, 2020, interest expense was approximately $6.7 million compared to $6.0 million for the three months ended March 31, 2019, an increase of $0.7 million. This increase was the result of continued amortization on the Company's Convertible Notes, as well as addition of the Term loan and interest expense thereon during the three months ended March 31, 2020.

***Liquidity and Capital Resources***

From inception to March 31, 2020, we have incurred an accumulated deficit of $1,274.3 million, primarily as a result of expenses incurred through a combination of research and development activities related to our various product candidates and expenses supporting those activities. Our total cash, cash equivalents, restricted cash, marketable securities, and investments balance as of March 31, 2020 was $138.0 million. We have financed our operations since inception primarily through the public offerings of our common stock, issuance of convertible debt, private sales of preferred stock, and borrowings under credit facilities. Following our U.S. commercial launch of TYMLOS in May 2017, we have begun financing a portion of our operations through product revenue.

Based upon our cash, cash equivalents, marketable securities, and investments balance as of March 31, 2020, we believe that, prior to the consideration of potential proceeds from partnering and/or collaboration activities, we have sufficient capital as well as access to other capital discussed in Note 7, "Term Loan and Credit Facility" to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q, to fund our development plans, U.S. commercial and other operational activities for at least one year from the date of this filing. We expect to finance the future U.S. commercial activities and development costs of our clinical product portfolio with our existing cash, cash equivalents, marketable securities, and investments, as well as through future product sales, or through strategic financing opportunities, that could include, but are not limited to partnering or other collaboration agreements, future offerings of equity, royalty-based financing arrangements, the incurrence of additional debt, or other alternative financing arrangements, which may involve a combination of the foregoing.

There is no guarantee that any of these strategic or financing opportunities will be executed or executed on favorable terms, and some could be dilutive to existing stockholders. Market volatility resulting from the COVID-19 pandemic or other factors could also adversely impact our ability to access capital as and when needed. Our future capital requirements will depend on many factors, including the impacts of the COVID-19 pandemic and the scope of and progress in our research and development and commercialization activities, the results of our clinical trials, and the review and potential approval of our products by the FDA or other foreign regulatory authorities. The successful development of our product candidates is subject to numerous risks

and uncertainties associated with developing drugs, which could have a significant impact on the cost and timing associated with the development of our product candidates. If we fail to obtain additional future capital, we may be unable to complete our planned commercialization activities or complete preclinical and clinical trials and obtain approval of any of our product candidates from the FDA and foreign regulatory authorities.

TYMLOS is our only approved product and our business currently depends heavily on its successful commercialization. Successful commercialization of an approved product is an expensive and uncertain process. See “Risk Factors - Risks Related to the Commercialization and Development of Our Product Candidates” set forth in Part I, “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2019, as amended by the Risk Factors set forth in Part II, “Item IA. Risk Factors” in this Form 10-Q for the quarter ended March, 31, 2020.

The following table sets forth the major sources and uses of cash for each of the periods set forth below (in thousands):

| | Three Months Ended March 31, | | Change | |
|---|---|---|---|---|
| | 2020 | 2019 | $ | % |
| Net cash (used in) provided by: | | | | |
| Operating activities | $ (33,185) | $ (34,464) | $ 1,279 | 4 % |
| Investing activities | (6,907) | 45,000 | (51,907) | (115)% |
| Financing activities | 10,929 | 1,649 | 9,280 | 563 % |
| Net increase (decrease) in cash, cash equivalents, and restricted cash | $ (29,163) | $ 12,185 | $ (41,348) | (339)% |

*Cash Flows from Operating Activities*

Net cash used in operating activities during the three months ended March 31, 2020 was $33.2 million, which was primarily the result of a net loss of $37.7 million, partially offset by $10.2 million of net non-cash adjustments to reconcile net loss to net cash used in operations and net changes in working capital of $5.8 million. The $37.7 million net loss was primarily due to abaloparatide-SC program costs, abaloparatide-TD program costs, elacestrant and RAD140 program development expenses along with employee compensation incurred to support the commercialization of TYMLOS in the United States. The $10.2 million net non-cash adjustments to reconcile net loss to net cash used in operations primarily included stock-based compensation expense of $5.5 million, amortization of debt discount of $4.3 million, and depreciation of $0.5 million.

Net cash used in operating activities during the three months ended March 31, 2019 was $34.5 million, which was primarily the result of a net loss of $42.8 million, partially offset by $10.8 million of net non-cash adjustments to reconcile net loss to net cash used in operations and net changes in working capital of $3.0 million. The $42.8 million net loss was primarily due to abaloparatide-SC program costs, elacestrant and RAD140 program development expenses along with employee compensation incurred to support the commercialization of TYMLOS in the United States. The $10.8 million non-cash adjustments to reconcile net loss to net cash used in operations included stock-based compensation expense of $6.1 million, amortization of debt discount of $3.8 million, impairment charge for the right of use operating lease of $0.3 million and depreciation of $0.6 million.

*Cash Flows from Investing Activities*

Net cash used in investing activities during the three months ended March 31, 2020 was $6.9 million, which was the result of $33.0 million in sales and maturities of marketable securities, partially offset by $39.9 million in purchases of marketable securities.

Net cash provided by investing activities during the three months ended March 31, 2019 was $45.0 million, which was primarily the result of $45.0 million in sales and maturities of marketable securities.

Our investing cash flows will be impacted by the timing of our purchases and sales of our marketable securities. Because our marketable securities are primarily short-term in duration, we would not expect our operational results or cash flows to be significantly affected by a change in market interest rates.

*Cash Flows from Financing Activities*

Net cash provided by financing activities during the three months ended March 31, 2020 was $10.9 million, which consisted of $9.9 million of net proceeds from issuance of term loan and $1.0 million received upon issuance of common stock under the Radius Health, Inc. 2016 Employee Stock Purchase Plan (“ESPP”).

Net cash provided by financing activities during the three months ended March 31, 2019 was $1.6 million, which consisted of $0.6 million of proceeds received from exercises of stock options and $1.0 million received upon issuance of common stock under the Radius Health, Inc. 2016 Employee Stock Purchase Plan.

***Borrowings and Other Liabilities***

In August 2017, we issued $300.0 million aggregate principal amount of the Convertible Notes, as discussed in more detail in Note 6, “Convertible Notes Payable,” to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q. We received net proceeds of approximately $290.8 million from the sale of the Convertible Notes, after deducting fees and expenses of $9.2 million. In addition, in September 2017, we issued an additional $5.0 million aggregate principal amount of the Convertible Notes pursuant to the exercise of an over-allotment option granted to the underwriters in the offering. We received net proceeds of approximately $4.8 million from the sale of the over-allotment option, after deducting fees and expenses of $0.2 million.

Future minimum payments on our Convertible Notes as of March 31, 2020 are as follows (in thousands):

| **Years ending December 31,** | **Future Minimum Payments** |
|---|---|
| 2020 | $ 4,575 |
| 2021 | 9,150 |
| 2022 | 9,150 |
| 2023 | 9,150 |
| 2024 | 314,150 |
| Total minimum payments | $ 346,175 |
| Less: interest | (41,175) |
| Less: unamortized discount | (105,120) |
| Less: current portion | — |
| Long Term Debt | $ 199,880 |

***Term Loan and Credit Facility***

In January 2020, we entered into a Term Credit Agreement and Revolving Credit Agreement with MidCap Financial Trust. as discussed in more detail in Note 7, “Term Loan and Credit Facility,” to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

Future minimum payments on our Term Loan as of March 31, 2020 are as follows (in thousands):

| **Years ended December 31,** | **Future Minimum Payments** |
|---|---|
| 2020 | $ 594 |
| 2021 | 786 |
| 2022 | 786 |
| 2023 | 7,044 |
| 2024 | 3,611 |
| Total minimum payments | $ 12,821 |
| Less: interest | (2,821) |

| | | |
|---|---|---|
| Less: unamortized discount | | (61) |
| Less: current portion | | — |
| Long Term Debt | $ | 9,939 |

***Contractual Obligations***

Contractual obligations represent future cash commitments and liabilities under agreements with third parties and exclude contingent liabilities for which we cannot reasonably predict future payment. We enter into contracts in the normal course of

business for marketing and promotion, commercial activities, preclinical and clinical research studies, research supplies, and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore are cancelable contracts and not included in the table of contractual obligations and commitments. In addition, we have certain obligations to make future payments to third parties that become due and payable on the achievement of certain development, regulatory and commercial milestones, such as the start of a clinical trial, filing of an NDA, approval by the FDA, or product launch. The disclosed balances exclude the potential payments we may be required to make under our agreements because the timing of payments and actual amounts paid under those agreements may be different depending on the timing of receipt of goods or services or changes to agreed-upon terms or amounts for some obligations, and those agreements are cancelable upon written notice by us and therefore, not long-term liabilities. Additionally, the expected timing of payment of the obligations presented below is estimated based on current information.

***Supply and Manufacturing Agreements***

In June 2016, we entered into a Supply Agreement with Ypsomed AG ("Ypsomed"), as amended, pursuant to which Ypsomed agreed to supply commercial and clinical supplies of a disposable pen injection device customized for subcutaneous injection of abaloparatide. We agreed to purchase a minimum number of devices at prices per device that decrease with an increase in quantity supplied. In addition, we made milestone payments for Ypsomed's capital developments in connection with the initiation of the commercial supply of the device and paid a one-time capacity fee. All costs and payments under the agreement are delineated in Swiss Francs. The agreement has an initial term of three years which began on June 1, 2017, after which, it automatically renews for two-year terms unless either party terminates the agreement upon 18 months' notice prior to the end of the then-current term. We are required to purchase a minimum number of batches for CHF 2.4 million ($2.5 million) through the year ended December 31, 2022.

In June 2016, we entered into a Commercial Supply Agreement with Vetter Pharma International GmbH ("Vetter"), as amended, pursuant to which Vetter agreed to formulate the finished abaloparatide-SC drug product containing abaloparatide active pharmaceutical ingredient fill cartridges with the drug product, assemble the pen delivery device, and to package the pen for commercial distribution. We agreed to purchase the cartridges and pens in specified batch sizes at a price per unit. For labeling and packaging services, we have agreed to pay a per unit price dependent upon the number of pens loaded with cartridges that are labeled and packaged. These prices are subject to an annual price adjustment. The agreement has an initial term of five years, which began on January 1, 2016, after which, it automatically renews for two-year terms unless either party notifies the other party two years before the end of the then-current term that it does not intend to renew.

In July 2016, we entered into a Manufacturing Services Agreement with Polypeptide Laboratories Holding AB ("PPL"), as amended, as successor-in-interest to Lonza Group Ltd., pursuant to which PPL has agreed to manufacture the commercial and clinical supplies of abaloparatide API. We have agreed to purchase the API in batches at a price per gram in euros, subject to an annual increase by PPL. We are required to purchase a minimum number of batches annually, equal to €2.9 million ($3.2 million) per year through the year ended December 31, 2022. The agreement has an initial term of a six years, after which, it automatically renews for three-year terms unless either party provides notice of non-renewal 24 months before the end of the then-current term.

***License Agreement Obligations***

*TYMLOS (abaloparatide)*

In September 2005, we entered into a license agreement with an affiliate of Ipsen Pharma SAS ("Ipsen"), as amended, or the License Agreement, under which we exclusively licensed certain Ipsen compound technology and related patents covering abaloparatide to research, develop, manufacture and commercialize certain compounds and related products in all countries, except Japan and France (where our commercialization rights were subject to certain co-marketing and co-promotion rights exercisable by Ipsen, provided that certain conditions included in the License Agreement were met). We believe that Ipsen's co-marketing and co-promotion rights in France have permanently expired. Ipsen also granted us an exclusive right and license under the Ipsen compound technology and related patents to make and have made compounds or product in Japan. Ipsen further granted us an exclusive right and license under certain Ipsen formulation technology and related patents solely for purposes of enabling us to develop, manufacture and commercialize compounds and products covered by the compound technology license in all countries, except Japan and France (as discussed above).

In consideration for these rights, we made nonrefundable, non-creditable payments in the aggregate of $13.0 million to Ipsen, including payment in recognition of certain milestones having been achieved through March 31, 2020. The License Agreement provides for further payments upon the achievement of certain future regulatory and commercial milestones. Total additional milestone payments that could be payable under the agreement are €24.0 million (approximately $26.4 million). In connection with the FDA's approval of TYMLOS in April 2017, we paid Ipsen a milestone of €8.0 million (approximately $8.8 million) under the License Agreement, which we have recorded as an intangible asset within the consolidated balance sheet and will

amortize over the remaining patent life or the estimated useful life of the underlying product. The License Agreement provides that we are obligated to pay to Ipsen a fixed five percent royalty based on net sales of products containing abaloparatide by us or our sublicensees on a country-by-country basis until the later of the last to expire of the licensed patents or for a period of 10 years after the first commercial sale in such country. The royalty expense was approximately $2.4 million for the three months ended March 31, 2020. The date of the last to expire of the abaloparatide patents licensed from or co-owned with Ipsen, barring any extension thereof, is expected to be March 26, 2028.

If we sublicense abaloparatide to a third party, the agreement provides that we would pay a percentage of certain payments received from such sublicensee (in lieu of milestone payments not achieved at the time of such sublicense). The applicable percentage is in the low double-digit range. In addition, if we or our sublicensees commercialize a product that includes a compound discovered by us based on or derived from confidential Ipsen know-how, the agreement provides that we would pay to Ipsen a fixed low single-digit royalty on net sales of such product on a country-by-country basis until the later of the last to expire of our patents that cover such product or for a period of 10 years after the first commercial sale of such product in such country.

The License Agreement expires on a country-by-country basis on the later of (1) the date the last remaining valid claim in the licensed patents expires in that country, or (2) a period of 10 years after the first commercial sale of the licensed products in such country, unless it is sooner terminated in accordance with its terms.

Prior to executing the License Agreement for abaloparatide with Radius, Ipsen licensed the Japanese rights for abaloparatide to Teijin. Teijin has initiated a Phase 3 clinical study of abaloparatide-SC in Japan for the treatment of postmenopausal osteoporosis. We maintain full global rights to our development program for abaloparatide-patch.

Pursuant to a final decision in arbitration proceedings with Ipsen in connection with the License Agreement, we are obligated to pay Ipsen $5.0 million if abaloparatide receives marketing approval in Japan and a fixed mid single-digit royalty based on net sales of abaloparatide in Japan.

*Abaloparatide-patch*

In February 2018, we entered into a Scale-Up And Commercial Supply Agreement (the “Supply Agreement”) with 3M Company and 3M Innovative Properties Company (collectively with 3M Company, “3M”), pursuant to which 3M agreed to exclusively manufacture Phase 3 and global commercial supplies of an abaloparatide-coated transdermal patch product (“Product”) and associated applicator devices (“Applicator”). Under the Supply Agreement, 3M agreed to manufacture Product and Applicator for us according to agreed-upon specifications in sufficient quantities to meet our projected supply requirements. 3M agreed to manufacture commercial supplies of Product at unit prices that decrease with an increase in the quantity we order. We are obligated to pay 3M a mid-to-low single-digit royalty on worldwide net sales of Product and reimburse 3M for certain capital expenditures incurred to establish commercial supply of Product. We are responsible for providing, at our expense, supplies of abaloparatide drug substance to be used in manufacturing Product. During the term of the Supply Agreement, 3M and Radius have agreed to work exclusively with each other with respect to the delivery of abaloparatide, parathyroid hormone (“PTH”), and/or PTH related proteins via active transdermal, intradermal, or microneedle technology. In October 2018, the Company committed to fund 3M’s purchase of capital equipment totaling approximately $9.6 million in preparation for manufacturing Phase 3 and potential commercial supplies of Product. Milestone payments for the equipment commenced in the fourth quarter of 2018 and are expected to be paid in full in the second quarter of 2021.

The initial term of the Supply Agreement began on its effective date and will continue for five years after the first commercial sale of Product. The Supply Agreement then automatically renews for successive three-year terms, unless earlier terminated pursuant to its terms or upon either party’s notice of termination to the other 24 months prior to the end of the then-current term. The Supply Agreement may be terminated by either party upon an uncured material breach of its terms by the other party, or due to the other party’s bankruptcy, insolvency, or dissolution. We may terminate the Supply Agreement upon the occurrence of certain events, including for certain clinical, technical, or commercial reasons impacting Product, if we are unable to obtain U.S. regulatory approval for Product within a certain time period, or if we cease development or commercialization of Product. 3M may terminate the Supply Agreement upon the occurrence of certain events, including if there are certain safety issues related to Product, if we are unable to obtain U.S. regulatory approval for Product within a certain time period, or if we fail to order Product for a certain period of time after commercial launch of the Product in the U.S. Upon certain events of termination, 3M is required to transfer the manufacturing processes for Product and Applicator to us or a mutually agreeable third party and continue supplying Product and Applicator for a period of time pursuant to our projected supply requirements.

In June 2009, we entered into a Development and Clinical Supplies Agreement with 3M, as amended (the “Development Agreement”), under which Product and Applicator development activities occur and 3M has manufactured phase 1 and 2 clinical trial supplies for us on an exclusive basis. The initial term of the Development Agreement remained in effect until June 2019 and then automatically renews for successive one-year terms, unless earlier terminated, until the earliest of (i) the

expiration or termination of the Supply Agreement, (ii) the mutual written agreement of the parties, or (iii) prior written notice by either party to the other party at least ninety days prior to the end of the then-current term of the Development Agreement that such party declines to extend the term. Either party may terminate the agreement in the event of an uncured material breach by the other party. We pay 3M for services delivered pursuant to the agreement on a fee-for-service or a fee-for-deliverable basis as specified in the agreement. We have paid 3M approximately $29.3 million, in the aggregate, through March 31, 2020 with respect to performance under the Development Agreement.

*Elacestrant (Eisai)*

In June 2006, we entered into a license agreement ("Eisai Agreement"), with Eisai Co. Ltd. ("Eisai"). Under the Eisai Agreement, Eisai granted to us an exclusive right and license to research, develop, manufacture and commercialize elacestrant (RAD1901) and related products from Eisai in all countries, except Japan. In consideration for the rights to elacestrant, we paid Eisai an initial license fee of $0.5 million, which was expensed during 2006. In March 2015, we entered into an amendment to the Eisai Agreement, or the "Eisai Amendment," in which Eisai granted to us the exclusive right and license to research, develop, manufacture and commercialize elacestrant in Japan. In consideration for the rights to elacestrant in Japan, we paid Eisai an initial license fee of $0.4 million upon execution of the Eisai Amendment, which was recognized as research and development expense in 2015. The Eisai Agreement, as amended, also provides for additional payments of up to $22.3 million, payable upon the achievement of certain future clinical and regulatory milestones. To date, we have paid Eisai approximately $1.0 million in connection with the achievement of certain milestones.

Under the Eisai Agreement, as amended, should a product covered by the licensed technology be commercialized, we will be obligated to pay to Eisai royalties in a variable mid-single-digit range based on net sales of the product on a country-by-country basis. The royalty rate will be reduced, on a country-by-country basis, at such time as the last remaining valid claim in the licensed patents expires, lapses or is invalidated and the product is not covered by data protection clauses. In addition, the royalty rate will be reduced, on a country-by-country basis, if, in addition to the conditions specified in the previous sentence, sales of lawful generic versions of such product account for more than a specified minimum percentage of the total sales of all products that contain the licensed compound during a calendar quarter. The latest licensed patent is expected to expire, barring any extension thereof, on August 18, 2026.

The Eisai Agreement, as amended, also grants us the right to grant sublicenses with prior written approval from Eisai. If we sublicense the licensed technology to a third party, we will be obligated to pay Eisai, in addition to the milestones referenced above, a fixed low double-digit percentage of certain fees received from such sublicensee and royalties in the low single-digit range based on net sales of the sublicensee. The Eisai Agreement expires on a country-by-country basis on the later of (1) the date the last remaining valid claim in the licensed patents expires, lapses or is invalidated in that country, the product is not covered by data protection clauses, and the sales of lawful generic versions of the product account for more than a specified percentage of the total sales of all pharmaceutical products containing the licensed compound in that country; or (2) a period of 10 years after the first commercial sale of the licensed products in such country, unless it is sooner terminated.

*Elacestrant (Duke)*

In December 2017, we and Duke University ("Duke") entered into a patent license Agreement, as amended, (the "Duke Agreement") pursuant to which we acquired the exclusive worldwide license to certain Duke patents associated with elacestrant (RAD1901) related to the use of elacestrant in the treatment of breast cancer as a monotherapy and in a combination therapy (collectively "Duke Patents").

In consideration for these rights, we incurred non-refundable, non-creditable obligations to pay Duke, totaling $1.3 million, which were expensed as research and development during 2017. The Duke Agreement provides for further payments upon the achievement of certain future regulatory and commercial milestones totaling up to $3.8 million. The agreement provides that we would pay Duke a fixed low single-digit royalty based on net sales, on a country-by-country basis, beginning in August 2029 and ending upon expiration of the last patent rights to expire.

If we sublicense the Duke Patents to a third party, the agreement provides that we will pay Duke a percentage of certain payments we received from such sublicensee(s). The applicable percentage is in the high single-digit range on certain payments received in excess of a pre-specified amount. The Duke Agreement may be terminated by either party upon an uncured material breach of the agreement by the other party. We may terminate the agreement upon 60 days written notice to Duke, if we suspend our manufacture, use and sale of the licensed products.

*Abaloparatide-SC (Teijin)*

In July 2017, we entered into a license and development agreement with Teijin for abaloparatide-SC in Japan (the "Teijin Agreement"). Teijin is developing abaloparatide-SC in Japan under an agreement with Ipsen and has initiated a Phase 3 trial in Japanese patients with osteoporosis. Pursuant to the Teijin Agreement, we granted Teijin (i) an exclusive payment bearing

license under certain of our intellectual property to develop and commercialize abaloparatide-SC in Japan, (ii) a non-exclusive payment bearing license under certain of our intellectual property to manufacture abaloparatide-SC for commercial supply in Japan, (iii) a right of reference to certain of our regulatory data related to abaloparatide-SC for purposes of developing, manufacturing and commercializing abaloparatide-SC in Japan, (iv) a manufacture transfer package, upon Teijin's request, consisting of information and our know-how that is necessary for the manufacture of active pharmaceutical ingredient and abaloparatide-SC, and (v) a right to request that we use commercially reasonable efforts to manufacture (or arrange for a third party to manufacture) and supply (or arrange for a third party to supply), at Teijin's expense, the active pharmaceutical ingredient ("API") for the clinical supply of abaloparatide-SC in sufficient quantities to enable Teijin to conduct its clinical trials in Japan. In addition, we agreed to use commercially reasonable efforts to arrange for Teijin to directly enter into commercial supply agreements with our then existing contract manufacturers of abaloparatide-SC API and drug product.

In consideration for these rights, we received an upfront payment of $10.0 million. The Teijin Agreement also provides for additional payments to us of up to an aggregate of $40.0 million upon the achievement of certain regulatory and sales milestones, and requires Teijin to pay us a fixed low double-digit royalty based on net sales of abaloparatide-SC in Japan during the royalty term, as defined below.

Teijin granted us (i) an exclusive license under certain of Teijin's intellectual property to develop, manufacture and commercialize abaloparatide-SC outside Japan and (ii) a right of reference to certain of Teijin's regulatory data related to abaloparatide-SC for purposes of developing, manufacturing and commercializing abaloparatide-SC outside Japan. We maintain full global rights to our development program for abaloparatide-patch, which is not part of the Teijin Agreement. Pursuant to the Teijin Agreement, the parties may further collaborate on new indications for abaloparatide-SC.

Unless earlier terminated, the Teijin Agreement expires on the later of the (i) date on which the use, sale or importation of abaloparatide-SC is no longer covered by a valid claim under our patent rights licensed to Teijin in Japan, (ii) expiration of marketing or data exclusivity for abaloparatide-SC in Japan, or (iii) 10th anniversary of the first commercial sale of abaloparatide-SC in Japan.

***Net Operating Loss Carryforwards***

As of December 31, 2019, we had federal and state net operating loss carryforwards of approximately $974.3 million and $681.8 million, respectively, subject to limitation, as described below. If not utilized, the net operating loss carryforwards will expire at various dates through 2039.

Under Section 382 of the Internal Revenue Code of 1986, or Section 382, substantial changes in our ownership may limit the amount of net operating loss carryforwards that could be used annually in the future to offset taxable income. We have completed studies through December 31, 2015, to determine whether any ownership change has occurred since our formation and have determined that transactions have resulted in two ownership changes, as defined under Section 382. There could be additional ownership changes subsequent to December 31, 2015 and/or in the future that could further limit the amount of net operating loss and tax credit carryforwards that we can utilize. A full valuation allowance has been recorded against our net operating loss carryforwards and other deferred tax assets, as the realization of the deferred tax asset is uncertain.

As a result, we have not recorded any federal or state income tax benefit in our condensed consolidated statements of operations.

**Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements or any relationships with unconsolidated entities of financial partnerships, such as entities often referred to as structured finance or special purpose entities.

**New Accounting Standards**

See Note 2 - *Basis of Presentation and Significant Accounting Policies - Accounting Standards Updates* in the accompanying unaudited condensed consolidated financial statements in this Quarterly Report for a discussion of new accounting standards.

**Item 3. Quantitative and Qualitative Disclosures about Market Risk.**

We are exposed to market risk related to changes in the dollar/euro exchange rate because a portion of our development costs are denominated in euros. We do not hedge our foreign currency exchange rate risk. However, an immediate 10 percent adverse change in the dollar/euro exchange rate would not have a material effect on financial results.

We are exposed to market risk related to changes in interest rates. As of March 31, 2020, we had cash, cash equivalents, restricted cash, marketable securities and investments of $138.5 million, consisting of cash, money market funds, domestic corporate debt securities, domestic corporate commercial paper and agency bonds. This exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments are in marketable securities. Because our marketable securities are short-term in duration, and have a low risk profile, an immediate 10% change in interest rates would not have a material effect on the fair market value of our portfolio. We generally have the ability to hold our investments until maturity, and therefore we would not expect our operating results or cash flows to be affected to any significant degree by a change in market interest rates on our investments. We carry our investments based on publicly available information. As of March 31, 2020, we do not have any hard-to-value investment securities or securities for which a market is not readily available or active.

We are not subject to significant credit risk as this risk does not have the potential to materially impact the value of our assets and liabilities.

## Item 4. Controls and Procedures.

### Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of 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, as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of as of March 31, 2020.

### Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting during the three months ended March 31, 2020 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## PART II— OTHER INFORMATION

### Item 1. Legal Proceedings.

From time to time, we are party to litigation arising in the ordinary course of our business. As of March 31, 2020, we were not party to any significant litigation.

### Item 1A. Risk Factors.

*Our business faces significant risks and uncertainties. Certain important factors may have a material adverse effect on our business prospects, financial condition and results of operations, and you should carefully consider them. Accordingly, in evaluating our business, we encourage you to carefully consider the discussion of risk factors in Part I, "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2019, which could materially affect our business, financial condition or future results, in addition to other information contained in or incorporated by reference into this Quarterly Report on Form 10-Q and our other public filings with the Securities and Exchange Commission, or the SEC.*

The risk factor set forth below represents a new risk factor to add under the section entitled "Risks Related to the Commercialization and Development of Our Product Candidates" included in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the Securities and Exchange Commission on February 27, 2020.

***The ongoing COVID-19 pandemic is having and is expected to continue to have an adverse impact on our business, financial condition and results of operations, including our commercial operations and sales, clinical trials, preclinical studies, and employees.***

In December 2019, a novel strain of coronavirus, SARSCoV-2, which causes coronavirus disease 2019 (COVID-19), surfaced in Wuhan, China. Since then, SARS-CoV-2 and COVID-19 have spread to multiple countries, including the United States. The COVID-19 pandemic is evolving, and to date has led to the implementation of various responses, including government-imposed quarantines, travel restrictions and other public health safety measures.

In response to the spread of SARS-CoV-2 and COVID-19, in March 2020, we closed our administrative offices, with our employees continuing their work outside of our offices, and our commercial organization and sales force and medical organization having suspended personal interactions with physicians and customers and our commercial organization conducting promotional activities virtually. It is unknown when our offices will reopen and personal interactions with physicians and customers may resume.

We continue to monitor our operations and applicable government recommendations, and we have made modifications to our normal operations because of the COVID-19 pandemic, including requiring most office-based employees to work remotely. Notwithstanding these measures, the COVID-19 pandemic could affect the health and availability of our workforce as well as those of the third parties we rely on taking similar measures. If members of our management and other key personnel in critical functions across our organization are unable to perform their duties or have limited availability due to COVID-19, we may not be able to execute on our business strategy and/or our operations may be negatively impacted. We may also experience limitations in employee resources, including because of sickness of employees or their families or the desire of employees to avoid contact with individuals or large groups of people. In addition, we have experienced and will continue to experience disruptions to our business operations resulting from quarantines, self-isolations and other restrictions on the ability of our employees to perform their jobs.

The current COVID-19 pandemic is adversely impacting our business, and future public health crises such as pandemics or similar outbreaks may have similar adverse impacts on our business in the future. We have experienced disruptions that are impacting our ability to successfully commercialize our only product, TYMLOS. Demand for TYMLOS has declined and the rate of new patients starting on TYMLOS therapy has slowed as patients are unable or unwilling to see their doctor for diagnosis and treatment due to illness, quarantine, travel restrictions or financial hardship. As a result, we may not be able to meet our expectations with respect to TYMLOS sales or to attaining or maintaining profitability and positive cash-flow from our operations. Business interruptions from the current COVID-19, or a future, pandemic may also adversely impact the third parties we solely rely on to sufficiently manufacture TYMLOS and to produce our product candidates in quantities we require, which may adversely impact the commercialization of TYMLOS and our research and development activities and potential commercialization of our product candidates.

Enrollment in our Phase 3 trials of abaloparatide-SC, abaloparatide-patch and elacestrant has slowed as a result of the impacts of the COVID-19 pandemic. We cannot accurately predict the duration of the slowdown or how rapidly we will return to full enrollment activities

Timely enrollment in our clinical trials is dependent upon global clinical trial sites, many of which are being adversely affected by the current pandemic. We are currently conducting clinical trials for our product candidates in many countries, including the United States, European Union, Canada, United Kingdom, Australia, South Korea, Argentina, and Israel, and may expand to other geographies. Many of the regions in which we operate are currently being, or may in the future be, affected by the COVID-19 pandemic. We are following health authority guidance regarding missed study visits and procedures. Some factors from the COVID-19 outbreak that may delay or otherwise further adversely affect enrollment in the clinical trials of our product candidates, as well as adversely impact our business generally, include:

- delays or difficulties in clinical site initiation and enrollment, including difficulties in recruiting clinical site investigators and clinical site staff, and delays enrolling patients in our clinical trials or increased rates of patients withdrawing from our clinical trials following enrollment as a result of contracting COVID-19, being forced to quarantine, or not accepting home health visits, particularly for older patients with a higher risk of contracting COVID-19;

- delays or difficulties in patient and site adherence to all protocol-specified procedures, potentially jeopardizing data quality and trial integrity;

- diversion of healthcare resources away from the conduct of clinical trials to focus on pandemic concerns, including the attention of physicians serving as our clinical trial investigators, diversion of hospitals and medical centers or sites serving as our clinical trial sites and hospital or other staff supporting the conduct of our clinical trials;

- limitations on travel that could interrupt key trial activities, such as clinical trial site initiations and monitoring, domestic and international travel by employees, contractors or patients to clinical trial sites, including any government-imposed travel restrictions or quarantines that may impact the ability or willingness of patients, employees or contractors to travel to our clinical trial sites or secure visas or entry permissions, any of which could delay or adversely impact the conduct or progress of our clinical trials;

- potential interruption or delays in the operations of the U.S. Food and Drug Administration and foreign regulatory authorities, or independent review boards or ethics committees, which may impact review and approval timelines;

- potential interruption of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems; or in the clinical trial sites' ability to maintain continuous supply of product candidates to patients;

- longer payment and reimbursement cycles and uncertainties regarding the collectability of accounts receivable; and

- business disruptions caused by potential workplace, laboratory and office closures and an increased reliance on employees working from home, disruptions to or delays in ongoing laboratory experiments and operations, staffing shortages, travel imitations or mass transit disruptions, any of which could adversely impact our business operations or delay necessary interactions with local regulators, ethics committees and other important agencies and contractors.

These and other factors arising from the COVID-19 pandemic could worsen in countries that are already afflicted with COVID-19, could continue to spread to additional countries, or could return to countries where the pandemic has been partially contained, each of which could further adversely impact our ability to conduct clinical trials and our business generally, and could have a material adverse impact on our operations and financial condition and results. In addition, the trading prices for our common stock and other biopharmaceutical companies have been, and will likely continue to be, highly volatile as a result of the COVID-19 pandemic, and may limit our ability to raise additional capital.

Health regulatory agencies globally may experience disruptions in their operations as a result of the COVID-19 pandemic. The FDA and comparable foreign regulatory agencies may have slower response times or be under-resourced to continue to monitor our clinical trials and, as a result, review, inspection, and other timelines may be materially delayed. It is unknown how long these disruptions could continue, were they to occur. Any elongation or de-prioritization of our clinical trials or delay in regulatory review resulting from such disruptions could materially affect the development and study of our product candidates. For example, regulatory authorities may require that we not distribute a product candidate lot until the relevant agency authorizes its release. Such release authorization may be delayed as a result of the coronavirus pandemic and could also result in delays to our clinical trials.

In response to the COVID-19 pandemic, the Coronavirus Aid, Relief and Economic Security Act (CARES Act) was signed into law in March 2020. The CARES Act is aimed at providing emergency assistance and health care for individuals, families and businesses affected by the COVID-19 pandemic and generally supporting the United States economy. Due to the recent enactment of the CARES Act, there is a high degree of uncertainty around its implementation. We expect that additional state and federal healthcare reform measures may be adopted in the future, any of which could limit the amounts that federal and

state governments will pay for our commercial product, TYMLOS®, which could result in reduced demand. The current COVID-19 pandemic may introduce temporary or permanent healthcare reform measures for which we cannot predict the financial impact on our business.

The COVID-19 outbreak continues to rapidly evolve. While the impacts of the COVID-19 outbreak are having and will continue to have an adverse effect on our business, financial condition and results of operations, the ultimate extent to which the outbreak impacts our business, including our commercial results, financial condition, liquidity, future results of operations, clinical trials, preclinical studies, and our workforce, will depend on the duration and extent of future developments, which are highly uncertain and cannot be predicted with confidence. These future developments include the ultimate geographic spread of the disease, the duration of the outbreak, travel restrictions and actions to contain the outbreak or treat its impact, such as social distancing and quarantines or lock-downs in the United States and other countries, business closures or business disruptions and the effectiveness of actions taken in the United States and other countries to contain and treat the disease.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.**

None.

**Item 3. Defaults Upon Senior Securities.**

None.

**Item 4. Mine Safety Disclosures.**

None.

**Item 5. Other Information.**

None.

**Item 6. Exhibits.**

A list of exhibits is set forth in the Exhibit Index below, which is incorporated herein by reference.

## EXHIBIT INDEX

Unless otherwise indicated, all references to previously filed Exhibits refer to the Company's filings with the Securities and Exchange Commission ("SEC"), under File No. 001-35726.

| Exhibit Number | Exhibit Description | Incorporated by Reference | | | | Filed/ Furnished Herewith |
|---|---|---|---|---|---|---|
| | | Form | File No. | Exhibit | Filing Date | |
| 3.1 | Restated Certificate of Incorporation | 8-K | | 3.1 | 6/13/2014 | |
| 3.2 | Amended and Restated By-Laws | 8-K | | 3.1 | 3/2/2018 | |
| 10.1 | Amendment No. 1, dated March 27, 2020, to Credit and Security Agreement (Term Loan), dated January 10, 2020, by and among the Company, Radius Pharmaceuticals, Inc., MidCap Financial Trust, Apollo Investment Corporation, Flexpoint MCLS Holdings LLC and ELM 2018-2 Trust | 8-K | | 10.1 | 3/30/2020 | |
| 31.1 | Certification of Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a)/15d-14(a) | | | | | * |
| 31.2 | Certification of Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a)/15d-14(a) | | | | | * |
| 32.1 | Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 | | | | | ** |
| 101.SCH | Inline XBRL Taxonomy Extension Schema Document | | | | | * |
| 101.CAL | Inline XBRL Taxonomy Extension Calculation Linkbase Document | | | | | * |
| 101.LAB | Inline XBRL Taxonomy Extension Label Linkbase Document | | | | | * |
| 101.PRE | Inline XBRL Taxonomy Extension Presentation Linkbase Document | | | | | * |
| 101.DEF | Inline XBRL Taxonomy Extension Definition Linkbase Document | | | | | * |
| 104 | Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101.*) | | | | | * |

* Filed herewith.

** Furnished herewith.

## SIGNATURES

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

**RADIUS HEALTH, INC.**

By: /s/ G. Kelly Martin

**G. Kelly Martin**
**President and Chief Executive Officer**
**(Principal Executive Officer)**

Date: May 7, 2020

By: /s/ Jose Carmona

**Jose Carmona**
**Chief Financial Officer**
**(Principal Accounting and Financial Officer)**

Date: May 7, 2020

**Exhibit 31.1**

**CERTIFICATIONS**

I, G. Kelly Martin, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Radius Health, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 7, 2020

/s/ G. Kelly Martin

G. Kelly Martin

President and Chief Executive Officer

**Exhibit 31.2**

**CERTIFICATIONS**

I, Jose Carmona, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Radius Health, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 7, 2020

/s/ Jose Carmona

Jose Carmona

Chief Financial Officer

**Exhibit 32.1**

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

Each of G. Kelly Martin and Jose Carmona hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, in his capacity as President and Chief Executive Officer (principal executive officer) and Chief Financial Officer (principal financial officer), respectively, of Radius Health, Inc. (the "Company"), that, to his knowledge, the Quarterly Report of the Company on Form 10-Q for the period ended March 31, 2020 as filed with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 7, 2020

By: /s/ G. Kelly Martin
G. Kelly Martin
President and Chief Executive Officer

Date: May 7, 2020

By: /s/ Jose Carmona
Jose Carmona
Chief Financial Officer

This written statement is being furnished to the Securities and Exchange Commission as an exhibit to the Report, and "accompanies" such Report to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Report to which it relates), notwithstanding any general incorporation language contained in such filing. A signed original of this statement has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.