Table of Contents

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 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: 001-35403

Verastem, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**27-3269467**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
117 Kendrick Street, Suite 500	
Needham, MA	**02494**
(Address of principal executive offices)	(Zip Code)

(781) 292-4200
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	VSTM	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 (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer ☐	Accelerated filer ☒	Non-accelerated filer ☐	Smaller reporting company ☒	Emerging growth company ☐

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

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

As of August 7, 2020, there were 169,532,285 shares of Common Stock outstanding.

TABLE OF CONTENTS

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements related to present facts or current conditions or historical facts, contained in this Quarterly Report on Form 10-Q, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. Such statements relate to, among other things, the development and activity of our programs, product candidates, VS-6766 (rapidly accelerated fibrosarcoma (RAF)/ mitogen-activated protein kinase kinase (MEK) program) and defactinib (focal adhesion kinase (FAK program), and our marketed product, COPIKTRA® (phosphoinositide 3-kinase (PI3K) program), generally the potential commercial success of COPIKTRA, the anticipated adoption of COPIKTRA by patients and physicians, the structure of our planned and pending clinical trials, and the timeline and indications for clinical development, regulatory submissions and commercialization of activities. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements are not guarantees of future performance and our actual results could differ materially from the results discussed in the forward-looking statements we make. Applicable risks and uncertainties include the risks and uncertainties, among other things, regarding: the commercial success of COPIKTRA in the United States; physician and patient adoption of COPIKTRA, including those related to the safety and efficacy of COPIKTRA; the uncertainties inherent in research and development of VS-6766, defactinib and COPIKTRA, such as negative or unexpected results of clinical trials; whether and when any applications for VS-6766, defactinib and COPIKTRA may be filed with regulatory authorities in any other jurisdictions; whether and when regulatory authorities in any other jurisdictions may approve any such other applications that may be filed for VS-6766, defactinib or COPIKTRA, which will depend on the assessment by such regulatory authorities of the benefit-risk profile suggested by the totality of the efficacy and safety information submitted and, if approved, whether VS-6766, defactinib, or COPIKTRA will be commercially successful in such jurisdictions; our ability to obtain, maintain and enforce patent and other intellectual property protection for VS-6766, defactinib and COPIKTRA; the scope, timing, and outcome of any legal proceedings; decisions by regulatory authorities regarding labeling and other matters that could affect the availability or commercial potential of COPIKTRA; the fact that regulatory authorities in the U.S. or other jurisdictions, if approved, could withdraw approval; whether preclinical testing of our product candidates and preliminary or interim data from clinical trials will be predictive of the results or success of ongoing or later clinical trials; that the timing, scope and rate of reimbursement for our product candidates is uncertain; that third-party payors (including government agencies) may not reimburse for COPIKTRA; that there may be competitive developments affecting our product candidates; that data may not be available when expected; that enrollment of clinical trials may take longer than expected; that VS-6766, defactinib, or COPIKTRA will cause unexpected safety events, experience manufacturing or supply interruptions or failures, or result in unmanageable safety profiles as compared to their levels of efficacy; that COPIKTRA will be ineffective at treating patients with lymphoid malignancies; that we face substantial competition, which may result in others developing or commercializing products before or more successfully than we do which could result in reduced market share or market potential for COPIKTRA, VS-6766 or defactinib; that we will be unable to successfully initiate or complete the clinical development and eventual commercialization of our product candidates; that the development and commercialization of our product candidates will take longer or cost more than planned; that we may not have sufficient cash to fund our contemplated operations; that we may not realize the operational efficiencies and cost savings from restructuring, that we, Sanofi, CSPC Pharmaceutical Group Limited, Yakult Honsha Co., Ltd., Chugai Pharmaceutical, Co. Ltd, or Infinity Pharmaceuticals, Inc. will fail to fully perform under the license agreements; that we may be unable to make additional draws under our debt facility or obtain adequate financing in the future through product licensing, co-promotional arrangements, public or private equity, debt financing or otherwise; that we will not pursue or submit regulatory filings for our product candidates, including for duvelisib in patients with chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL) or indolent non-Hodgkin lymphoma (iNHL) in other jurisdictions; that our product candidates will not receive regulatory approval, become commercially successful products, or result in new treatment options being offered to patients; and that the duration and impact of COVID-19 may affect, precipitate or exacerbate one or more of the foregoing risks and uncertainties. Other risks and uncertainties include those identified in our Annual Report on Form 10-K for the year ended December 31, 2019 as filed with the Securities and Exchange Commission (SEC) on March 11, 2020, in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 as filed with the SEC on May 7, 2020 and in any subsequent filing with the SEC.

As a result of these and other factors, we may not achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. The forward-looking statements contained in this Quarterly Report on Form 10-Q reflect our views as of the date hereof. We do not assume and specifically disclaim any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

PART I—FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements (unaudited).

Verastem, Inc.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except per share amounts)

	June 30, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 125,328	$ 43,514
Short-term investments	—	31,992
Accounts receivable, net	1,500	2,524
Inventory	6,316	3,096
Restricted cash	4,890	507
Prepaid expenses and other current assets	6,558	3,328
Total current assets	144,592	84,961
Property and equipment, net	791	947
Right-of-use asset, net	2,909	3,077
Intangible assets, net	19,223	20,008
Restricted cash	30,616	35,241
Other assets	401	812
Total assets	$ 198,532	$ 145,046
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 2,241	$ 9,655
Accrued expenses	21,449	19,365
Lease liability, short-term	508	420
Derivative liability, short-term	—	450
Current portion of long-term debt	4,586	—
Total current liabilities	28,784	29,890
Non-current liabilities:		
Long-term debt	30,899	35,067
Convertible senior notes	20,381	68,556
Lease liability, long-term	3,225	3,489
Other non-current liabilities	870	870
Total liabilities	84,159	137,872
Stockholders' equity:		
Preferred stock, $0.0001 par value; 5,000 shares authorized, no shares issued and outstanding at June 30, 2020 and December 31, 2019, respectively	—	—
Common stock, $0.0001 par value; 300,000 and 200,000 shares authorized, 169,338 and 80,118 shares issued and outstanding at June 30, 2020 and December 31, 2019, respectively	17	8
Additional paid-in capital	700,141	531,937
Accumulated other comprehensive income	—	14
Accumulated deficit	(585,785)	(524,785)
Total stockholders' equity	114,373	7,174
Total liabilities and stockholders' equity	$ 198,532	$ 145,046

See accompanying notes to the condensed consolidated financial statements.

Verastem, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(unaudited)
(in thousands, except per share amounts)

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Revenue:				
Product revenue, net	$ 4,235	$ 3,019	$ 9,269	$ 4,690
License and collaboration revenue	72	117	94	117
Total revenue	4,307	3,136	9,363	4,807
Operating expenses:				
Cost of sales - product	392	377	887	534
Cost of sales - intangible amortization	393	392	785	785
Research and development	9,344	11,346	20,268	21,103
Selling, general and administrative	15,442	29,298	35,046	55,331
Total operating expenses	25,571	41,413	56,986	77,753
Loss from operations	(21,264)	(38,277)	(47,623)	(72,946)
Other expense	—	—	(1,313)	—
Interest income	122	1,268	478	2,765
Interest expense	(1,868)	(5,185)	(12,542)	(10,115)
Net loss	$ (23,010)	$ (42,194)	$ (61,000)	$ (80,296)
Net loss per share—basic and diluted	$ (0.14)	$ (0.57)	$ (0.45)	$ (1.09)
Weighted average common shares outstanding used in computing net loss per share - basic and diluted	165,395	73,877	136,775	73,865
Net loss	$ (23,010)	$ (42,194)	$ (61,000)	$ (80,296)
Unrealized (loss) gain on available-for-sale securities	(9)	(24)	(14)	(41)
Comprehensive loss	$ (23,019)	$ (42,218)	$ (61,014)	$ (80,337)

See accompanying notes to the condensed consolidated financial statements.

Verastem, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(unaudited)
(in thousands, except share data)

	Common stock		Additional paid-in capital	Accumulated other comprehensive (loss) income	Accumulated deficit	Total stockholders' equity
	Shares	Amount				
Balance at December 31, 2019	**80,117,531**	**$ 8**	**$ 531,937**	**$ 14**	**$ (524,785)**	**$ 7,174**
Net loss	—	—	—	—	(37,990)	(37,990)
Unrealized (loss) on available-for-sale marketable securities	—	—	—	(5)	—	(5)
Issuance of common stock resulting from exercise of stock options	645,628	—	983	—	—	983
Issuance of common stock resulting from vesting of restricted stock units	58,166	—	(51)	—	—	(51)
Stock-based compensation expense	—	—	1,370	—	—	1,370
Issuance of common stock resulting from private investment in public equity offering, net of issuance costs of $6,171	46,511,628	5	93,824	—	—	93,829
Issuance of common stock under Employee Stock Purchase Plan	227,141	—	259	—	—	259
Conversion of 2019 Notes into common stock	34,796,350	3	57,411	—	—	57,414
Balance at March 31, 2020	**162,356,444**	**$ 16**	**$ 685,733**	**$ 9**	**$ (562,775)**	**$ 122,983**
Net loss	—	—	—	—	(23,010)	(23,010)
Unrealized (loss) on available-for-sale marketable securities	—	—	—	(9)	—	(9)
Issuance of common stock resulting from exercise of stock options	179,266	—	551	—	—	551
Issuance of common stock resulting from vesting of restricted stock units	32,650	—	(31)	—	—	(31)
Stock-based compensation expense	—	—	1,659	—	—	1,659
Issuance of common stock resulting from at-the-market transactions, net of issuance costs of $55	6,769,559	1	12,229	—	—	12,230
Balance at June 30, 2020	**169,337,919**	**$ 17**	**$ 700,141**	**$ —**	**$ (585,785)**	**$ 114,373**

Balance at December 31, 2018	**73,806,344**	**$ 7**	**$ 499,741**	**$ 127**	**$ (375,576)**	**$ 124,299**
Net loss	—	—	—	—	(38,102)	(38,102)
Unrealized (loss) on available-for-sale marketable securities	—	—	—	(17)	—	(17)
Issuance of common stock resulting from exercise of stock options	46,803	—	75	—	—	75
Issuance of common stock resulting from vesting of restricted stock units	23,792	—	(43)	—	—	(43)
Stock-based compensation expense	—	—	2,248	—	—	2,248
Balance at March 31, 2019	**73,876,939**	**$ 7**	**$ 502,021**	**$ 110**	**$ (413,678)**	**$ 88,460**
Net loss	—	—	—	—	(42,194)	(42,194)
Unrealized (loss) on available-for-sale marketable securities	—	—	—	(24)	—	(24)
Stock-based compensation expense	—	—	3,065	—	—	3,065
Balance at June 30, 2019	**73,876,939**	**$ 7**	**$ 505,086**	**$ 86**	**$ (455,872)**	**$ 49,307**

See accompanying notes to the condensed consolidated financial statements.

Verastem, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited)
(in thousands)

	Six months ended June 30,	
	2020	2019
Operating activities		
Net loss	$ (61,000)	$ (80,296)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	189	227
Amortization of acquired intangible asset	785	785
Amortization of right-of-use asset and lease liability	(8)	112
Stock-based compensation expense	3,029	5,313
Amortization of deferred financing costs, debt discounts and premiums and discounts on available-for-sale marketable securities	9,259	2,815
Change in fair value of interest make whole provision for 2019 Notes	1,313	—
Changes in operating assets and liabilities:		
Accounts receivable, net	1,024	(1,083)
Inventory	(3,220)	33
Prepaid expenses, other current assets and other assets	(2,819)	(434)
Accounts payable	(7,414)	1,278
Accrued expenses and other liabilities	2,312	(2,199)
Net cash used in operating activities	(56,550)	(73,449)
Investing activities		
Purchases of property and equipment	(27)	—
Purchases of investments	—	(37,637)
Maturities of investments	32,050	84,530
Net cash provided by investing activities	32,023	46,893
Financing activities		
Proceeds from long-term debt, net of issuance costs	—	9,694
Proceeds from the exercise of stock options and employee stock purchase program	1,793	75
Interest make-whole payments on the 2019 Notes	(1,763)	—
Proceeds from the issuance of common stock, net	106,069	—
Net cash provided by financing activities	106,099	9,769
Increase (decrease) in cash, cash equivalents and restricted cash	81,572	(16,787)
Cash, cash equivalents and restricted cash at beginning of period	79,262	130,608
Cash, cash equivalents and restricted cash at end of period	$ 160,834	$ 113,821
Supplemental disclosure of non-cash investing and financing activities		
Common stock issuance costs included in accounts payable and accrued expenses	$ 25	$ 15
Conversion of 2019 Notes into common stock	$ 57,414	$ —
Purchases of property and equipment included in accounts payable and accrued expenses	$ 6	$ 7
Settlement of restricted stock units for tax withholdings included in accrued expenses	$ 82	$ —

See accompanying notes to the condensed consolidated financial statements.

Verastem, Inc.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

1. Nature of business

Verastem, Inc. (the Company) is a biopharmaceutical company focused on developing and commercializing medicines to improve the survival and quality of life of cancer patients. On September 24, 2018, the Company's first commercial product, COPIKTRA® (duvelisib), was approved by the U.S. Food and Drug Administration (the FDA) for the treatment of adult patients with certain hematologic cancers including relapsed or refractory chronic lymphocytic leukemia/ small lymphocytic lymphoma (CLL/SLL) after at least two prior therapies and relapsed or refractory follicular lymphoma (FL) after at least two prior systemic therapies. Its marketed product, COPIKTRA, and most advanced product candidates, defactinib and VS-6766 (formerly known as CH5126766, CK127, and RO5126766), utilize a multi-faceted approach designed to treat cancers originating either in the blood or major organ systems. The Company is currently developing its product candidates in both preclinical and clinical studies as potential therapies for certain cancers, including leukemia, lymphoma, ovarian cancer, lung cancer, head and neck cancer, colorectal cancer, pancreatic cancer, and mesothelioma. The Company believes that these compounds may be beneficial as therapeutics either as single agents or when used in combination with immuno-oncology agents, other pathway inhibitors or other current and emerging standard of care treatments in aggressive cancers that do not adequately respond to currently available therapies.

The condensed consolidated financial statements include the accounts of Verastem Securities Company and Verastem Europe GmbH, wholly-owned subsidiaries of the Company. All financial information presented has been consolidated and includes the accounts of the Company and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

The Company is subject to the risks associated with other life science companies, including, but not limited to, possible failure of preclinical testing or clinical trials, competitors developing new technological innovations, inability to obtain marketing approval of the Company's product candidates, VS-6766 and defactinib, market acceptance and the commercial success of COPIKTRA, and the Company's product candidates, VS-6766 and defactinib, following receipt of regulatory approval, and, protection of proprietary technology and the continued ability to obtain adequate financing to fund the Company's future operations. If the Company does not obtain marketing approval and successfully commercialize its product candidates, VS-6766 and defactinib following regulatory approval, or successfully commercialize COPIKTRA, it will be unable to generate product revenue or achieve profitability and may need to raise additional capital.

The Company has historical losses from operations and anticipates that it will continue to incur losses as it continues the research and development of its product candidates and commercialization of COPIKTRA. As of June 30, 2020, the Company had cash, cash equivalents, restricted cash and short-term investments of $160.8 million, inclusive of $35.5 million of restricted cash, and accumulated deficit of $585.8 million. The Company expects its existing cash resources, along with revenue the Company expects to generate from sales of COPIKTRA, will be sufficient to fund its planned operations through 12 months from the date of issuance of these condensed consolidated financial statements.

The Company expects to finance the future development costs of its clinical product portfolio with its existing cash, cash equivalents and short-term investments, or through strategic financing opportunities that could include, but are not limited to collaboration 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 planned preclinical studies and clinical trials and obtain approval of certain investigational product candidates from the FDA or foreign regulatory authorities.

2. Summary of significant accounting policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of the Company have been prepared in accordance with generally accepted accounting principles in the United States (GAAP) for interim financial reporting and as required by Regulation S-X, Rule 10-01 under the assumption that the Company will continue as a going concern for the next twelve months. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements, or any adjustments that might result from the uncertainty related to the Company's ability to continue as a going concern. 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 GAAP, the Company must make estimates and assumptions that affect the reported amounts and related disclosures at the date of the financial statements. Actual results could differ from those estimates. Additionally, operating results for the three and six months ended June 30, 2020 are not necessarily indicative of the results that may be expected for any other interim period or for the year ending December 31, 2020. For further information, refer to the financial statements and footnotes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the Securities and Exchange Commission (SEC) on March 11, 2020.

Significant Accounting Policies

The significant accounting policies identified in the Company's Annual Report on Form 10-K for the year ended December 31, 2019 that require the Company to make estimates and assumptions include accrued research and development expenses, stock-based compensation, revenue recognition, collaborative arrangements, accounts receivable, inventory and intangible assets. During the six months ended June 30, 2020 there were no material changes to the significant accounting policies.

Revenue Recognition

The Company recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services in accordance with Accounting Standards Codification (ASC) Topic 606 *Revenue from Contracts with Customers* (ASC 606). To determine revenue recognition for contracts with its customers, the Company performs the following five step assessment: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception and once the contract is determined to be within the scope of ASC 606, the Company assesses the goods or services promised within each contract, determines which goods and services are performance obligations, and assesses whether each promised good or service is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Product Revenue, Net – The Company sells COPIKTRA to a limited number of specialty pharmacies and specialty distributors in the United States. These customers subsequently resell COPIKTRA either directly to patients or to community hospitals or oncology clinics with in-office dispensaries who in turn distribute COPIKTRA to patients. In addition to distribution agreements with customers, the Company also enters into arrangements with (1) certain government agencies and various private organizations (Third-Party Payers), which may provide for chargebacks or discounts with respect to the purchase of COPIKTRA, and (2) Medicare and Medicaid, which may provide for certain rebates with respect to the purchase of COPIKTRA.

The Company recognizes revenue on sales of COPIKTRA when a customer obtains control of the product, which occurs at a point in time (typically upon delivery). Product revenues are recorded at the wholesale acquisition costs, net of applicable reserves for variable consideration. Components of variable consideration include trade discounts and allowances, Third-Party Payer chargebacks and discounts, government rebates, other incentives, such as

voluntary co-pay assistance, product returns, and other allowances that are offered within contracts between the Company and customers, payors, and other indirect customers relating to the Company's sale of COPIKTRA. These reserves, as detailed below, are based on the amounts earned, or to be claimed on the related sales, and are classified as reductions of accounts receivable or a current liability. These estimates take into consideration a range of possible outcomes based upon relevant factors such as customer contract terms, information received from third parties regarding the anticipated payor mix for COPIKTRA, known market events and trends, industry data, and forecasted customer buying and payment patterns. Overall, these reserves reflect the Company's best estimates of the amount of consideration to which it is entitled with respect to sales made.

The amount of variable consideration which is included in the transaction price may be constrained and is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue recognized under contracts will not occur in a future period. The Company's analyses contemplate the application of the constraint in accordance with ASC 606. For the three and six months ended June 30, 2020, the Company determined a material reversal of revenue would not occur in a future period for the estimates detailed below and, therefore, the transaction price was not reduced further. Actual amounts of consideration ultimately received may differ from the Company's estimates. If actual results in the future vary from the Company's estimates, the Company will adjust these estimates, which would affect net product revenue and earnings in the period such variances become known.

Trade Discounts and Allowances: The Company generally provides customers with invoice discounts on sales of COPIKTRA for prompt payment, which are explicitly stated in the Company's contracts and are recorded as a reduction of revenue in the period the related product revenue is recognized. In addition, the Company compensates its specialty distributor customers for sales order management, data, and distribution services. The Company has determined such services are not distinct from the Company's sale of COPIKTRA to the specialty distributor customers and, therefore, these payments have also been recorded as a reduction of revenue within the condensed consolidated statements of operations and comprehensive loss for the three and six months ended June 30, 2020.

Third-Party Payer Chargebacks, Discounts and Fees: The Company executes contracts with Third-Party Payers which allow for eligible purchases of COPIKTRA at prices lower than the wholesale acquisition cost charged to customers who directly purchase the product from the Company. In some cases, customers charge the Company for the difference between what they pay for COPIKTRA and the ultimate selling price to the Third-Party Payers. These reserves are established in the same period that the related revenue is recognized, resulting in a reduction of product revenue and accounts receivable, net. Chargeback amounts are generally determined at the time of resale to the qualified Third-Party Payer by customers, and the Company generally issues credits for such amounts within a few weeks of the customer's notification to the Company of the resale. Reserves for chargebacks consist of credits that the Company expects to issue for units that remain in the distribution channel inventories at the end of each reporting period that the Company expects will be sold to Third-Party Payers, and chargebacks that customers have claimed, but for which the Company has not yet issued a credit. In addition, the Company compensates certain Third-Party Payers for administrative services, such as account management and data reporting. These administrative service fees have also been recorded as a reduction of product revenue within the condensed consolidated statements of operations and comprehensive loss for the three and six months ended June 30, 2020.

Government Rebates: The Company is subject to discount obligations under state Medicaid programs and Medicare. These reserves are recorded in the same period the related revenue is recognized, resulting in a reduction of product revenue and the establishment of a current liability which is included in accrued expenses on the condensed consolidated balance sheets. For Medicare, the Company also estimates the number of patients in the prescription drug coverage gap for whom the Company will owe an additional liability under the Medicare Part D program. The Company's liability for these rebates consists of invoices received for claims from prior quarters that have not been paid or for which an invoice has not yet been received, estimates of claims for the current quarter, and estimated future claims that will be made for product that has been recognized as revenue, but which remains in the distribution channel inventories at the end of each reporting period.

Other Incentives: Other incentives which the Company offers include voluntary co-pay assistance programs, which are intended to provide financial assistance to qualified commercially-insured patients with prescription drug co-

payments required by payors. The calculation of the accrual for co-pay assistance is based on an estimate of claims and the cost per claim that the Company expects to receive for product that has been recognized as revenue but remains in the distribution channel inventories at the end of each reporting period. The adjustments are recorded in the same period the related revenue is recognized, resulting in a reduction of product revenue and the establishment of a current liability which is included as a component of accrued expenses on the condensed consolidated balance sheets.

Product Returns: Consistent with industry practice, the Company generally offers customers a limited right of return for product that has been purchased from the Company. The Company estimates the amount of its product sales that may be returned by its customers and records this estimate as a reduction of revenue in the period the related product revenue is recognized. The Company estimates product return liabilities using available industry data and its own sales information, including its visibility into the inventory remaining in the distribution channel.

Subject to certain limitations, the Company's return policy allows for eligible returns of COPIKTRA for credit under the following circumstances:

- Receipt of damaged product;
- Shipment errors that were a result of an error by the Company;
- Expired product that is returned during the period beginning three months prior to the product's expiration and ending six months after the expiration date;
- Product subject to a recall; and
- Product that the Company, at its sole discretion, has specified can be returned for credit.

If taxes should be collected from customers relating to product sales and remitted to governmental authorities, they will be excluded from product revenue. The Company expenses incremental costs of obtaining a contract when incurred, if the expected amortization period of the asset that the Company would have recognized is one year or less. However, no such costs were incurred to date.

Exclusive Licenses of Intellectual Property - The Company may enter into collaboration and licensing arrangements for research and development, manufacturing, and commercialization activities with collaboration partners for the development and commercialization of its product candidates, which have components within the scope of ASC 606. The arrangements generally contain multiple elements or deliverables, which may include (i) licenses, or options to obtain licenses, to the Company's intellectual property, (ii) research and development activities performed for the collaboration partner, (iii) participation on joint steering committees, and (iv) the manufacturing of commercial, clinical or preclinical material. Payments pursuant to these arrangements typically include non-refundable, upfront payments, milestone payments upon the achievement of significant development events, research and development reimbursements, sales milestones, and royalties on product sales. The amount of variable consideration is constrained until it is probable that the revenue is not at a significant risk of reversal in a future period. The contracts into which the Company enters generally do not include significant financing components.

In determining the appropriate amount of revenue to be recognized as it fulfills its obligations under each of its collaboration and license agreements, the Company performs the following steps: (i) identification of the promised goods or services in the contract within the scope of ASC 606; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when (or as) the Company satisfies each performance obligation. As part of the accounting for these arrangements, the Company must use significant judgment to determine: a) the number of performance obligations based on the determination under step (ii) above; b) the transaction price under step (iii) above; c) the stand-alone selling price for each performance obligation identified in the contract for the allocation of transaction price in step (iv) above; and d) the measure of progress in step (v) above. The Company uses judgment to determine whether milestones or other variable consideration, except for royalties, should be included in the transaction price as described further below.

If a license to the Company's intellectual property is determined to be distinct from the other promises or performance obligations identified in the arrangement, the Company recognizes revenue from non-refundable, upfront

fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. In assessing whether a promise or performance obligation is distinct from the other elements, the Company considers factors such as the research, development, manufacturing and commercialization capabilities of the collaboration partner and the availability of its associated expertise in the general marketplace. In addition, the Company considers whether the collaboration partner can benefit from a promise for its intended purpose without the receipt of the remaining elements, whether the value of the promise is dependent on the unsatisfied promise, whether there are other vendors that could provide the remaining promise, and whether it is separately identifiable from the remaining promise. For licenses that are combined with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress of each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition. The measure of progress, and thereby periods over which revenue should be recognized, is subject to estimates by management and may change over the course of the arrangement. Such a change could have a material impact on the amount of revenue the Company records in future periods.

Customer Options: If an arrangement is determined to contain customer options that allow the customer to acquire additional goods or services such as research and development services or manufacturing services, the goods and services underlying the customer options are not considered to be performance obligations at the inception of the arrangement; rather, such goods and services are contingent on exercise of the option, and the associated option fees are not included in the transaction price. The Company evaluates customer options for material rights or options to acquire additional goods or services for free or at a discount. If a customer option is determined to represent a material right, the material right is recognized as a separate performance obligation at the outset of the arrangement. The Company allocates the transaction price to material rights based on the relative standalone selling price, which is determined based on the identified discount and the estimated probability that the customer will exercise the option. Amounts allocated to a material right are not recognized as revenue until, at the earliest, the option is exercised.

Milestone Payments: At the inception of each arrangement that includes milestone payments, the Company evaluates whether the milestones are considered probable of being achieved and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within the control of the Company or the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. The Company evaluates factors such as the scientific, clinical, regulatory, commercial, and other risks that must be overcome to achieve the respective milestone in making this assessment. There is considerable judgment involved in determining whether it is probable that a significant revenue reversal would not occur. At the end of each subsequent reporting period, the Company reevaluates the probability of achievement of all milestones subject to constraint and, if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment.

Royalties: For arrangements that include sales-based royalties, including milestone payments based on a level of sales, and the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any royalty revenue resulting from any of its licensing arrangements.

Collaborative Arrangements: Contracts are considered to be collaborative arrangements when they satisfy the following criteria defined in ASC Topic 808, *Collaborative Arrangements* (ASC 808): (i) the parties to the contract must actively participate in the joint operating activity and (ii) the joint operating activity must expose the parties to the possibility of significant risk and rewards, based on whether or not the activity is successful. Payments received from or made to a partner that are the result of a collaborative relationship with a partner, instead of a customer relationship, such as co-development activities, are recorded as a reduction or increase to research and development expense, respectively.

Concentrations of credit risk and off-balance sheet risk

Cash, cash equivalents, short-term investments and trade accounts receivable are financial instruments that potentially subject the Company to concentrations of credit risk. The Company mitigates this risk by maintaining its cash and cash equivalents and investments with high quality, accredited financial institutions. The management of the Company's investments is not discretionary on the part of these financial institutions. As of June 30, 2020, the Company's cash, cash equivalents and short-term investments were deposited at two financial institutions and it has no significant off-balance sheet concentrations of credit risk, such as foreign currency exchange contracts, option contracts or other hedging arrangements.

As of June 30, 2020 there were three customers that cumulatively made up more than 60% of the Company's trade accounts receivable balance. The Company assesses the creditworthiness of all its customers and sets and reassesses customer credit limits to ensure collectability of any trade accounts receivable balances are assured.

For each of the three and six months ended June 30, 2020, there were five customers who each individually accounted for greater than 10% of the Company's total revenues.

Recently Issued Accounting Standards Updates

In June 2016, the FASB issued Accounting Standard Update (ASU) No. 2016-13, Measurement of Credit Losses on Financial Instruments ("ASU 2016-13"). ASU 2016-13 will replace the incurred loss impairment methodology under current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. In November 2019, the FASB issued ASU 2019-10, Financial Instruments – Credit Losses (Topic 326), Derivatives (Topic 815), and Leases (Topic 842). This ASU delayed the required adoption for SEC filers that are smaller reporting companies as of their determination on November 15, 2019, until annual and interim periods beginning after December 15, 2022, with early adoption permitted. The Company has determined that as of November 15, 2019, it is a smaller reporting company and has not elected to early adopt this standard. The Company is currently evaluating the impact the adoption of the standard will have on its condensed consolidated financial statements and related disclosures.

In December 2019, the FASB issued ASU No 2019-12, Simplifying Accounting for Income Taxes (ASU 2019-12). ASU 2019-12 removes certain exceptions for recognizing deferred taxes for investments, performing intraperiod allocations, calculating income taxes in interim periods, and adds certain guidance to remove complexity in certain areas. ASU 2019-12 is effective for all entities for annual and interim periods beginning after December 15, 2020. An entity is permitted to early adopt either the entire standard or only the provisions that eliminate or modify requirements. The Company has not elected to early adopt this standard and is currently evaluating the impact the adoption of the standard will have on its condensed consolidated financial statements and related disclosures.

Recently Adopted Accounting Standards Updates

In November 2018, the Financial Accounting Standards Board (FASB) issued ASU 2018-18, Collaborative Arrangements (ASU 2018-18): Clarifying the Interaction between ASC 808 and ASC 606, which makes targeted improvements for collaborative arrangements to clarify that certain transactions between collaborative arrangement participants should be accounted for as revenue under ASC 606 when the collaborative arrangement participant is a customer in the context of a unit of account, adds unit of account guidance in ASC 808 to align with guidance in ASC 606, and clarifies presentation of certain revenues with a collaborative arrangement participant which are not directly related to a third party. ASU 2018-18 is effective for annual and interim periods beginning after December 15, 2019, with early adoption permitted. This guidance requires entities to adopt on a retrospective basis to the date the Company adopted ASC 606. The Company adopted ASU 2018-18 as of January 1, 2020 on a retrospective basis to January 1, 2018, the date at which the Company adopted ASC 606, and it did not have a material impact on the Company's condensed consolidated financial statements or disclosures.

In August 2018, the FASB issued ASU 2018-15, Intangibles-Goodwill and Other-Internal Use Software: Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service

Contract, which aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. ASU 2018-15 is effective for annual and interim periods beginning after December 15, 2019, with early adoption permitted. The Company adopted this standard effective January 1, 2020 on a prospective basis. The adoption of this ASU did not have an effect on the Company's financial statements of disclosures.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement, which eliminates certain disclosure requirements for fair value measurements for all entities, requires public entities to disclose certain new information and modifies some disclosure requirements. ASU 2018-13 is effective for all entities for annual and interim periods beginning after December 15, 2019. The Company adopted this standard effective January 1, 2020 on a prospective basis. The adoption of this ASU did not have an effect on the Company's financial statements of disclosures.

3. Cash, cash equivalents and restricted cash

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the condensed consolidated balance sheets that sum to the total of the same such amounts shown in the condensed consolidated statements of cash flows (in thousands):

	June 30, 2020	December 31, 2019
Cash and cash equivalents	$ 125,328	$ 43,514
Restricted cash	35,506	35,748
Total cash, cash equivalents and restricted cash	**$ 160,834**	**$ 79,262**

Amounts included in restricted cash as of June 30, 2020 and December 31, 2019 represent (i) cash that the Company is contractually obligated to maintain in accordance with the terms of the Amended Term Loan Agreement, (ii) cash received pursuant to a funded research and development agreement with the Leukemia and Lymphoma Society (the "LLS Research Funding Agreement") which is restricted for future expenditures for specific R&D studies and (iii) cash held to collateralize outstanding letters of credit provided as a security deposit for the Company's office space located in Needham, Massachusetts in the amount of approximately $35.0 million, $0.3 million, and $0.2 million respectively, at June 30, 2020 and $35.0 million, $0.5 million, and $0.2 million, respectively, at December 31, 2019. Restricted cash related to Amended Term Loan Agreement is included on the condensed balance sheet at June 30, 2020 in the amount of $4.6 million in current restricted cash and $30.4 million in non-current restricted cash. Restricted cash related to the Amended Term Loan Agreement is segregated between current restricted cash and non-current restricted cash in correlation to the segregation of the Amended Term Loan Agreement between current and non-current at June 30, 2020. Restricted cash related to Amended Term Loan Agreement is included on the condensed balance sheet at December 31, 2019 in non-current restricted cash. Letters of credit are included in non-current restricted cash on the condensed consolidated balance sheets at June 30, 2020 and December 31, 2019, and cash related to the LLS Research Funding Agreement is included in current restricted cash on the condensed consolidated balance sheets at June 30, 2020 and December 31, 2019.

4. Fair value of financial instruments

The Company determines the fair value of its financial instruments based upon the fair value hierarchy, which prioritizes valuation inputs based on the observable nature of those inputs. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments and is not a measure of the investment credit quality. The hierarchy defines three levels of valuation inputs:

Level 1 inputs	Quoted prices in active markets for identical assets or liabilities that the Company can access at the measurement date.

Level 2 inputs	Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
Level 3 inputs	Unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability.

Items Measured at Fair Value on a Recurring Basis

The following table presents information about the Company's financial instruments that are measured at fair value on a recurring basis (in thousands):

	June 30, 2020			
Description	**Total**	**Level 1**	**Level 2**	**Level 3**
Financial assets				
Cash equivalents	$ 159,422	$ 159,422	$ —	$ —
Short-term investments	—	—	—	—
Total financial assets	**$ 159,422**	**$ 159,422**	**$ —**	**$ —**

	December 31, 2019			
Description	**Total**	**Level 1**	**Level 2**	**Level 3**
Financial assets				
Cash equivalents	$ 77,176	$ 75,678	$ 1,498	$ —
Short-term investments	31,992	—	31,992	—
Total financial assets	**$ 109,168**	**$ 75,678**	**$ 33,490**	**$ —**
Derivative liability	$ 450	—	—	$ 450

The Company's cash equivalents and short-term investments consist of U.S. Government money market funds, corporate bonds, agency bonds and commercial paper of publicly traded companies. The investments and cash equivalents have been initially valued at the transaction price and subsequently valued, at the end of each reporting period, utilizing third party pricing services or other market observable data. The pricing services utilize industry standard valuation models, including both income and market-based approaches and observable market inputs to determine value. These observable market inputs include reportable trades, benchmark yields, credit spreads, broker/dealer quotes, bids, offers, current spot rates and other industry and economic events. The Company validates the prices provided by third party pricing services by reviewing their pricing methods and matrices, obtaining market values from other pricing sources, analyzing pricing data in certain instances and confirming that the relevant markets are active. After completing its validation procedures, the Company did not adjust or override any fair value measurements provided by the pricing services as of June 30, 2020 and December 31, 2019.

During 2019, a derivative liability was recorded as a result of the issuance of the 2019 Notes (see note 12). The fair value measurement of the derivative liability is classified as Level 3 under the fair value hierarchy and it has been valued using unobservable inputs. These inputs include: (1) a simulated share price at the time of conversion of the 2019 Notes, (2) assumed timing of conversion of the 2019 Notes, (3) risk-adjusted discount rate to present value the probability-weighted cash flows, and (4) entity specific cost of equity. Significant increases or decreases in any of those inputs in isolation could result in a significantly lower or higher fair value measurement.

The fair value of the derivative liability was determined using a Monte-Carlo simulation by calculating fair value of the 2019 Interest Make-Whole Payment to 2019 Note holders based on assumed timing of conversion of the 2019 Notes. At December 31, 2019, the risk-adjusted discount rate was determined to be 13.08% and entity specific cost of equity was determined to be 16.54%.

The following table represents a reconciliation of the derivative liability recorded in connection with the issuance of the 2019 Notes (in thousands):

January 1, 2020	$ 450
Fair value adjustment	1,313
Derivative liability extinguished upon conversion	(1,763)
June 30, 2020	$ —

During the six months ended June 30, 2020 the derivative liability has been settled upon conversion of all 2019 Notes into shares of common stock (see note 12).

Fair Value of Financial Instruments

The fair value of the Company's long-term debt is determined using a discounted cash flow analysis with current applicable rates for similar instruments as of the condensed consolidated balance sheet dates. The carrying value of the Company's long-term debt, including the current portion, at June 30, 2020 and December 31, 2019 was approximately $35.5 million and $35.1 million, respectively. The Company estimates that the fair value of its long-term debt, including the current portion, was approximately $37.0 million at both June 30, 2020 and December 31, 2019. The fair value of the Company's long-term debt was determined using Level 3 inputs.

The fair value of the Company's 5.00% Convertible Senior Notes due 2048 (the 2018 Notes) as of June 30, 2020 was approximately $14.3 million, which differs from the carrying value of the 2018 Notes of $20.4 million. The fair value of the 2018 Notes was determined using Level 2 inputs.

5. Investments

Cash, cash equivalents, and short-term investments consist of the following (in thousands):

	June 30, 2020			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash, cash equivalents & restricted cash:				
Cash and money market accounts	$ 160,834	$ —	$ —	$ 160,834
Total cash, cash equivalents & restricted cash:	$ 160,834	$ —	$ —	$ 160,834

	December 31, 2019			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash, cash equivalents & restricted cash:				
Cash and money market accounts	$ 77,764	$ —	$ —	$ 77,764
Corporate bonds, agency bonds and commercial paper (due within 90 days)	1,498	$ —	$ —	$ 1,498
Total cash, cash equivalents & restricted cash:	$ 79,262	$ —	$ —	$ 79,262
Investments:				
Corporate bonds and commercial paper (due within 1 year)	$ 31,979	$ 14	$ —	$ 31,993
Total investments	$ 31,979	$ 14	$ —	$ 31,993
Total cash, cash equivalents, restricted cash and investments	**$ 111,241**	**$ 14**	**$ —**	**$ 111,255**

There were no realized gains or losses on investments for the three and six months ended June 30, 2020 or 2019, respectively. There were zero and two investments in an unrealized loss position as of June 30, 2020 and

December 31, 2019, respectively. None of these investments h had been in an unrealized loss position for more than 12 months. The fair value of these securities as of June 30, 2020 and December 31, 2019 was $0 and $5.8 million, respectively, and the aggregate unrealized loss was immaterial. The Company considered the decline in the market value for these securities to be primarily attributable to current economic conditions. As it was not more likely than not that the Company would be required to sell these securities before the recovery of their amortized cost basis, which may be at maturity, the Company did not consider these investments to be other-than-temporarily impaired as of June 30, 2020 and December 31, 2019, respectively.

6. Inventory

Inventory consists of the following (in thousands):

	June 30, 2020	December 31, 2019
Raw materials	$ 1,056	$ 955
Work in process	4,668	2,040
Finished goods	592	101
Total inventories	**$ 6,316**	**$ 3,096**

7. Intangible assets

The Company's intangible assets consist of the following (in thousands):

	June 30, 2020	Estimated useful life
Acquired and in-licensed rights	$ 22,000	14 years
Less: accumulated amortization	(2,777)	
Total intangible assets, net	**$ 19,223**	

Acquired and in-licensed rights as of June 30, 2020 consist of a $22.0 million milestone payment which became payable upon the FDA marketing approval on September 24, 2018, pursuant to the amended and restated license agreement with Infinity Pharmaceuticals, Inc. (Infinity). The Company made the milestone payment of $22.0 million to Infinity in November 2018.

The Company recorded approximately $0.4 million and $0.8 million in amortization expense related to finite-lived intangible assets during the three and six months ended June 30, 2020 using the straight-line methodology. Estimated future amortization expense for finite-lived intangible assets as of June 30, 2020 is approximately $0.8 million for the remainder of 2020 and approximately $1.6 million per year thereafter.

8. Accrued expenses

Accrued expenses consist of the following (in thousands):

	June 30, 2020	December 31, 2019
Compensation and related benefits	4,551	7,399
Contract research organization costs	7,387	5,467
Commercialization costs	4,375	3,028
Interest	520	897
Consulting fees	3,579	1,610
Professional fees	933	573
Other	104	391
Total accrued expenses	**$ 21,449**	**$ 19,365**

9. Product revenue reserves and allowances

As of June 30, 2020, the Company's sole source of product revenue has been from sales of COPIKTRA in the United States, which it began shipping to customers on September 25, 2018. The following table summarizes activity in each of the product revenue allowance and reserve categories for the six months ended June 30, 2020 (in thousands):

	Trade discounts and allowances	Third-Party Payer chargebacks, discounts and fees	Government rebates and other incentives	Returns	Total
Balance at December 31, 2019	$ 111	$ 255	$ 372	$ 76	$ 814
Provision related to sales in the current year	385	1,003	645	358	2,391
Adjustments related to prior period sales	—	—	—	—	—
Credits and payments made	(402)	(1,123)	(562)	(108)	(2,195)
Ending balance at June 30, 2020	**$ 94**	**$ 135**	**$ 455**	**$ 326**	**$ 1,010**

Trade discounts and Third-Party Payer chargebacks and discounts are recorded as a reduction to accounts receivable, net on the condensed consolidated balance sheets. Trade allowances and Third-Party Payer fees, government rebates, other incentives and returns are recorded as a component of accrued expenses on the condensed consolidated balance sheets.

10. Leases

On April 15, 2014, the Company entered into a lease agreement for approximately 15,197 square feet of office and laboratory space in Needham, Massachusetts. Effective February 15, 2018, the Company amended its lease agreement to relocate within the facility to another location consisting of 27,810 square feet of office space (the Amended Lease Agreement). The Amended Lease Agreement extends the expiration date of the lease from September 2019 through May 2025. Pursuant to the Amended Lease Agreement, the initial annual base rent amount is approximately $0.7 million, which increases during the lease term to $1.1 million for the last twelve-month period.

The Company has accounted for its Needham, Massachusetts office space as an operating lease. The Company's lease contains an option to renew and extend the lease terms and an option to terminate the lease prior to the expiration date. The Company has not included the lease extension or the termination options within the right-of-use asset and lease liability on the condensed consolidated balance sheets as neither option is reasonably certain to be exercised. The Company's lease includes variable non-lease components (e.g., common area maintenance, maintenance, consumables, etc.) that are not included in the right-of-use asset and lease liability and are reflected as an expense in the period incurred. The Company does not have any other operating or finance leases.

In calculating the present value of future lease payments, the Company has elected to utilize its incremental borrowing rate based on the remaining lease term at the date of adoption of ASC Topic 842, *Leases* of January 1, 2019. The Company has elected to account for lease components and associated non-lease components as a single lease component and has allocated all of the contract consideration to the lease components only. This will potentially result in the initial and subsequent measurement of the balances of the right-of-use asset and lease liability for leases being greater than if the policy election was not applied.

As of June 30, 2020, a right-of-use asset of $2.9 million and lease liability of $3.7 million are reflected on the condensed consolidated balance sheets. The elements of lease expense were as follows (dollar amounts in thousands):

	Three months ended		Six months ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Lease Expense				
Operating lease expense	$ 221	$ 222	$ 442	$ 444
Total Lease Expense	**$ 221**	**$ 222**	**$ 442**	**$ 444**
Other Information - Operating Leases				
Operating cash flows paid for amounts included in measurement of lease liabilities	$ 247	$ 166	$ 451	$ 331

	June 30, 2020
Other Balance Sheet Information - Operating Leases	
Weighted average remaining lease term (in years)	5.0
Weighted average discount rate	14.6%
Maturity Analysis	
2020	$ 504
2021	1,019
2022	1,039
2023	1,060
2024	1,081
Thereafter	546
Total	**$ 5,249**
Less: Present value discount	(1,516)
Lease Liability	**$ 3,733**

11. Long-term debt

On March 21, 2017, the Company entered into a term loan facility of up to $25.0 million with Hercules Capital, Inc. (Hercules). The term loan facility is governed by a loan and security agreement, dated March 21, 2017 (the Original Loan Agreement). The Original Loan Agreement was amended on January 4, 2018, March 6, 2018, October 11, 2018, April 23, 2019, and November 14, 2019 (the Amended Loan Agreement) to increase the total borrowing limit under the Original Loan Agreement from up to $25.0 million to up to $75.0 million, pursuant to certain conditions of funding.

Per the terms of the Amended Loan Agreement, the Company may borrow up to an aggregate of $75.0 million, of which $35.0 million was outstanding immediately as of April 23, 2019 (Fourth Amendment Date) (Amended Term A Loan) as a result of the existing outstanding principal of term loans of $25.0 million being converted into the Amended Term A Loan, and an additional $10.0 million being drawn on the Fourth Amendment Date. The remaining $40.0 million of borrowing capacity may be drawn in multiple tranches comprised of (i) a term loan in an amount of up to $15.0 million upon the Company generating cumulative net product revenues (as defined in the Amended Loan Agreement) of either (a) $37.5 million on or before April 30, 2020 or (b) $50.0 million on or before June 30, 2020 (Amended Term B Loan), and (ii) a term loan in an amount of up to $25.0 million available through December 31, 2021, subject to Hercules' approval and certain other conditions specified in the Amended Loan Agreement (the Amended Term C Loan, and together with the Amended Term A Loan and Amended Term B Loan, the Amended Term Loan). As of June 30, 2020, the funding conditions for the Amended Term B Loan have not been met and expired on June 30, 2020. As of June 30, 2020, the Company has borrowed a total of $35.0 million in term loans.

The Company must maintain unrestricted and unencumbered cash in accounts subject to control agreements in favor of Hercules of an aggregate amount greater than or equal to 100% of the outstanding debt obligations under the Amended Term Loan Agreement, unless and until the Company's receives of Net Product Revenues (as defined in the Amended Loan Agreement) of at least $20 million on or before December 31, 2020, measured on a trailing six month basis (Initial Net Product Revenue Threshold). As of June 30, 2020 the Company has not met the Initial Net Product Revenue Threshold. The Company has recorded a total $35.0 million in current restricted cash and non-current restricted

cash on the condensed consolidated balance sheets. If the Initial Net Product Revenue Threshold is satisfied on or before December 31, 2020, then the Company must, on a monthly basis, either (a) maintain at all times during such month unrestricted and unencumbered cash in accounts subject to control agreements in favor of Hercules, in an aggregate amount greater than or equal to 50% of the outstanding debt obligations under the Amended Loan Agreement, or (b) show net product revenues of at least 80% of the amounts shown on the Company's most recent board approved financial and business projections, measured on a trailing six month basis as of the end of such calendar month,

The Amended Term Loan will mature on December 1, 2022 (Amended Term Loan Maturity Date). Each advance accrues interest at a floating per annum rate equal to the greater of (a) 9.75% or (b) the lesser of (i) 12.00% and (ii) the sum of (x) 9.75% plus (y) (A) the prime rate (as defined in the Amended Loan Agreement) minus (B) 5.50%. The Amended Term Loan provides for interest-only payments until April 1, 2021, which may be extended to December 1, 2021 subject to the Company generating $40.0 million in net product revenue on a trailing six-month basis on or prior to December 31, 2020 provided that no event of default has occurred. Thereafter, amortization payments will be payable monthly in equal installments of principal and interest (subject to recalculation upon a change in prime rates).

The Amended Term Loan is secured by a lien on substantially all of the Company's assets, other than intellectual property and contains customary covenants and representations, including a liquidity covenant, minimum net revenue covenant, financial reporting covenant and limitations on dividends, indebtedness, collateral, investments, distributions, transfers, mergers or acquisitions, taxes, corporate changes, deposit accounts, and subsidiaries.

On the Fourth Amendment Date, the Company was required to pay any outstanding accrued interest as well as the final payment fee equal to 4.5% on the outstanding principal balance, or $1.1 million. No prepayment charges were due as a result of executing the Fourth Amendment or conversion of the existing term loans into Amended Term A Loans.

The events of default under the Amended Loan Agreement include, without limitation, and subject to customary grace periods, (i) any failure by us to make any payments of principal or interest under the Amended Loan Agreement, any promissory notes or any other loan documents, (ii) any breach or default in the performance of any covenant under the Amended Loan Agreement, (iii) any making of false or misleading representations or warranties in any material respect, (iv) the Company's insolvency or bankruptcy, (v) certain attachments or judgments on the assets of Verastem, Inc., or (vi) the occurrence of any material default under certain agreements or obligations of ours involving indebtedness, or (vii) the occurrence of a material adverse effect. If an event of default occurs, Hercules is entitled to take enforcement action, including acceleration of amounts due under the Amended Loan Agreement.

The Amended Loan Agreement also contains other customary provisions, such as expense reimbursement and confidentiality. Hercules has indemnification rights and the right to assign the Amended Term Loan.

The Company assessed all terms and features of the Amended Loan Agreement in order to identify any potential embedded features that would require bifurcation or any beneficial conversion features. As part of this analysis, the Company assessed the economic characteristics and risks of the Amended Loan Agreement, including put and call features. The Company determined that all features of the Amended Loan Agreement were clearly and closely associated with a debt host and did not require bifurcation as a derivative liability, or the fair value of the feature was immaterial to the Company's condensed consolidated financial statements. The Company reassesses the features on a quarterly basis to determine if they require separate accounting. There have been no changes to the Company's original assessment through June 30, 2020.

The future principal payments under the Amended Term Loan are as follows as of June 30, 2020 (in thousands):

2021	$ 14,234
2022	20,766
Total principal payments	**$ 35,000**

12. Convertible Senior Notes

On October 17, 2018, the Company closed a registered direct public offering of $150.0 million aggregate principal amount of the Company's 5.00% Convertible Senior Notes due 2048 (the 2018 Notes). The 2018 Notes are governed by the terms of a base indenture for senior debt securities (the 2018 Base Indenture), as supplemented by the first supplemental indenture thereto (the Supplemental Indenture and together with the 2018 Base Indenture, the 2018 Indenture), each dated October 17, 2018, by and between the Company and Wilmington Trust, National Association, as trustee. The 2018 Notes are senior unsecured obligations of the Company and bear interest at a rate of 5.00% per annum, payable semi-annually in arrears on May 1 and November 1 of each year, beginning on May 1, 2019. The 2018 Notes will mature on November 1, 2048, unless earlier repurchased, redeemed or converted in accordance with their terms.

The 2018 Notes are convertible into shares of the Company's common stock, par value $0.0001 per share, together, if applicable, with cash in lieu of any fractional share, at an initial conversion rate of 139.5771 shares of common stock per $1,000 principal amount of the 2018 Notes, which corresponds to an initial conversion price of approximately $7.16 per share of common stock and represents a conversion premium of approximately 15.0% above the last reported sale price of the common stock of $6.23 per share on October 11, 2018. Upon conversion, converting noteholders will be entitled to receive accrued interest on their converted 2018 Notes. The conversion rate is subject to adjustment from time to time upon the occurrence of certain events, including, but not limited to, the issuance of stock dividends and payment of cash dividends, but will not be adjusted for any accrued and unpaid interest.

The Company has the right, exercisable at its option, to cause all Notes then outstanding to be converted automatically if the "Daily VWAP" (as defined in the 2018 Indenture) per share of the Company's common stock equals or exceeds 130% of the conversion price on each of at least 20 VWAP Trading Days (as defined in the 2018 Indenture), whether or not consecutive, during any 30 consecutive VWAP Trading Day period commencing on or after the date the Company first issued the 2018 Notes.

The 2018 Indenture includes customary covenants and sets forth certain events of default after which the 2018 Notes may be declared immediately due and payable and sets forth certain types of bankruptcy or insolvency events of default involving the Company or certain of its subsidiaries after which the 2018 Notes become automatically due and payable.

The Company assessed all terms and features of the 2018 Notes in order to identify any potential embedded features that would require bifurcation. As part of this analysis, the Company assessed the economic characteristics and risks of the 2018 Notes, including the conversion, put and call features. The conversion feature was initially bifurcated as an embedded derivative but subsequently qualified for a scope exception to derivative accounting upon the Company's stockholders approving an increase in the number of authorized shares of Common Stock in December 2018. The Company determined that all other features of the 2018 Notes were clearly and closely associated with the debt host and did not require bifurcation as a derivative liability, or the fair value of the feature was immaterial to the Company's condensed consolidated financial statements. The Company reassesses the features on a quarterly basis to determine if they require separate accounting. There have been no changes to the Company's original assessment through June 30, 2020.

On November 14, 2019 and December 23, 2019, the Company entered into privately negotiated agreements to exchange approximately $114.3 million and $7.4 million, respectively, aggregate principal amount of the 2018 Notes for (i) approximately $62.9 million and $4.0 million, respectively, aggregate principal amount of 5.00% Convertible Senior Second Lien Notes due 2048 (the 2019 Notes), (ii) an aggregate of approximately $11.4 million and $0.7 million in 2018 Notes principal repayment and (iii) accrued interest on the 2018 Notes through November 14, 2019 and December 23, 2019, respectively. The 2019 Notes are governed by the terms of an indenture (the 2019 Indenture). The 2019 Notes are senior secured obligations of the Company and bear interest at 5.00% per annum, payable semi-annually in arrears on May 1 and November 1 of each year. The 2019 Notes will mature on November 1, 2048, unless earlier repurchased, redeemed or converted in accordance with the terms thereof.

The 2019 Notes are convertible into shares of the Company's common stock, par value $0.0001 per share, together, if applicable, with cash in lieu of any fractional share, at an initial conversion rate of 606.0606 shares of

common stock per $1,000 principal amount of the 2019 Notes, which corresponds to an initial conversion price of approximately $1.65 per share of common stock and represents a conversion premium of approximately 52.8% above the last reported sale price of the Company's common stock of $1.08 per share on November 11, 2019. The conversion rate is subject to adjustment from time to time upon the occurrence of certain events, including, but not limited to, the issuance of stock dividends and payment of cash dividends, but will not be adjusted for any accrued and unpaid interest.

The Company has the right, exercisable at the Company's option, to cause all 2019 Notes then outstanding to be converted automatically if the "Daily VWAP" (as defined in the 2019 Indenture) per share of the Company's common stock equals or exceeds 121% of the conversion price on each of at least 20 VWAP Trading Days (as defined in the 2019 Indenture), whether or not consecutive, during any 30 consecutive VWAP Trading Days period commencing on or after the date the Company first issued the 2019 Notes (Company's Mandatory Conversion Option).

Upon conversion, converting noteholders will be entitled to receive accrued interest on their converted 2019 Notes. In addition, if the 2019 Notes are converted with a conversion date that is on or prior to November 1, 2020, other than in connection with the Company's exercise of the Company's Mandatory Conversion Option then the consideration due upon any such conversion will also include a cash interest make-whole payment for all future scheduled interest payments on the converted 2019 Notes through November 1, 2020 (2019 Notes Interest Make-Whole Provision).

The company assessed all terms and features of the 2019 Notes in order to identify any potential embedded features that would require bifurcation. As part of this analysis, the Company assessed the economic characteristics and risks of the 2019 Notes, including the conversion, put and call features. In consideration of the 2019 Notes Interest Make-Whole Provision, the Company concluded the provision required bifurcation as a derivative. It was determined that the fair value of the derivative upon the November 14, 2019 and December 23, 2019 issuance of the 2019 Notes was $0.2 million in the aggregate; and the Company recorded this amount as a derivative liability and the offsetting amount as a debt discount as a reduction to the carrying value of the 2019 Notes on the closing dates. It was determined that the fair value of the derivative at December 31, 2019 was $0.5 million.

During the first three months of the six month period ended June 30, 2020, 2019 Note holders converted $57.4 million aggregate principal of 2019 Notes in exchange for 34,796,350 shares of common stock and $1.8 million of cash for the 2019 Note Interest Make-Whole Provision. The Company recorded approximately $0.0 million and $1.3 million for the three and six months ended June 30, 2020, respectively, as other expense for the change in fair value of the 2019 Notes Interest Make-Whole Provision in the condensed consolidated statements of operations and comprehensive loss. The Company determined that all other features of the 2019 Notes were clearly and closely associated with a debt host and did not require bifurcation as a derivative liability, or the fair value of the feature was immaterial to the Company's condensed consolidated financial statements. As of June 30, 2020, all 2019 Notes have converted into shares of common stock.

13. Common stock

Private Investment in Public Equity (PIPE)

On February 27, 2020, the Company entered into a Securities Purchase Agreement (Purchase Agreement) with certain institutional investors in which the Company agreed to sell 46,511,628 shares of common stock at a purchase price of $2.15 per share, which represents 12.6% premium to the last reported sale price of the Company's common stock of $1.91 per share on February 27, 2020. On March 3, 2020, the closing occurred. The aggregate proceeds net of underwriting discounts and offering costs, were approximately $93.8 million.

At-the-market equity offering programs

In March 2017, the Company established an at-the-market equity offering program pursuant to which it was able to offer and sell up to $35.0 million of its common stock at then current market prices from time to time through Cantor Fitzgerald & Co. (Cantor) as sales agent. In August 2017, the Company amended its sales agreement with Cantor to increase the maximum aggregate offering price of shares of common stock that can be sold under the at-the-market equity offering program to $75.0 million.

During the three and six months ended June 30, 2020, the Company sold 6,769,559 shares under this program for net proceeds of approximately $12.2 million (after deducting commissions and other offering expenses). Through June 30, 2020, the Company has sold a total of 18,287,913 shares under this program for net proceeds of approximately $59.6 million (after deducting commissions and other offering expenses).

14. Stock-based compensation

Stock options

A summary of the Company's stock option activity and related information for the six months ended June 30, 2020 is as follows:

	Shares	Weighted-average exercise price per share	Weighted-average remaining contractual term (years)	Aggregate intrinsic value (in thousands)
Outstanding at December 31, 2019	17,258,524	$ 4.00	7.3	$ 185
Granted	584,357	$ 1.93		
Exercised	(824,894)	$ 1.86		
Forfeited/cancelled	(3,617,832)	$ 3.90		
Outstanding at June 30, 2020	13,400,155	$ 4.06	6.7	$ 1,623
Vested at June 30, 2020	7,261,308	$ 5.25	5.2	$ 523
Vested and expected to vest at June 30, 2020(1)	13,190,155	$ 4.03	6.8	$ 1,623

(1) This represents the number of vested options as of June 30, 2020, plus the number of unvested options expected to vest as of June 30, 2020.

The fair value of each stock option granted during the six months ended June 30, 2020 and 2019 was estimated on the grant date using the Black-Scholes option-pricing model using the following weighted-average assumptions:

	Six months ended June 30,	
	2020	2019
Risk-free interest rate	0.40 %	2.16 %
Volatility	97 %	86 %
Dividend yield	—	—
Expected term (years)	5.6	5.8

Restricted stock units (RSUs)

The Company awards RSUs to employees under its Amended and Restated 2012 Incentive Plan and its inducement award program. Each RSU entitles the holder to receive one share of the Company's common stock when the RSU vests. The RSUs generally vest in either (i) four substantially equal installments on each of the first four anniversaries of the vesting commencement date, (ii) 100 percent on the first anniversary of the vesting commencement date, (iii) thirty three and one-third percent (33 1/3%) on the first anniversary of the vesting commencement date and as to an additional eight and two-thirds percent (8.33%) at the end of each successive three-month period thereafter, or (iv) 100 percent after approximately 21 months from the vesting commencement date, subject to the employee's continued employment with, or service to, the Company on such vesting date. Compensation expense is recognized on a straight-line basis.

A summary of RSU activity during the six months ended June 30, 2020 is as follows:

	Shares	Weighted-average grant date fair value per share
Outstanding at December 31, 2019	678,089	$ 2.36
Granted	1,050,525	$ 2.18
Vested	(138,798)	$ 2.78
Forfeited/cancelled	(113,668)	$ 2.69
Outstanding at June 30, 2020	1,476,148	$ 2.17

On March 27, 2020, the Company amended all outstanding stock options and RSUs awards held by employees (including executive officers), other than certain performance-based awards, to provide that, in the event of a change of control, such equity awards currently held by employees that are outstanding and unvested immediately prior to a change of control of the Company will become fully vested and, if applicable, exercisable immediately prior to, and subject to the consummation of, such change of control. The amendment was implemented to provide assurance to the Company's existing employees and not in response to any change of control offer for the Company.

Employee stock purchase plan

At the Special Meeting of Stockholders, held on December 18, 2018, the stockholders approved the 2018 Employee Stock Purchase Plan (2018 ESPP). On June 21, 2019, the board of directors of the Company amended and restated the 2018 ESPP, to account for certain non-material changes to the plan's administration (the Amended and Restated 2018 ESPP). The Amended and Restated 2018 ESPP provides eligible employees with the opportunity, through regular payroll deductions, to purchase shares of the Company's common stock at 85% of the lesser of the fair market value of the common stock (a) on the date the option is granted, which is the first day of the purchase period, and (b) on the exercise date, which is the last business day of the purchase period. The Amended and Restated 2018 ESPP generally allows for two six-month purchase periods per year beginning in January and July, or such other periods as determined by the compensation committee of the Company's board of directors. The Company has reserved 2,000,000 shares of common stock for the administration of the Amended and Restated 2018 ESPP. The fair value of shares expected to be purchased under the Amended and Restated 2018 ESPP was calculated using the Black-Scholes model with the following assumptions:

	Six months ended June 30,	
	2020	2019
Risk-free interest rate	1.57 %	2.46 %
Volatility	78 %	79 %
Dividend yield	—	—
Expected term (years)	0.5	0.4

For the six months ended June 30, 2020 and 2019, the Company has recognized $0.1 million and $0.3 million, respective, of stock-based compensation expense under the Amended and Restated 2018 ESPP. During the six months ended June 30, 2020 the Company issued 227,141 shares of common stock for proceeds of $0.3 million under the Amended and Restated 2018 ESPP.

15. Net loss per share

Basic net loss per common share is calculated by dividing net loss applicable to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net loss per common share is calculated by increasing the denominator by the weighted-average number of additional shares that could have been outstanding from securities convertible into common stock, such as stock options and restricted stock units (using the

"treasury stock" method), and the 2018 Notes and 2019 Notes (using the "if-converted" method), unless their effect on net loss per share is anti-dilutive.

The following potentially dilutive securities were excluded from the calculation of diluted net loss per share for the periods indicated because including them would have had an anti-dilutive effect:

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Outstanding stock options	13,400,155	16,635,757	13,400,155	16,635,757
Outstanding restricted stock units	1,476,148	739,117	1,476,148	739,117
2018 Notes	3,950,032	20,936,548	3,950,032	20,936,548
Total potentially dilutive securities	**18,826,335**	**38,311,422**	**18,826,335**	**38,311,422**

16. License and collaboration agreements

Chugai Pharmaceutical Co., Ltd (Chugai)

On January 7, 2020, the Company entered into a license agreement with Chugai (the Chugai Agreement) whereby Chugai granted the Company an exclusive worldwide license for the development, commercialization and manufacture of products containing VS-6766, a dual RAF/MEK inhibitor.

Under the terms of the Chugai Agreement, the Company received an exclusive right to develop and commercialize products containing VS-6766 at the Company's own cost and expense. The Company is required to pay Chugai a non-refundable payment of $3.0 million which was paid in February 2020. The Company is further obligated to pay Chugai double-digit royalties on net sales of products containing VS-6766, subject to reduction in certain circumstances. Chugai also obtained opt back rights to develop and commercialize VS-6766 (a) in the European Union, which option may be exercised through the date the Company submits a NDA to the FDA for a product which contains VS-6766 as the sole active pharmaceutical ingredient and (b) in Japan and Taiwan, which option may be exercised through the date the Company receives marketing authorization from the FDA for a product which contains VS-6766 as the sole active pharmaceutical ingredient. As consideration for executing either option, Chugai would have to make a payment to the Company calculated on the Company's development costs to date. Chugai and the Company have made customary representations and warranties and have agreed to certain customary covenants, including confidentiality and indemnification.

Unless earlier terminated, the Chugai Agreement will expire upon the fulfillment of the Company's royalty obligations to Chugai for the sale of any products containing the VS-6766, which royalty obligations expire on a product-by-product and country-by-country basis, upon the last to occur, in each specific country, of (a) expiration of valid patent claims covering such product or (b) 12 years from the first commercial sale of such product in such country.

The Company may terminate the Chugai Agreement upon 180 days' written notice. Subject to certain limitations, Chugai may terminate the Chugai Agreement upon written notice if the Company challenges any patent licensed by Chugai to the Company under the Chugai Agreement. Either party may terminate the license agreement in its entirety with 120 days' written notice for the other party's material breach if such party fails to cure the breach. Either party may also terminate the Chugai Agreement in its entirety upon certain insolvency events involving the other party.

The Company evaluated the license agreement with Chugai under ASC Topic 805, *Business Combinations* (ASC 805*)* and concluded that as the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar assets, the transaction did not meet the requirements to be accounted for as a business combination and therefore was accounted for as an asset acquisition. The Company recorded the up-front payment of $3.0 million as research and development expense within the condensed consolidated statement of operations for the six months ended June 30, 2020.

Sanofi

On July 25, 2019, the Company entered into a license and collaboration agreement with Sanofi (the Sanofi Agreement), under which the Company granted exclusive rights to Sanofi to develop and commercialize products containing duvelisib in Russia, the Commonwealth of Independent States (CIS), Turkey, the Middle East and Africa (collectively the "Sanofi Territory") for the treatment, prevention, palliation or diagnosis of any oncology indication in humans or animals.

Under the terms of the Sanofi Agreement, Sanofi received the exclusive right to develop and commercialize products containing duvelisib in the Sanofi Territory under mutually agreed upon development and commercialization plans at Sanofi's own cost and expense. In addition, Sanofi received certain limited manufacturing rights in the event the Company is unable to manufacture or supply sufficient quantities of duvelisib or products containing duvelisib to Sanofi during the term of the Sanofi Agreement. The Company retained all rights to duvelisib outside the Sanofi Territory, except for those territories previously and exclusively licensed to other partners.

Sanofi paid the Company an upfront, non-refundable payment of $5.0 million in August 2019. The Company is also entitled to receive aggregate payments of up to $42.0 million if certain regulatory and commercial milestones are successfully achieved. Sanofi is obligated to pay the Company double-digit royalties on net sales of products containing duvelisib in the Sanofi Territory, subject to reduction in certain circumstances. For the six months ended June 30, 2020, there have been no additional milestones achieved under the Sanofi Agreement.

Yakult Honsha Co., Ltd. (Yakult)

On June 5, 2018, the Company entered into a license and collaboration agreement with Yakult (the Yakult Agreement), under which the Company granted exclusive rights to Yakult to develop and commercialize products containing duvelisib in Japan for the treatment, prevention, palliation or diagnosis of all oncology indications in humans or animals.

Yakult paid the Company an upfront, non-refundable payment of $10.0 million in June 2018. The Company is also entitled to receive aggregate payments of up to $90.0 million if certain development, regulatory and commercial milestones are successfully achieved. Yakult is obligated to pay the Company a double-digit royalty on net sales of products containing duvelisib in Japan, subject to reduction in certain circumstances, and to fund certain global development costs related to worldwide clinical trials conducted by the Company in which Yakult has opted to participate on a pro-rata basis. For the six months ended June 30, 2020, there have been no additional milestones achieved under the Yakult Agreement.

Subsequently, on February 28, 2019, the Company entered into a supply agreement with Yakult (the Yakult Supply Agreement), under which the Company agreed to provide Yakult with drug product for clinical and commercial use in accordance with the Yakult Agreement. Under the terms of the Yakult Supply Agreement, the Company also granted to Yakult a limited manufacturing license to fill, finish, package, and label the drug product solely for clinical and commercial purposes in Japan.

CSPC Pharmaceutical Group Limited (CSPC)

On September 25, 2018, the Company entered into a license and collaboration agreement with CSPC (the CSPC Agreement), under which the Company granted exclusive rights to CSPC to develop and commercialize products containing duvelisib in the People's Republic of China (China), Hong Kong, Macau and Taiwan (each, a Region and collectively, the CSPC Territory) for the treatment, prevention, palliation or diagnosis of all oncology indications in humans.

CSPC paid the Company an aggregate upfront, non-refundable payment of $15.0 million in 2018. The Company is also entitled to receive aggregate payments of up to $160.0 million if certain development, regulatory and commercial milestones are successfully achieved. CSPC is obligated to pay the Company a double-digit royalty on net

sales of products containing duvelisib in the CSPC Territory, subject to reduction in certain circumstances, and to fund certain global development costs related to worldwide clinical trials conducted by the Company in which CSPC has opted to participate on a pro-rata basis. For the six months ended June 30, 2020 there have been no additional milestones achieved under the CSPC Agreement.

17. Income taxes

The Company did not record a federal or state income tax provision or benefit for the three and six months ended June 30, 2020 and 2019, respectively, 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.

18. Commitments and contingencies

The Company has no other commitments other than minimum lease payments as disclosed in Note 10, *Leases*.

19. Restructurings

On October 28, 2019, the Company committed to an operational plan to reduce overall operating expenses, including the elimination of approximately 40 positions across the Company and other cost-saving measures (the "October 2019 Restructuring"). The October 2019 Restructuring was designed to streamline operations, speed execution, and reflect the focused, account-based approach in the field. The Company recorded $1.2 million of costs in the fourth quarter of 2019, for one-time termination benefits to the affected employees, including cash severance payments, healthcare benefits, and outplacement assistance.

On February 27, 2020, following further analysis of the Company's strategy, the Company committed to an operational plan to reduce overall operating expenses, including the elimination of approximately 31 positions across the Company and other cost-saving measures (the "February 2020 Restructuring"). The February 2020 Restructuring is designed to streamline operations, speed execution of the Company's clinical development of defactinib and CH5126766, and reflect a focused, account-based approach in the field.

During the three and six months ended June 30, 2020, the Company recorded an aggregate expense of $0.0 million and $1.8 million, respectively, which is reflected in the condensed consolidated statements of operation and comprehensive loss as selling general, and administrative expense for $0.0 million and $1.4 million, respectively, and research and development expense for $0.0 million and $0.4 million, respectively, for the February 2020 Restructuring for one-time termination benefits for employee severance, benefits, and related costs.

The following table summarizes the accrued liabilities activity recorded in connection with the restructurings for the six months ended June 30, 2020 (in thousands):

Employee severance, benefits and related costs	Amounts accrued at December 31, 2019	Charges	Amount Paid	Adjustments	Amounts accrued at June 30, 2020
October 2019 Restructuring	631	—	(587)	(5)	39
February 2020 Restructuring	—	1,788	(1,063)	7	732
Total	$ 631	$ 1,788	$ (1,650)	$ 2	$ 771

20. Subsequent events

The Company reviews all activity subsequent to the end of the quarter but prior to issuance of the condensed consolidated financial statements for events that could require disclosure or that could impact the carrying value of assets or liabilities as of the balance sheet date. The Company is not aware of any material subsequent events other than the following:

Sale of duvelisib (COPIKTRA)

On August 10, 2020, the Company signed an Asset Purchase Agreement (APA) with Secura Bio, Inc. (Secura), under which the Company agreed to sell its exclusive worldwide license for the research, development, commercialization, and manufacture in oncology indications of products containing duvelisib. The sale includes certain intellectual property related to duvelisib in oncology indications, certain existing duvelisib inventory, certain machinery and equipment pertaining to duvelisib, and claims and rights under certain contracts pertaining to duvelisib. Pursuant to the APA, Secura will assume all operational and financial responsibility for activities that were part of the Company's duvelisib oncology program, including all commercialization efforts related to duvelisib in the United States and Europe, as well as the Company's ongoing duvelisib clinical trials. Further, Secura will assume all obligations with existing collaboration partners developing and commercializing duvelisib, which include Yakult, CSPC, and Sanofi. Additionally, Secura will assume any and all royalty payment obligations due under the amended and restated license agreement with Infinity. Secura is obligated to use diligent efforts to develop and manufacture duvelisib to achieve regulatory approval for the treatment of Peripheral T-Cell Lymphoma in both the United States and the European Union. The Company has agreed to make customary provisions not to compete with Secura with respect to duvelisib.

Pursuant to the terms of the APA, Secura will make an up-front payment of $70 million to the Company. Additionally, Secura is obligated to make royalty payments to the Company on net sales over $100 million of any products in any oncology indication containing duvelisib in the United States, European Union, and the United Kingdom of Great Britain and Northern Ireland in the low double digits. The Company is also entitled to receive additional aggregate milestone payments of up to $95 million if certain regulatory and sales milestones are successfully achieved. With respect to the Company's collaboration partners, pursuant to each license agreement outlined in Note 16, the Company is entitled to receive half of both (i) royalties received from net sales of duvelisib from Yakult, CSPC or Sanofi and (ii) any development, regulatory, or commercial milestone payments received from Yakult, CSPC or Sanofi. In addition, the Company is entitled to receive half of all royalty and milestone payments payable to Secura under any license or sublicense agreement entered into by Secura after the closing in certain jurisdictions

Secura's royalty obligations shall remain in effect on a country-by-country basis upon the last to occur (a) 10 years from the first commercial sale of product containing duvelisib in such country or (b) the expiration of all valid patent claims covering products containing duvelisib in such country. Prior to the closing of the transaction, each party can terminate the APA if the other party materially breaches or defaults in the performance of its obligations, if such party fails to cure the breach or non-performance.

The closing date for this transaction is expected to occur during the three month period ending September 30, 2020.

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

You should read the following discussion and analysis of our financial condition and results of operations together with our condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q. The following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results and the timing of certain events could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those discussed below and elsewhere in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K for our fiscal year ended December 31, 2019. Please also refer to the sections under headings "Forward-Looking Statements" and "Risk Factors" in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K for our fiscal year ended December 31, 2019.

OVERVIEW

We are a biopharmaceutical company focused on developing and commercializing medicines to improve the survival and quality of life of cancer patients. Our most advanced product candidates, VS-6766 (formerly known as CH5126766, CK127, and RO5126766) and defactinib and our marketed product COPIKTRA® (duvelisib) capsules, utilize a multi-faceted approach to treat cancers originating either in the blood or major organ systems. We are currently developing our product candidates, VS-6766 and defactinib, and duvelisib and in both preclinical and clinical studies as potential therapies for certain cancers, including leukemia, lymphoma, ovarian cancer, lung cancer, head and neck cancer, colorectal cancer, pancreatic cancer, and mesothelioma. We believe that these compounds may be beneficial as therapeutics either as single agents or when used in combination with immuno-oncology agents, other pathway inhibitors or other current and emerging standard of care treatments in aggressive cancers that do not adequately respond to currently available therapies.

VS-6766 is an orally available first-in-class unique small molecule RAF/MEK inhibitor. Standard MEK inhibitors paradoxically induce MEK phosphorylation (pMEK) by relieving extracellular-signal-regulated-kinase (ERK)-dependent feedback inhibition of RAF which may limit their efficacy. By inhibiting RAF phosphorylation of MEK, VS-6766 has the advantage of not inducing pMEK. This unique mechanism of VS-6766 enables more effective inhibition of ERK signaling and may confer enhanced therapeutic activity against ERK-dependent, RAS or BRAF mutant tumors. VS-6766 has been studied in over 150 patients and has shown a manageable safety profile to date. Initial signs of activity have been observed in clinical studies as a monotherapy in KRAS mutant, non-small cell lung cancer (NSCLC), endometrial and ovarian cancers, in BRAF mutant ovarian cancer, and in RAS mutant multiple myeloma.

Defactinib, is a targeted inhibitor of Focal Adhesion Kinase (FAK). FAK is a non-receptor tyrosine kinase encoded by the Protein Tyrosine Kinase-2 (PTK-2) gene that is involved in cellular adhesion and, in cancer, metastatic capability. Defactinib in combination with VS-6766 is being studied in an ongoing Phase 1 Investigator Sponsored Study (IST) (FRAME) in patients with KRAS mutant advanced solid tumors, including ovarian cancer, NSCLC and colorectal cancer. Defactinib is delivered orally and designed to be a potential therapy for patients to take at home under the advice of their physician. We have initiated discussions with regulatory authorities in second quarter of 2020 and have met with the regulatory authorities in third quarter of 2020, with the goal of commencing registration-directed trials investigating the defactinib/VS-6766 combination by the end of 2020.

Initial Results from the Phase 1 Study (FRAME) Investigating the Combination of VS-6766 and Defactinib in Patients with KRAS Mutant Cancers and Subsequent Analyses

The poster presentation at the AACR 2020 Virtual Meeting held in April 2020 described safety and dose response data from the dose-escalation portion and expansion cohorts from an open-label, investigator-initiated Phase 1 study conducted in the United Kingdom assessing the combination of RAF/MEK and FAK inhibitor therapy in patients with LGSOC and KRAS mutant NSCLC. The study evaluated the combination of VS-6766 and defactinib. VS-6766 was administered using a twice-weekly dose escalation schedule and was administered 3 out of every 4 weeks. Defactinib was administered using a twice-daily dose escalation schedule, also 3 out of every 4 weeks. Dose levels were assessed in

3 cohorts: cohort 1 (VS-6766 3.2mg, defactinib 200mg); cohort 2a (VS-6766 4mg, defactinib 200mg); and cohort 2b (VS-6766 3.2mg, defactinib 400mg).

In the patients with LGSOC (n=8), the ORR was 50% (n=4). Among the patients with KRAS mutant LGSOC (n=6), the ORR was 67% (n=4). Of the 4 patients who have responded, 3 had a prior MEK inhibitor and as of November 2019 had been on study for a median of 20.5 months (range 7-23 months). In the patients with NSCLC (n=10), all of which had KRAS mutations, 1 patient achieved a partial response and 1 patient with a 22% tumor reduction still on treatment as of November 2019. Median time on treatment for this cohort was approximately 18 weeks.

Based on an observation of higher response rates seen in patients with $KRAS^{G12V}$ mutations in the investigator-initiated Phase 1 combination study, we conducted a combined analysis with data from the combination study and the prior single-agent study that utilized a twice-weekly dosing schedule of VS-6766 to get a more complete picture of activity in $KRAS^{G12V}$ mutations. The subsequent, combined analysis (VS-6766 monotherapy and defactinib combination) showed a 57% ORR (4/7 patients); as a single agent (2/5 patients) and in combination with defactinib (2/2 patients) in $KRAS^{G12V}$ mutant NSCLC. Similarly, the combined analysis showed a 60% ORR (3/5 patients); as a single agent (1/2 patients) and in combination with defactinib (2/3 patients) in $KRAS^{G12V}$ mutant gynecologic cancers. All $KRAS^{G12V}$ responses were confirmed responses per RECIST criteria. These additional analyses were conducted by Verastem Oncology to understand the impact that various KRAS variants may have had on response to identify potential signals to pursue in future prospective studies. This additional analysis was not part of the AACR 2020 poster presentation.

The most common side effects seen in the Phase 1 study were rash, creatine kinase elevation, nausea, hyperbilirubinemia and diarrhea, most being NCI CTC Grade 1/2 and all were reversible. The recommended Phase 2 dose was determined to be cohort 1 (VS-6766 3.2mg, defactinib 200mg).

The preliminary data reported in the study suggest that a novel intermittent dosing schedule of RAF/MEK and FAK inhibitor combination therapy has promising clinical activity in patients with KRAS mutant LGSOC and $KRAS^{G12V}$ mutant NSCLC, including patients previously treated with a MEK inhibitor. Expansion cohorts remain ongoing.

In addition, defactinib is currently being investigated in combination with immunotherapeutic and other agents through ISTs. In 2020, it is planned to report results from certain ongoing dose escalation combination studies involving defactinib.

COPIKTRA is an oral inhibitor of phosphoinositide 3-kinase (PI3K), and the first approved dual inhibitor of PI3K-delta and PI3K-gamma, two enzymes known to help support the growth and survival of malignant B-cells and T-cells. PI3K signaling may lead to the proliferation of malignant B-cells and T-cells and is thought to play a role in the formation and maintenance of the supportive tumor microenvironment. COPIKTRA was approved by the U.S. Food & Drug Administration (FDA) on September 24, 2018 and is now indicated for the treatment of adult patients with relapsed or refractory chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL) after at least two prior therapies and relapsed or refractory follicular lymphoma (FL) after at least two prior systemic therapies. The indication in FL is approved under accelerated approval based on overall response rate. Continued approval for this FL indication may be contingent upon verification and description of clinical benefits in confirmatory trials. We are also developing duvelisib for the treatment of multiple types of cancer, the most advanced of which is for treatment of patients with peripheral T-cell lymphoma (PTCL). The development of duvelisib in PTCL has been awarded Fast Track and Orphan Drug status by the FDA and a registration study is underway.

On August 10, 2020, we signed an Asset Purchase Agreement (APA) with Secura Bio, Inc. (Secura), under which we agreed to sell our exclusive worldwide license for the research, development, commercialization, and manufacture in oncology indications of products containing duvelisib. A detailed description of the terms and conditions of the APA is contained below under the heading *License and collaboration agreements*. With the transition of the duvelisib program to Secura, we are focusing our efforts on our lead product candidates, VS-6766 and defactinib.

Our operations to date have been organizing and staffing our company, business planning, raising capital, identifying and acquiring potential product candidates, undertaking preclinical studies and clinical trials for our product candidates and duvelisib and initiating U.S. commercial operations following the approval of COPIKTRA. We have financed our operations to date primarily through public offerings of our common stock, sales of common stock under our at-the-market equity offering programs, our loan and security agreement executed with Hercules Capital, Inc. (Hercules) in March 2017, as amended, the upfront payments under our license and collaboration agreements with Sanofi, Yakult and CSPC, the issuance of the 2018 Notes in October 2018 and the proceeds in connection with the PIPE. With our U.S. commercial launch of COPIKTRA on September 24, 2018, we have recently begun financing a portion of our operations through product revenue.

As of June 30, 2020, we had an accumulated deficit of $585.8 million. Our net loss was $23.0 million, $61.0 million, $42.2 million and $80.3 million for the three and six months ended June 30, 2020 and 2019, respectively. We expect to incur significant expenses and operating losses for the foreseeable future as a result of the continued research and development of VS-6766, defactinib, and duvelisib, and continued commercialization of COPIKTRA. We will need to generate significant revenues to achieve profitability, and we may never do so. As of June 30, 2020, we had cash, cash equivalents, restricted cash and short-term investments of $160.8 million, inclusive of $35.5 million of restricted cash. We expect our existing cash resources, along with revenue we expect to generate from sales of COPIKTRA, will be sufficient to fund our planned operations through 12 months from the date of issuance of these condensed consolidated financial statements.

We expect to finance the future development costs of our clinical product portfolio with our existing cash, cash equivalents and short-term investments, or through strategic financing opportunities that could include, but are not limited to collaboration agreements, future offerings of our 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 we fail to obtain additional future capital, we may be unable to complete our planned preclinical studies and clinical trials and obtain approval of certain investigational product candidates from the FDA or foreign regulatory authorities.

COVID-19 pandemic

The current COVID-19 pandemic has presented a substantial public health and economic challenge around the world and is affecting our employees, patients, communities and business operations, as well as the U.S. economy and financial markets. We have been carefully monitoring the COVID-19 pandemic and its impact on our operations. All employees who are able to work from home have been working from home since mid-March 2020. 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, national and international markets.

We have significantly limited in-person interactions for our commercial teams and medical affairs with physicians and clinicians which has affected our ability to meet new customers and educate physicians and clinicians. Furthermore, oncology clinics are reporting a decline in patient visits, which has impacted our ability to start new patients on COPIKTRA. In addition, fewer patients may visit their healthcare provider to initiate, change or receive therapy. While these factors have had a minor impact to our net product revenue for the six months ended June 30, 2020, we may see a more significant impact in future quarters.

While we are currently continuing our clinical trials, we expect that COVID-19 precautions may directly or indirectly impact the timeline for some of our clinical trials. We had seen a reduction in site initiation, participant recruitment and enrollment, due to the COVID-19 pandemic. In particular, based on updates we have received, there was a slowdown in enrollment for the Phase 1 IST (FRAME) studying VS-6766 in combination with defactinib in patients with KRAS mutant advanced solid tumors. With respect to ISTs, COVID-19 limits our ability to access, analyze, and predict when data will available for presentation. Due to COVID-19 precautions and impacts, we are not able to predict when scientific meetings will be held and the impact this could have on our ability to share clinical results. In addition, we had paused initiation of a new site for our Phase 2 Study for the treatment of PTCL – entitled PRIMO in New York

due to the hospitals' prioritizing resources for the COVID-19 pandemic. While we are currently seeing patient accruals among our studies pick back up as conditions alleviate in certain areas, if conditions worsen we may experience further delays on completing our clinical trials. To help mitigate some of the impacts to our clinical trials, we are pursuing innovative approaches such as remote patient visits where possible.

We contract with third parties for the supply of raw materials and manufacture of VS-6766 and defactinib for preclinical studies and clinical trials and for the supply of raw materials and manufacture of COPIKTRA for commercial and clinical use. Our third party suppliers and manufacturers have informed us they have put in place measures to reduce the risk of COVID-19 from effecting their operations and to date we have not experienced delays or interruptions in our supply chain.

For additional information on the various risks posed by the COVID-19 pandemic, please read *Item 1A. Risk Factors* included in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, as filed with the SEC on May 7, 2020.

CRITICAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGMENTS AND ESTIMATES

Our discussion and analysis of our financial condition and results of operations is based upon our condensed consolidated financial statements prepared in accordance with U.S. generally accepted accounting principles. The preparation of these condensed consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of certain assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in our financial statements, and the amounts of revenues and expenses during the reported periods.

We believe that several accounting policies are important to understanding our historical and future performance. We refer to these policies as "critical" because these specific areas generally require us to make judgments and estimates about matters that are uncertain at the time we make the estimate, and different estimates—which also would have been reasonable—could have been used, which would have resulted in different financial results.

The critical accounting policies we identified in our most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2019, related to revenue recognition, collaborative agreements, accrued research and development expenses, stock-based compensation, accounts receivable, inventory, intangible assets and leases. During the six months ended June 30, 2020, there were no material changes to our critical accounting policies.

RESULTS OF OPERATIONS

Comparison of the three months ended June 30, 2020 and 2019

	Three months ended June 30,			
	2020	2019	Change	% Change
Revenue:				
Product revenue, net	$ 4,235	$ 3,019	$ 1,216	40%
License and collaboration revenue	72	117	(45)	-38%
Total revenue	4,307	3,136	1,171	37%
Operating expenses:				
Cost of sales - product	392	377	15	4%
Cost of sales - intangible amortization	393	392	1	0%
Research and development	9,344	11,346	(2,002)	-18%
Selling, general and administrative	15,442	29,298	(13,856)	-47%
Total operating expenses	25,571	41,413	(15,842)	-38%
Loss from operations	(21,264)	(38,277)	17,013	-44%
Interest income	122	1,268	(1,146)	-90%
Interest expense	(1,868)	(5,185)	3,317	-64%
Net loss	$ (23,010)	$ (42,194)	$ 19,184	-45%

Product revenue, net. Product revenue, net for the three months ended June 30, 2020 (2020 Quarter) was $4.2 million compared to $3.0 million for the three months ended June 30, 2019 (2019 Quarter). Product revenue, net consisted of net product sales of COPIKTRA in the United States. We began commercial sales of COPIKTRA within the United States in September 2018 following receipt of FDA marketing approval. The $1.2 million increase was primarily driven by an increase in product shipments for COPIKTRA as a result of greater market penetration. As discussed above under the heading *COVID-19 pandemic*, we may see a greater impact on net product revenue as a result of the COVID-19 pandemic in future quarters.

License and collaboration revenue. License and collaboration revenue for both the 2020 Quarter and 2019 Quarter was $0.1 million. 2020 Quarter and 2019 Quarter license and collaboration revenue is comprised of duvelisib shipments to CSPC and Yakult, during each respective quarter.

Costs of sales - product. Costs of sales - product for both the 2020 Quarter and 2019 Quarter were $0.4 million. Cost of sales - product consisted of costs associated with the manufacturing of COPIKTRA, royalties owed to Healthcare Royalty Partners (HCR) and Infinity Pharmaceuticals, Inc. (Infinity) on such sales, and certain period costs. We expensed the manufacturing costs of COPIKTRA as operating expenses in the periods prior to July 1, 2018. In the third quarter of 2018, we began capitalizing inventory costs for COPIKTRA manufactured in preparation for our launch in the United States based on our evaluation of, among other factors, the status of the COPIKTRA New Drug Application (NDA) in the United States and the ability of our third-party suppliers to successfully manufacture commercial quantities of COPIKTRA. Certain of the costs of COPIKTRA units recognized as revenue during the 2020 Quarter and 2019 Quarter were expensed prior to the September 2018 FDA marketing approval and, therefore, are not included in cost of sales - product during this period. We expect cost of sales – product to increase in relation to product revenues as we deplete these inventories. In addition, 2019 Quarter cost of sales - product included approximately $0.1 million of obsolete inventory expense.

Cost of sales – intangible amortization. Cost of Sales – intangible amortization for both the 2020 Quarter and 2019 Quarter was $0.4 million. Cost of sales – intangible amortization was related to the COPIKTRA finite-lived intangible asset which we recognized and began amortizing in September 2018.

Research and development expense. Research and development expense for the 2020 Quarter was $9.3 million compared to $11.3 million for the 2019 Quarter. The $2.0 decrease was primarily driven by a decrease of $1.4 million in contract research organization (CRO) costs, and a decrease of $1.4 million in personnel related costs, including non-cash stock-based compensation as a result of reduced headcount, partially offset by an increase of $0.5 million in investigated sponsored trial (IST) expenses, and $0.3 million in consulting and other costs.

We allocate the expenses related to external research and development services, such as CROs, clinical sites, manufacturing organizations and consultants by project. We use our employee and infrastructure resources across multiple research and development projects. Our project costing methodology does not allocate personnel and other indirect costs to specific clinical programs. The following table summarizes our allocation of research and development expenses to our clinical programs, including VS-6766, defactinib and COPIKTRA, for the 2020 Quarter and the 2019 Quarter.

	Three months ended June 30,	
	2020	2019
	(in thousands)	
COPIKTRA	$ 4,516	$ 6,630
Defactinib/VS-6766	1,624	26
Unallocated and other research and development expense	2,879	4,276
Unallocated stock-based compensation expense	325	414
Total research and development expense	$ 9,344	$ 11,346

The decrease in COPIKTRA related costs of $2.1 million for the 2020 Quarter as compared to the 2019 Quarter was driven by a decrease of $1.2 million in costs for drug substance and drug product, decrease of $1.1 million in CRO costs, and a decrease of $0.4 million in clinical supply and other costs which is partially offset by an increase of $0.6

million of investigator sponsored trial (IST) costs. Defactinib/VS-6766 2020 Quarter costs are primarily comprised of $1.4 million in costs for drug substance and drug product. Unallocated and other research and development expense includes $1.7 million and $3.0 million of personnel costs for the 2020 Quarter and the 2019 Quarter, respectively.

Selling, general and administrative expense. Selling, general and administrative expense for the 2020 Quarter was $15.4 million compared to $29.3 million for the 2019 Quarter. The decrease of $13.9 million from the 2019 Quarter to the 2020 Quarter primarily resulted from a decrease of $7.0 million in personnel related costs, including non-cash stock-based compensation as a result of reduced headcount, decrease of $5.5 million in consulting and professional fees, primarily related to the support of commercial launch activities in the 2019 Quarter, and decrease of $1.4 million in reduced travel and other costs.

Interest income. Interest income for the 2020 Quarter was $0.1 million compared to $1.3 million for the 2019 Quarter. The decrease of $1.2 million was primarily due to lower investment cost basis and lower interest rates on investments.

Interest expense. Interest expense for the 2020 Quarter was $1.9 million compared to $5.2 million for the 2019 Quarter. The decrease of $3.3 million was primarily due to reduced interest as a result of the reduction in 2018 Notes principal balance. As of June 30, 2020 and March 31, 2020, there was $28.3 million aggregate principal amount outstanding of the 2018 Notes as compared to $150.0 million aggregate principal amount outstanding of the 2018 Notes at June 30, 2019 and March 31, 2019.

Restructuring: We recognized $0.0M in both the 2020 Quarter and 2019 Quarter for restructuring expenses. Please refer to the *Restructuring* heading within the *Comparison of the six months ended June 30, 2020 and 2019* section below for further discussion.

Comparison of the six months ended June 30, 2020 and 2019

	Six months ended June 30,			
	2020	2019	Change	% Change
Revenue:				
Product revenue, net	$ 9,269	$ 4,690	$ 4,579	98%
License and collaboration revenue	94	117	(23)	-20%
Total revenue	9,363	4,807	4,556	95%
Operating expenses:				
Cost of sales - product	887	534	353	66%
Cost of sales - intangible amortization	785	785	—	0%
Research and development	20,268	21,103	(835)	-4%
Selling, general and administrative	35,046	55,331	(20,285)	-37%
Total operating expenses	56,986	77,753	(20,767)	-27%
Loss from operations	(47,623)	(72,946)	25,323	-35%
Other expense	(1,313)	—	(1,313)	100%
Interest income	478	2,765	(2,287)	-83%
Interest expense	(12,542)	(10,115)	(2,427)	24%
Net loss	$ (61,000)	$ (80,296)	$ 19,296	-24%

Product revenue, net. Product revenue, net for the six months ended June 30, 2020 (2020 Period) was $9.3 million compared to $4.7 million for the six months ended June 30, 2019 (2019 Period). Product revenue, net consisted of net product sales of COPIKTRA in the United States. We began commercial sales of COPIKTRA within the United States in September 2018 following receipt of FDA marketing approval. The $4.6 million increase was primarily driven by an increase in product shipments for COPIKTRA as a result of greater market penetration. As discussed above under the heading *COVID-19 pandemic*, we may see a greater impact on net product revenue as a result of the COVID-19 pandemic in future periods.

License and collaboration revenue. License and collaboration revenue for both the 2020 Period and 2019 Period was $0.1 million. 2020 Period and 2019 Period license and collaboration revenue is comprised of duvelisib shipments to CSPC and Yakult during each respective period.

Costs of sales - product. Costs of sales - product for the 2020 Period was $0.9 million compared to $0.5 million for the 2019 Period. The $0.4 million increase was primarily driven by an increase in the volume of COPIKTRA sold and corresponding increases in royalties, manufacturing and other costs during the 2020 Period as compared to the 2019 Period. Cost of sales - product consisted of costs associated with the manufacturing of COPIKTRA, royalties owed to HCR and Infinity on such sales, and certain period costs. We expensed the manufacturing costs of COPIKTRA as operating expenses in the periods prior to July 1, 2018. In the third quarter of 2018, we began capitalizing inventory costs for COPIKTRA manufactured in preparation for our launch in the United States based on our evaluation of, among other factors, the status of the COPIKTRA NDA in the United States and the ability of our third-party suppliers to successfully manufacture commercial quantities of COPIKTRA. Certain of the costs of COPIKTRA units recognized as revenue during the 2020 Period and 2019 Period were expensed prior to the September 2018 FDA marketing approval and, therefore, are not included in cost of sales - product during this period. We expect cost of sales – product to increase in relation to product revenues as we deplete these inventories.

Cost of sales – intangible amortization. Cost of Sales – intangible amortization for both the 2020 Period and 2019 Period was $0.8 million. Cost of sales – intangible amortization was related to the COPIKTRA finite-lived intangible asset which we recognized and began amortizing in September 2018.

Research and development expense. Research and development expense for the 2020 Period was $20.3 million compared to $21.1 million for the 2019 Period. The $0.8 million decrease was primarily related to a decrease of $2.7 million in CRO costs and $1.2 million in personnel related costs, including non-cash stock-based compensation as a result of reduced headcount, partially offset by an increase in $3.0 million increase due to a non-refundable payment of $3.0 million to Chugai in the 2020 Period for the VS-6766 license described further below under the heading *License and collaboration agreements* and increase of $0.1 million of other expenses.

We allocate the expenses related to external research and development services, such as CROs, clinical sites, manufacturing organizations and consultants by project. We use our employee and infrastructure resources across multiple research and development projects. Our project costing methodology does not allocate personnel and other indirect costs to specific clinical programs. The following table summarizes our allocation of research and development expenses to our clinical programs, including VS-6766, defactinib and COPIKTRA, for the 2020 Period and the 2019 Period.

	Six months ended June 30,	
	2020	2019
	(in thousands)	
COPIKTRA	$ 8,135	$ 11,345
Defactinib	4,996	879
Unallocated and other research and development expense	6,513	8,045
Unallocated stock-based compensation expense	624	834
Total research and development expense	$ 20,268	$ 21,103

The decrease in COPIKTRA related costs of $3.2 million for the 2020 Period as compared to the 2019 Period was driven by a decrease of $1.8 million of CRO costs, a decrease of $1.6 million in costs for drug substance and drug product, and a decrease of $0.7 million in clinical supply and other costs which is partially offset by an increase of $0.9 million in costs for ISTs. Defactinib/VS-6766 2020 Period costs are primarily comprised of a $3.0 million non-refundable payment to Chugai and $1.6 million in costs for drug substance and drug product. Unallocated and other research and development expense includes $4.4 million and $5.4 million of personnel costs for the 2020 Period and the 2019 Period, respectively.

Selling, general and administrative expense. Selling, general and administrative expense for the 2020 Period was $35.0 million compared to $55.3 million for the 2019 Period. The decrease of $20.3 million from the 2019 Period to

the 2020 Period primarily resulted from a decrease of $9.2 million in personnel related costs, including non-cash stock-based compensation as a result of reduced headcount, $8.4 million in consulting and professional fees, primarily related to the support of commercial launch activities in the 2019 Period, decrease of $2.1 million in reduced travel and a decrease of $0.6 million in other costs.

Other expense. Other expense for the 2020 Period was $1.3 million compared to $0.0 million for the 2019 Period. Other expense of approximately $1.3 million for the 2020 Period was for the mark-to-market adjustment related to the bifurcated make-whole interest provision derivative liability related to the 2019 Notes.

Interest income. Interest income for the 2020 Period was $0.5 million compared to $2.8 million for the 2019 Period. The decrease of $2.3 million was primarily due to lower investment cost basis and lower interest rates on investments.

Interest expense. Interest expense for the 2020 Period was $12.5 million compared to $10.1 million for the 2019 Period. The increase of $2.4 million was primarily due to non-cash interest expense of $8.1 million recorded upon conversion of the 2019 Notes to common stock. This increase is partially offset by reduced interest expense as a result of the reduction in 2018 Notes and 2019 Notes principal balance. As of June 30, 2020, there was $28.3 million aggregate principal amount outstanding of the 2018 Notes and as of December 31, 2019 there was an aggregate principal amount outstanding of $85.7 million of 2018 Notes and 2019 Notes compared to $150.0 million aggregate principal amount outstanding of the 2018 Notes at June 30, 2019 and December 31, 2018.

Restructuring: On October 28, 2019, we committed to an operational plan to reduce overall operating expenses, including the elimination of approximately 40 positions and other cost-saving measures (the “October 2019 Restructuring”). We recorded $1.2 million expense in the fourth quarter of 2019, for one-time termination benefits to the affected employees, including cash severance payments, healthcare benefits, and outplacement assistance.

On February 27, 2020, we committed to an operational plan to reduce overall operating expenses, including the elimination of approximately 31 positions and other cost-saving measures (the “February 2020 Restructuring”). During the 2020 Period, we recorded an aggregate expense of $1.8 million, which is reflected in the condensed consolidated statements of operation and comprehensive loss as selling general, and administrative expense and research and development expense for $1.4 million and $0.4 million, respectively, for one-time termination benefits for employee severance, benefits, and related costs.

LIQUIDITY AND CAPITAL RESOURCES

Sources of liquidity

We have financed our operations to date primarily through public and private offerings of our common stock, sales of common stock under our at-the-market equity offering programs, our loan and security agreement executed with Hercules in March 2017, as amended, the upfront payments under our license and collaboration agreements with Yakult, CSPC, and Sanofi, the issuance of 2018 Notes in October 2018, and the proceeds in connection with the PIPE. With the commercial launch of COPIKTRA in the United States in September 2018, we have recently begun financing a portion of our operations through product revenue.

As of June 30, 2020 we had $160.8 million in cash, cash equivalents, and restricted cash, inclusive of $35.5 million of restricted cash. We primarily invest our cash, cash equivalents and short-term investments in U.S. Government money market funds and corporate bonds and commercial paper of publicly traded companies.

Risks and uncertainties include those identified under Item 1A. Risk Factors, in our Annual Report on Form 10-K for the year ended December 31, 2019 as filed with the SEC on March 11, 2020, and in any subsequent filings with the SEC.

Cash flows

The following table sets forth the primary sources and uses of cash for the 2020 Period and the 2019 Period (in thousands):

	Six months ended June 30,	
	2020	2019
Net cash (used in) provided by:		
Operating activities	$ (56,550)	$ (73,449)
Investing activities	32,023	46,893
Financing activities	106,099	9,769
Increase (decrease) in cash, cash equivalents and restricted cash	**$ 81,572**	$ (16,787)

Operating activities. The use of cash in both periods resulted primarily from our net losses adjusted for non-cash charges and changes in the components of working capital. The $16.9 million decrease in cash used in operating activities for the 2020 Period compared to the 2019 Period was primarily due to increased product revenue, net and decreased selling, general and administrative expenses, partially offset by a net increase in components of working capital.

Investing activities. The cash provided by investing activities for the 2020 Period primarily relates to the net maturities of investments of $32.1 million. The cash provided by investing activities for the 2019 Period primarily reflects the net maturities of investments of $46.9 million.

Financing activities. The cash provided by financing activities for the 2020 Period primarily represents $93.8 in net proceeds from sales of our common stock under the Purchase Agreement described below, $12.2 million in net proceeds received under our at-the-market equity offering program, and $1.8 million of proceeds received related to exercise of stock options and employee stock purchase plan. This is partially offset by $1.8 million of interest-make whole payments on the 2019 Notes. The cash provided by financing activities for the 2019 Period primarily represents $9.7 million of net proceeds as a result of the Hercules Amended Loan Agreement and $0.1 million of proceeds received related to stock option exercises.

On February 27, 2020, we entered into a Purchase Agreement with certain institutional investors in which we agreed to sell 46,511,628 shares of common stock at a purchase price of $2.15 per share, which represents 12.6% premium to the last reported sale price of our common stock of $1.91 per share on February 27, 2020. On March 3, 2020, the closing occurred. The aggregate proceeds net of underwriting discounts and offering costs, were approximately $93.8 million.

In March 2017, we established an at-the-market equity offering program pursuant to which we were able to offer and sell up to $35.0 million of our common stock at then current market prices from time to time through Cantor Fitzgerald & Co. (Cantor) as sales agent. In August 2017, we amended our sales agreement with Cantor to increase the maximum aggregate offering price of shares of common stock that can be sold under the at-the-market equity offering program to $75.0 million.

During the three and six months ended June 30, 2020, we sold 6,769,559 shares under the at-the market equity offering program for net proceeds of approximately $12.2 million (after deducting commissions and other offering expenses). Through June 30, 2020, we have sold a total of 18,287,913 shares under this program for net proceeds of approximately $59.6 million (after deducting commissions and other offering expenses).

On October 17, 2018, we closed a registered direct public offering of $150.0 million aggregate principal amount of our 5.00% Convertible Senior Notes due 2048 (the 2018 Notes). The 2018 Notes are governed by the terms of a base indenture for senior debt securities (the 2018 Base Indenture), as supplemented by the first supplemental indenture thereto (the Supplemental Indenture and together with the 2018 Base Indenture, the 2018 Indenture), each dated October 17, 2018, by and between us and Wilmington Trust, National Association, as trustee. The 2018 Notes are senior unsecured obligations of us and bear interest at a rate of 5.00% per annum, payable semi-annually in arrears on May 1

and November 1 of each year, beginning on May 1, 2019. The 2018 Notes will mature on November 1, 2048, unless earlier repurchased, redeemed or converted in accordance with their terms.

The 2018 Notes are convertible into shares of our common stock, par value $0.0001 per share, together, if applicable, with cash in lieu of any fractional share, at an initial conversion rate of 139.5771 shares of common stock per $1,000 principal amount of the 2018 Notes, which corresponds to an initial conversion price of approximately $7.16 per share of common stock and represents a conversion premium of approximately 15.0% above the last reported sale price of the common stock of $6.23 per share on October 11, 2018. Upon conversion, converting noteholders will be entitled to receive accrued interest on their converted 2018 Notes. The conversion rate is subject to adjustment from time to time upon the occurrence of certain events, including, but not limited to, the issuance of stock dividends and payment of cash dividends, but will not be adjusted for any accrued and unpaid interest.

We have the right, exercisable at our option, to cause all 2018 Notes then outstanding to be converted automatically if the "Daily VWAP" (as defined in the 2018 Indenture) per share of our common stock equals or exceeds 130% of the conversion price, which equates to approximately $9.31 per share, on each of at least 20 VWAP Trading Days (as defined in the 2018 Indenture), whether or not consecutive, during any 30 consecutive VWAP Trading Day period commencing on or after the date we first issued the 2018 Notes.

The 2018 Indenture includes customary covenants and sets forth certain events of default after which the 2018 Notes may be declared immediately due and payable and sets forth certain types of bankruptcy or insolvency events of default involving us or certain of its subsidiaries after which the 2018 Notes become automatically due and payable.

We assessed all terms and features of the 2018 Notes in order to identify any potential embedded features that would require bifurcation. As part of this analysis, we assessed the economic characteristics and risks of the 2018 Notes, including the conversion, put and call features. The conversion feature was initially bifurcated as an embedded derivative but subsequently qualified for a scope exception to derivative accounting upon our stockholders approving an increase in the number of authorized shares of common stock in December 2018. We determined that all other features of the 2018 Notes were clearly and closely associated with the debt host and did not require bifurcation as a derivative liability, or the fair value of the feature was immaterial to our condensed consolidated financial statements. We reassess the features on a quarterly basis to determine if they require separate accounting. There have been no changes to our original assessment through June 30, 2020.

On November 14, 2019 and December 23, 2019, we entered into privately negotiated agreements to exchange approximately $114.3 million and $7.4 million, respectively, aggregate principal amount of the 2018 Notes for (i) approximately $62.9 million and $4.0 million, respectively, aggregate principal amount of 5.00% Convertible Senior Second Lien Notes due 2048 (the 2019 Notes) (ii) an aggregate of approximately $11.4 million and $0.7 million in 2018 Notes principal repayment and (iii) accrued interest on the 2018 Notes through November 14, 2019 and December 23, 2019, respectively. The 2019 Notes are governed by the terms of an indenture (the 2019 Indenture). The 2019 Notes are senior secured obligations of ours and bear interest at 5.00% per annum, payable semi-annually in arrears on May 1 and November 1 of each year. The 2019 Notes will mature on November 1, 2048, unless earlier repurchased, redeemed or converted in accordance with the terms thereof.

The 2019 Notes are convertible into shares of our common stock, par value $0.0001 per share, together, if applicable, with cash in lieu of any fractional share, at an initial conversion rate of 606.0606 shares of common stock per $1,000 principal amount of the 2019 Notes, which corresponds to an initial conversion price of approximately $1.65 per share of common stock and represents a conversion premium of approximately 52.8% above the last reported sale price of our common stock of $1.08 per share on November 11, 2019. The conversion rate is subject to adjustment from time to time upon the occurrence of certain events, including, but not limited to, the issuance of stock dividends and payment of cash dividends, but will not be adjusted for any accrued and unpaid interest.

We have the right, exercisable at our option, to cause all 2019 Notes then outstanding to be converted automatically if the "Daily VWAP" (as defined in the 2019 Indenture) per share of our common stock equals or exceeds 121% of the conversion price on each of at least 20 VWAP Trading Days (as defined in the 2019 Indenture), whether or

not consecutive, during any 30 consecutive VWAP Trading Day period commencing on or after the date we first issued the 2019 Notes. (Mandatory Conversion Option).

Upon conversion, converting noteholders will be entitled to receive accrued interest on their converted 2019 Notes. In addition, if the 2019 Notes are converted with a conversion date that is on or prior to November 1, 2020, other than in connection with our exercise of our Mandatory Conversion Option then the consideration due upon any such conversion will also include a cash interest make-whole payment for all future scheduled interest payments on the converted 2019 Notes through November 1, 2020 (2019 Notes Interest Make-Whole Provision).

We assessed all terms and features of the 2019 Notes in order to identify any potential embedded features that would require bifurcation. As part of this analysis, we assessed the economic characteristics and risks of the 2019 Notes, including the conversion, put and call features. In consideration of the 2019 Notes Interest Make-Whole Provision, we concluded the provision required bifurcation as a derivative. It was determined that the fair value of the derivative upon the November 14, 2019 and December 23, 2019 issuance of the 2019 Notes was $0.2 million in aggregate; and we recorded this amount as a derivative liability and the offsetting amount as a debt discount as a reduction to the carrying value of the 2019 Notes on the closing dates. It was determined that the fair value of the derivative at December 31, 2019 was $0.5 million.

During the first three months of six month period ended June 30, 2020, 2019 Note holders converted $57.4 million aggregate principal of 2019 Notes in exchange for 34,796,350 shares of common stock and $1.8 million of cash for 2019 Interest Make-Whole Provision. We recorded the change in fair value of the 2019 Interest Make-Whole Provision of $1.3 million for the six months ended June 30, 2020 as other expense in the condensed consolidated statement of operations and comprehensive loss. We determined that all other features of the 2019 Notes were clearly and closely associated with a debt host and did not require bifurcation as a derivative liability, or the fair value of the feature was immaterial to our condensed consolidated financial statements. As of June 30, 2020, all 2019 Notes have converted into shares of common stock.

As of June 30, 2020, there was $28.3 million aggregate principal amount outstanding of the 2018 Notes compared to $28.3 million and $57.4 million aggregate principal amount outstanding of the 2018 Notes and 2019 Notes, respectively, for a total of $85.7 million aggregate principal amount outstanding as of December 31, 2019.

On March 21, 2017 (Closing Date), we entered into a term loan facility of up to $25.0 million with Hercules, a Maryland corporation. The term loan facility is governed by a loan and security agreement, dated March 21, 2017 (the Original Loan Agreement), which originally provided for up to four separate advances, of which an aggregate of $15.0 million were drawn down during the year ended December 31, 2017. The Original Loan Agreement was amended on January 4, 2018, March 6, 2018, October 11, 2018, April 23, 2019, and November 14, 2019 (the Amended Loan Agreement) to increase the total borrowing limit under the Original Loan Agreement from up to $25.0 million to up to $75.0 million, pursuant to certain conditions of funding.

Per the terms of the Amended Loan Agreement, the we may borrow up to an aggregate of $75.0 million, of which $35.0 million was outstanding immediately as of April 23, 2019 (Fourth Amendment Date) (Amended Term A Loan) as a result of the existing outstanding principal of term loans of $25.0 million being converted into the Amended Term A Loan, and an additional $10.0 million being drawn on the Fourth Amendment Date. The remaining $40.0 million of borrowing capacity may be drawn in multiple tranches comprised of (i) a term loan in an amount of up to $15.0 million upon us generating cumulative net product revenues (as defined in the Amended Loan Agreement) of either (a) $37.5 million on or before April 30, 2020 or (b) $50.0 million on or before June 30, 2020 (Amended Term B Loan), and (ii) a term loan in an amount of up to $25.0 million available through December 31, 2021, subject to Hercules' approval and certain other conditions specified in the Amended Loan Agreement (the Amended Term C Loan, and together with the Amended Term A Loan and Amended Term B Loan, the Amended Term Loan). As of June 30, 2020, the funding conditions for the Amended Term B Loan have not been met and expired on June 30, 2020. As of June 30, 2020, we have borrowed a total of $35.0 million in term loans.

The Amended Term Loan will mature on December 1, 2022. Each advance accrues interest at a floating per annum rate equal to the greater of (a) 9.75% or (b) the lesser of (i) 12.00% and (ii) the sum of (x) 9.75% plus (y) (A) the

prime rate (as defined in the Amended Loan Agreement) minus (B) 5.50%. The Amended Term Loan provides for interest-only payments until April 1, 2021, which may be extended to December 1, 2021 subject to us generating $40.0 million in net product revenue on a trailing six-month basis on or prior to December 31, 2020 provided that no event of default has occurred. Thereafter, amortization payments will be payable monthly in equal installments of principal and interest (subject to recalculation upon a change in prime rates).

On the Fourth Amendment Date, we were required to pay any outstanding accrued interest as well as the final payment fee equal to 4.5% on the outstanding principal balance of the Amended Term Loan, or $1.1 million. No prepayment charges were due as a result of executing the Amendment or conversion of the existing term loans into Amended Term A Loans.

License and collaboration agreements

Secura

Under the APA with Secura, the sale includes certain intellectual property related to duvelisib in all oncology indications, certain existing duvelisib inventory, certain machinery and equipment pertaining to duvelisib, and claims and rights under certain existing contracts pertaining to duvelisib. Pursuant to the APA, Secura will assume all operational and financial responsibility for activities that were part of our duvelisib oncology program, including all commercialization efforts related to duvelisib in the United States and Europe, as well as our ongoing duvelisib oncology clinical trials. Further, Secura will assume all obligations with existing collaboration partners developing and commercializing duvelisib, which include Yakult, CSPC, and Sanofi described below. Additionally, Secura will assume any and all royalty payment obligations due under the amended and restated license agreement with Infinity. Secura is obligated to use diligent efforts to develop and manufacture duvelisib to achieve regulatory approval for the treatment of PTCL in both the United States and the European Union. We have agreed to make customary provisions not to compete with Secura with respect to duvelisib.

Pursuant to the terms of the APA, Secura will make an up-front payment of $70 million to us. Additionally, Secura is obligated to make royalty payments to us on net sales over $100 million of any products in any oncology indication containing duvelisib in the United States, European Union, and the United Kingdom of Great Britain and Northern Ireland in the low double digits. We are also entitled to receive additional aggregate milestone payments of up to $95 million if certain regulatory and sales milestones are successfully achieved. With respect to our collaboration partners, pursuant to each license agreement with respect to duvelisib outlined below, we are entitled to receive half of both (i) royalties received from net sales of duvelisib from Yakult, CSPC or Sanofi and (ii) any development, regulatory, or commercial milestone payments received from Yakult, CSPC or Sanofi. In addition, we are entitled to receive half of all royalty and milestone payments payable to Secura under any license or sublicense agreement entered into by Secura after the closing in certain jurisdictions

The APA shall remain in effect on a country-by-country upon the last to occur (a) 10 years from the first commercial sale of product containing duvelisib in such country or (b) the expiration of all valid patent claims covering products containing duvelisib in such country. Prior to the closing of this transaction each party can terminate the APA if the other party materially breaches or defaults in the performance of its obligations if such party fails to cure the breach or non-performance.

The closing date for this transaction is expected to occur during the three month period ending September 30, 2020.

Chugai

On January 7, 2020, we entered into a license agreement with Chugai (the Chugai Agreement) whereby Chugai granted us an exclusive worldwide license for the development, commercialization and manufacture of products containing VS-6766, a dual RAF/MEK inhibitor.

Under the terms of the Chugai Agreement, we received an exclusive right to develop and commercialize products containing VS-6766 at our own cost and expense. We are required to pay Chugai a non-refundable payment of $3.0 million which was paid in February 2020. We are further obligated to pay Chugai double-digit royalties on net sales of products containing VS-6766, subject to reduction in certain circumstances. Chugai also obtained opt back rights to develop and commercialize VS-6766 (a) in the European Union, which option may be exercised through the date we submits a NDA to the FDA for a product which contains VS-6766 as the sole active pharmaceutical ingredient and (b) in Japan and Taiwan, which option may be exercised through the date we receive marketing authorization from the FDA for a product which contains VS-6766 as the sole active pharmaceutical ingredient. As consideration for executing either option, Chugai would have to make a payment to us calculated on our development costs to date. Chugai and we have made customary representations and warranties and have agreed to certain customary covenants, including confidentiality and indemnification.

Unless earlier terminated, the Chugai Agreement will expire upon the fulfillment of the our royalty obligations to Chugai for the sale of any products containing the VS-6766, which royalty obligations expire on a product-by-product and country-by-country basis, upon the last to occur, in each specific country, of (a) expiration of valid patent claims covering such product or (b) 12 years from the first commercial sale of such product in such country.

We may terminate the Chugai Agreement upon 180 days' written notice. Subject to certain limitations, Chugai may terminate the Chugai Agreement upon written notice if we challenge any patent licensed by Chugai to us under the Chugai Agreement. Either party may terminate the license agreement in its entirety with 120 days' written notice for the other party's material breach if such party fails to cure the breach. Either party may also terminate the Chugai Agreement in its entirety upon certain insolvency events involving the other party.

We evaluated the license agreement with Chugai under ASC 805 and concluded that as the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar assets, the transaction did not meet the requirements to be accounted for as a business combination and therefore was accounted for as an asset acquisition. We recorded the up-front payment of $3.0 million as research and development expense within the condensed consolidated statement of operations for the six months ended June 30, 2020.

Sanofi

On July 25, 2019, we entered into a license and collaboration agreement with Sanofi (the Sanofi Agreement), under which we granted exclusive rights to Sanofi to develop and commercialize products containing duvelisib in Russia, the Commonwealth of Independent States (CIS), Turkey, the Middle East and Africa (collectively the "Sanofi Territory") for the treatment, prevention, palliation or diagnosis of any oncology indication in humans or animals.

Yakult

On June 5, 2018, we entered into a license and collaboration agreement with Yakult (the Yakult Agreement), under which we granted exclusive rights to Yakult to develop and commercialize products containing duvelisib in Japan for the treatment, prevention, palliation or diagnosis of all oncology indications in humans or animals.

Subsequently, on February 28, 2019, we entered into a supply agreement with Yakult (the Yakult Supply Agreement), under which we agreed to provide Yakult with drug product for clinical and commercial use in accordance with the Yakult Agreement. Under the terms of the Yakult Supply Agreement, we also granted to Yakult a limited manufacturing license to fill, finish, package, and label the drug product solely for clinical and commercial purposes in Japan.

CSPC

On September 25, 2018, we entered into a license and collaboration agreement with CSPC (the CSPC Agreement), under which we granted exclusive rights to CSPC to develop and commercialize products containing duvelisib in the People's Republic of China (China), Hong Kong, Macau and Taiwan (each, a Region and collectively, the CSPC Territory) for the treatment, prevention, palliation or diagnosis of all oncology indications in humans.

Funding requirements

We expect to continue to incur significant expenses and operating losses. We anticipate that our expenses and operating losses will continue as we:

- commercialize COPIKTRA;
- continue our ongoing clinical trials, including with VS-6766, defactinib, and COPIKTRA;
- initiate additional clinical trials for our product candidates;
- maintain, expand and protect our intellectual property portfolio;
- acquire or in-license other products and technologies;
- hire additional clinical, development and scientific personnel;
- add operational, financial and management information systems and personnel, including personnel to support our product development and commercialization efforts; and
- establish and maintain a sales, marketing and distribution infrastructure to commercialize COPIKTRA or any products for which we may obtain marketing approval.

We expect our existing cash resources, along with the revenue we expect to generate from COPIKTRA will be sufficient to fund our obligations for at least the next twelve months from the date of filing of this Quarterly Report on Form 10-Q. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, and the extent to which we may enter into collaborations with third parties for development and commercialization of our product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenses associated with completing the development of our current product candidates. Our future capital requirements will depend on many factors, including:

- the costs and timing of commercialization activities for COPIKTRA and the product candidates for which we expect to receive marketing approval;
- the scope, progress and results of our ongoing and potential future clinical trials;
- the extent to which we acquire or in-license other product candidates and technologies;
- the costs, timing and outcome of regulatory review of our product candidates (including our efforts to seek approval and fund the preparation and filing of regulatory submissions);
- revenue received from commercial sales of COPIKTRA and our product candidates, should any of our other product candidates also receive marketing approval;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property related claims; and
- our ability to establish collaborations or partnerships on favorable terms, if at all.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing stockholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

CONTRACTUAL OBLIGATIONS AND COMMITMENTS

The disclosure of our contractual obligations and commitments was reported in our Annual Report on Form 10-K for the year ended December 31, 2019. There have not been any material changes from the contractual obligations and commitments previously disclosed in such report.

OFF-BALANCE SHEET ARRANGEMENTS

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under SEC rules.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risk related to changes in interest rates. We had cash, restricted cash, cash equivalents and short-term investments of $160.8 million as of June 30, 2020 consisting of cash, U.S. Government money market funds, agency bonds, corporate bonds and commercial paper of publicly traded companies. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, including interest rate changes resulting from the impact of the COVID-19 pandemic, particularly because most of our investments are interest bearing. Our available for sale securities are subject to interest rate risk and will fall in value if market interest rates increase. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our portfolio.

We contract with CROs and contract manufacturers globally which may be denominated in foreign currencies. We may be subject to fluctuations in foreign currency rates in connection with these agreements. Transactions denominated in currencies other than the functional currency are recorded based on exchange rates at the time such transactions arise. As of June 30, 2020, an immaterial amount of our total liabilities was denominated in currencies other than the functional currency.

As of June 30, 2020, we have borrowed $35.0 million under the Amended Loan Agreement. The Amended Loan Agreement bears interest per annum equal to the greater of either (a) 9.75% or (b) the lesser of (i) 12.00% and (ii) the sum of (x) 9.75% plus (y) (A) the prime rate minus (B) 5.50%. Changes in interest rates can cause interest charges to fluctuate under the Amended Loan Agreement. A 10% increase in current interest rates would have resulted in an immaterial increase in the amount of cash interest expense for the six months ended June 30, 2020.

The 2018 Notes bear interest at a fixed rate and therefore have minimal exposure to changes in interest rates; however, because the interest rates are fixed, we may be paying a higher interest rate, relative to market, in the future if our credit rating improves or other circumstances change.

Item 4. Controls and Procedures.

Evaluation of disclosure controls and procedures

Our management, with the participation of our Chief Executive Officer and our Chief Business and Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2020. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act of 1934 (Exchange Act), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of June 30, 2020 our Chief Executive Officer and our Chief Business and Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in internal control over financial reporting

There have been no changes in our internal control over financial reporting during the six months ended June 30, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

None.

Item 1A. Risk Factors.

You should carefully review and consider the information regarding certain factors that could materially affect our business, financial condition or future results set forth under Item 1A. (Risk Factors) in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 as filed with the SEC on March 11, 2020, and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, as filed with the SEC on May 7, 2020, one or more of which may be precipitated or exacerbated by the impact of the COVID-19 pandemic, including risks relating to our level of indebtedness, our need to generate sufficient cash flows to service our indebtedness, our ability to comply with the covenants contained in the agreements that govern our indebtedness and our availability of adequate capital.

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

RECENT SALES OF UNREGISTERED SECURITIES

None.

PURCHASE OF EQUITY SECURITIES

We did not purchase any of our equity securities during the period covered by this Quarterly Report on Form 10-Q.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

None.

Item 5. Other Information.

None.

Item 6. Exhibits.

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth on the Exhibit Index, which Exhibit Index is incorporated herein by reference.

EXHIBIT INDEX

3.1	Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2011, filed by the Registrant with the Securities and Exchange Commission on March 30, 2012)
3.2	Certificate of Amendment to the Restated Certificate of Incorporation of Verastem, Inc. (incorporated by reference to Exhibit 3.1 to the Form 8-K filed by the Registrant with the Securities and Exchange Commission on December 20, 2018)
3.3	Certificate of Amendment to the Restated Certificate of Incorporation of Verastem, Inc. (incorporated by reference to Exhibit 3.1 to the Form 8-K filed by the Registrant with the Securities and Exchange Commission on May 21, 2020)
10.1	Amended and Restated 2012 Incentive Plan (incorporated by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K, filed by the Registrant with the Securities and Exchange Commission on May 21, 2020)
31.1*	Certification of Principal Executive Officer pursuant to Rules 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer pursuant to Rules 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	The cover page from this Current Report on form 10-Q, formatted in Inline XBRL

* Filed or 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.

VERASTEM, INC.

Date: August 10, 2020 By: /s/ BRIAN M. STUGLIK

Brian M. Stuglik
Chief Executive Officer
(Principal executive officer)

Date: August 10, 2020 By: /s/ ROBERT GAGNON

Robert Gagnon
Chief Business and Financial Officer
(Principal financial and accounting officer)

Exhibit 31.1

CERTIFICATIONS

I, Brian M. Stuglik, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Verastem, 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 and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

5. The registrant's other certifying officer 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.

/s/ BRIAN M. STUGLIK

Brian M. Stuglik
Chief Executive Officer
(Principal executive officer)

Date: August 10, 2020

Exhibit 31.2

CERTIFICATIONS

I, Robert Gagnon, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Verastem, 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 and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

5. The registrant's other certifying officer 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.

/s/ ROBERT GAGNON

Robert Gagnon
Chief Business and Financial Officer
(Principal financial and accounting officer)

Date: August 10, 2020

Exhibit 32.1

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

In connection with the Quarterly Report on Form 10-Q of Verastem, Inc. (the "Company") for the period ended June 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Brian M. Stuglik, Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

/s/ BRIAN M. STUGLIK

Brian M. Stuglik
Chief Executive Officer
(Principal executive officer)

Date: August 10, 2020

Exhibit 32.2

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

In connection with the Quarterly Report on Form 10-Q of Verastem, Inc. (the "Company") for the period ended June 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Robert Gagnon, Chief Business and Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

/s/ ROBERT GAGNON

Robert Gagnon
Chief Business and Financial Officer
(Principal financial and accounting officer)

Date: August 10, 2020