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

FORM 10-Q

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

FOR THE QUARTERLY PERIOD ENDED MARCH 31, 2020

or

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

Commission File Number 000-50549

Oncternal Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**62-1715807**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification No.)**

12230 El Camino Real, Suite 300
San Diego, CA 92130
(858) 434-1113
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.001 par value	ONCT	The Nasdaq Capital 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 and post such files). Yes ☒ No ☐

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

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

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

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

As of May 1, 2020, the registrant had 15,392,377 shares of common stock outstanding.

Oncternal Therapeutics, Inc.

FORM 10-Q

TABLE OF CONTENTS

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

Oncternal Therapeutics, Inc.
Condensed Consolidated Balance Sheets
(in thousands, except par value)

	March 31, 2020 (Unaudited)	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 16,019	$ 20,051
Prepaid and other assets	545	736
Total current assets	16,564	20,787
Right-of-use asset	154	190
Other assets	1,047	767
Total assets	$ 17,765	$ 21,744
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 1,376	$ 871
Accrued liabilities	2,778	2,731
Deferred grant revenue	3,062	3,640
Current portion of lease liability	101	99
Total current liabilities	7,317	7,341
Lease liability	53	91
Commitments and contingencies (Notes 3)		
Stockholders' equity:		
Preferred stock, $0.001 par value, authorized shares – 5,000 at March 31, 2020 and December 31, 2019, respectively; issued and outstanding shares – none	—	—
Common stock, $0.001 par value; authorized shares – 60,000 at March 31, 2020 and December 31, 2019; issued and outstanding shares – 15,392 and 15,387 at March 31, 2020 and December 31, 2019, respectively	15	15
Additional paid-in capital	80,690	79,869
Accumulated deficit	(70,310)	(65,572)
Total stockholders' equity	10,395	14,312
Total liabilities and stockholders' equity	$ 17,765	$ 21,744

See accompanying notes.

Oncternal Therapeutics, Inc.
Condensed Consolidated Statements of Operations
(Unaudited; in thousands, except per share data)

	Three Months Ended March 31,	
	2020	2019
Grant revenue	$ 578	$ 470
Operating expenses:		
Research and development	2,696	1,896
General and administrative	2,633	932
Total operating expenses	5,329	2,828
Loss from operations	(4,751)	(2,358)
Other income:		
Change in fair value of warrant liability	—	17
Interest income	13	47
Total other income	13	64
Net loss	$ (4,738)	$ (2,294)
Net loss per share, basic and diluted	$ (0.31)	$ (0.62)
Weighted-average shares outstanding, basic and diluted	15,355	3,676

See accompanying notes.

Oncternal Therapeutics, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited; in thousands)

	Three Months Ended March 31,	
	2020	**2019**
Cash flows from operating activities		
Net loss	$ (4,738)	$ (2,294)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	399	39
Change in fair value of preferred stock warrants liability	—	(17)
Noncash lease expense	36	—
Changes in operating assets and liabilities:		
Prepaid and other assets	90	158
Accounts payable	336	(2,422)
Accrued liabilities	455	264
Change in operation lease liability	(36)	—
Deferred grant revenue	(578)	639
Net cash used in operating activities	(4,036)	(3,633)
Cash flows from investing activities		
Acquisition related costs paid	—	(79)
Net cash used in investing activities	—	(79)
Cash flows from financing activities		
Proceeds from exercise of stock options	4	2
Net cash provided by financing activities	4	2
Net decrease in cash and cash equivalents	(4,032)	(3,710)
Cash and cash equivalents at beginning of period	20,051	20,645
Cash and cash equivalents at end of period	$ 16,019	$ 16,935
Supplemental disclosure of non-cash investing and financing activities:		
Issuance of 2019 bonus awards with stock options in lieu of cash	$ 415	$ -
Asset acquisition costs included in accounts payable and accrued liabilities	$ -	$ 1,268
Deferred financing costs included in accounts payable and accrued liabilities	$ 179	$ -

See accompanying notes.

Oncternal Therapeutics, Inc.
Condensed Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)
(Unaudited; in thousands)

	Three Months Ended March 31, 2020				
	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance at December 31, 2019	15,387	$ 15	$ 79,869	$ (65,572)	$ 14,312
Exercise of stock options for cash	5	—	4	—	4
Vesting related to repurchase liability	—	—	3	—	3
Stock-based compensation	—	—	399	—	399
Issuance of 2019 bonus awards with stock options in lieu of cash	—	—	415	—	415
Net loss	—	—	—	(4,738)	(4,738)
Balance at March 31, 2020	15,392	$ 15	$ 80,690	$ (70,310)	$ 10,395

	Three Months Ended March 31, 2019						
	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount			
Balance at December 31, 2018	8,148	$ 46,588	3,762	$ 5	$ 1,748	$ (31,384)	$ (29,631)
Exercise of stock options for cash	—	—	2	—	2	—	2
Vesting related to repurchase liability	—	—	—	—	4	—	4
Stock-based compensation	—	—	—	—	39	—	39
Net loss	—	—	—	—	—	(2,294)	(2,294)
Balance at March 31, 2019	8,148	$ 46,588	3,764	$ 5	$ 1,793	$ (33,678)	$ (31,880)

See accompanying notes.

1. Description of Business, Basis of Presentation and Summary of Significant Accounting Policies

Description of Business

Oncternal Therapeutics, Inc. (the "Company," "Oncternal," or the "combined company"), formerly known as GTx, Inc., was incorporated in Tennessee in September 1997 and reincorporated in Delaware in 2003 and is based in San Diego, California. The Company is a clinical-stage biopharmaceutical company focused on the development of novel oncology therapies for the treatment of cancers with critical unmet medical need. The Company's clinical pipeline includes, cirmtuzumab, a humanized monoclonal antibody that binds to ROR1 (Receptor-tyrosine kinase-like Orphan Receptor 1), and TK216, a small molecule inhibiting the biological activity of ETS-family transcription factor oncoproteins. The Company is also developing a CAR-T (chimeric antigen receptor T-cells) product candidate that targets ROR1.

Merger

On June 7, 2019, the Company, then operating as GTx, Inc. ("GTx"), completed the merger contemplated by the Agreement and Plan of Merger and Reorganization, dated March 6, 2019, as amended (the "Merger Agreement"), with privately-held Oncternal Therapeutics, Inc. ("Private Oncternal") and Grizzly Merger Sub, Inc., a wholly-owned subsidiary of the Company ("Merger Sub"). Under the Merger Agreement, Merger Sub merged with and into Private Oncternal, with Private Oncternal surviving as a wholly-owned subsidiary of the Company (the "Merger"). GTx changed its name to Oncternal Therapeutics, Inc., and Private Oncternal, which remains as a wholly-owned subsidiary of the Company, changed its name to Oncternal Oncology, Inc. On June 10, 2019, the combined company's common stock began trading on The Nasdaq Capital Market under the ticker symbol "ONCT."

Except as otherwise indicated, references herein to "Oncternal," "the Company," and the "combined company," refer to Oncternal Therapeutics, Inc. on a post-Merger basis, and the term "Private Oncternal" refers to the business of privately-held Oncternal Therapeutics, Inc., prior to completion of the Merger. References to GTx refer to GTx, Inc. prior to completion of the Merger.

Pursuant to the terms of the Merger Agreement, each outstanding share of Private Oncternal common stock outstanding immediately prior to the closing of the Merger was converted into approximately 0.073386 shares of Company common stock (the "Exchange Ratio"). Immediately prior to the closing of the Merger, all shares of Private Oncternal preferred stock then outstanding were exchanged into shares of common stock of Private Oncternal. In addition, all outstanding options exercisable for common stock of Private Oncternal and warrants exercisable for convertible preferred stock of Private Oncternal became options and warrants exercisable for the same number of shares of common stock of the Company multiplied by the Exchange Ratio. Immediately following the Merger, stockholders of Private Oncternal owned approximately 77.5% of the outstanding common stock of the combined company.

Principles of Consolidation

The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, Oncternal Oncology, Inc. and Oncternal, Inc. All intercompany accounts and transactions have been eliminated in the preparation of the condensed consolidated financial statements.

Liquidity and Going Concern

From its inception through March 31, 2020, the Company has devoted substantially all of its efforts to organizational activities including raising capital, building infrastructure, acquiring assets, developing intellectual property, and conducting preclinical studies, clinical trials and product development activities. The Company has a limited operating history and the sales and income potential of the Company's business and market are unproven. Since inception, the Company has experienced recurring net losses and negative cash flows from operating activities and expects to continue to incur losses into the foreseeable future. At March 31, 2020, the Company had an accumulated deficit of $70.3 million and had cash and cash equivalents of $16.0 million. The Company believes that its existing cash and cash equivalents will be sufficient to fund its operations into the fourth quarter of 2020. The Company will need to continue to raise a substantial amount of funds until it is able to generate revenues to fund its development activities and operations. The accompanying condensed consolidated financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business. However, based on the Company's current working capital, anticipated operating expenses and net losses and the uncertainties surrounding its ability to raise additional capital as needed,

as discussed below, the Company believes that there is substantial doubt about its ability to continue as a going concern for one year after the date these condensed consolidated financial statements are issued.

The Company plans to continue to fund its losses from operations and capital funding needs through a combination of equity offerings, debt financings, government funding, or other sources, including, potentially, collaborations, licenses and other similar arrangements. There can be no assurance that the Company will be able to obtain any sources of financing on acceptable terms, or at all. To the extent that the Company can raise additional funds by issuing equity securities, the Company's stockholders may experience significant dilution. Any debt financing, if available, may involve restrictive covenants that impact the Company's ability to conduct its business.

Unaudited Interim Financial Information

The unaudited condensed consolidated financial statements at March 31, 2020, and for the three months ended March 31, 2020 and 2019, have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission ("SEC") and with generally accepted accounting principles in the United States of America ("GAAP"). These unaudited condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and include all adjustments, consisting of only normal recurring accruals, which in the opinion of management are necessary to present fairly the Company's financial position as of the interim date and results of operations for the interim periods presented. Interim results are not necessarily indicative of results for a full year or future periods. The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ materially from those estimates. These unaudited condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements for the year ended December 31, 2019, filed with the SEC on its Annual Report on Form 10-K on March 16, 2020.

Use of Estimates

The Company's condensed consolidated financial statements are prepared in accordance with GAAP. The preparation of the Company's condensed consolidated financial statements and accompanying notes requires it to make estimates and assumptions that impact the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities. Significant estimates consist of those used to determine the fair value of the Company's preferred stock, preferred stock warrant liability and stock-based awards, and those used to determine grant revenue and accruals for research and development costs. Although these estimates are based on the Company's knowledge of current events and actions it may undertake in the future, actual results may ultimately materially differ from these estimates and assumptions.

Cash and Cash Equivalents

The Company considers all highly liquid investments with maturities of three months or less when purchased to be cash equivalents. Cash and cash equivalents include cash in readily available checking accounts and money market accounts.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts and believes it is not exposed to significant risk on its cash balances due to the financial position of the depository institution in which those deposits are held. Additionally, the Company established guidelines regarding approved investments and maturities of investments, which are designed to maintain safety and liquidity.

Patent Costs

Costs related to filing and pursuing patent applications are recorded as general and administrative expense and expensed as incurred since recoverability of such expenditures is uncertain.

Research and Development Expenses and Accruals

Research and development expenses consist of costs incurred for the Company's own and for sponsored and collaborative research and development activities. Research and development costs are expensed as incurred and include manufacturing process development costs, manufacturing costs, costs associated with preclinical studies and clinical trials, regulatory and medical affairs activities, quality assurance activities, salaries and benefits, including stock-based compensation, fees paid to third-party consultants, license fees and overhead.

The Company has entered into various research and development contracts with research institutions, clinical research organizations, clinical manufacturing organizations and other companies. Payments for these activities are based on the terms of the individual agreements, which may differ from the pattern of costs incurred, and payments made in advance of performance are reflected in the accompanying condensed consolidated balance sheets as prepaid and other assets or accrued liabilities. The Company records accruals for estimated costs incurred for ongoing research and development activities. When evaluating the

adequacy of the accrued liabilities, the Company analyzes progress of the services, including the phase or completion of events, invoices received and contracted costs. Significant judgments and estimates may be made in determining the prepaid or accrued balances at the end of any reporting period. Actual results could differ from the Company's estimates.

Preferred Stock Warrant Liability

Prior to the Merger, Private Oncternal had outstanding freestanding warrants to purchase shares of its Series B-2 convertible preferred stock (the "Series B-2 warrants"). Because the underlying Series B-2 convertible preferred stock was classified as temporary equity, the Series B-2 warrants were classified as a liability in the accompanying condensed consolidated balance sheets. Private Oncternal adjusted the carrying value of such Series B-2 warrants to their estimated fair value at each reporting date, with any related increases or decreases in the fair value recorded as an increase or decrease to other income (expense) in the condensed consolidated statements of operations. Upon the completion of the Merger, the Series B-2 warrants were amended such that they were converted into warrants to purchase the Company's common stock. As amended, warrant liability accounting is no longer required and the fair value of the warrant liability has been reclassified into stockholders' equity.

Fair Value Measurements

The accounting guidance defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring or non-recurring basis. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the accounting guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1: Observable inputs such as quoted prices in active markets.

Level 2: Inputs, other than the quoted prices in active markets that are observable either directly or indirectly.

Level 3: Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

The carrying amounts of the Company's current financial assets and liabilities are considered to be representative of their respective fair values because of the short-term nature of those instruments. The Company has no current financial assets or liabilities measured at fair value on a recurring basis and no transfers between levels have occurred during the periods presented.

Prior to the completion of the Merger, the Company had preferred stock warrants outstanding that were accounted for as liabilities. During the quarter ended March 31, 2019, the Company recognized a change in fair value of $17,000 related to the liability classified warrants. There were no warrants classified as liabilities as of December 31, 2019 or March 31, 2020.

Revenue Recognition

The Company currently generates revenue from the California Institute for Regenerative Medicine pursuant to a research subaward agreement (see Note 4), which provides the Company with payments in return for certain research and development activities over a contractually defined period. Revenue from such subaward is recognized in the period during which the related qualifying services are rendered and costs are incurred, provided that the applicable conditions under the subaward agreement have been met.

The subaward agreement is on a best-effort basis and does not require scientific achievement as a performance obligation. All fees received under the agreement are non-refundable. The costs associated with the agreement are expensed as incurred and reflected as a component of research and development expense in the accompanying condensed consolidated statements of operations.

Funds received from the subaward agreement are recorded as revenue as the Company is the principal participant in the arrangement because the activities under the subaward are part of the Company's development programs. In those instances where the Company first receives consideration in advance of providing underlying services, the Company classifies such consideration as deferred revenue until (or as) the Company provides the underlying services. In those instances where the Company first provides the underlying services prior to its receipt of consideration, the Company records a grant receivable. At March 31, 2020, and December 31, 2019, the Company had deferred grant revenue of $3.1 million and $3.6 million, respectively.

Stock-Based Compensation

Stock-based compensation expense represents the fair value of equity awards, on the grant date, recognized in the period using the Black-Scholes option pricing model. The Company recognizes expense for awards with graded vesting schedules over the requisite service period of the awards (usually the vesting period) on a straight-line basis. For equity awards for which

vesting is subject to performance-based milestones, the expense is recorded over the service period when the achievement of the milestone is probable.

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company recognizes net deferred tax assets to the extent that the Company believes these assets are more likely than not to be realized. In making such a determination, management considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If management determines that the Company would be able to realize its deferred tax assets in the future in excess of their net recorded amount, management would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes.

Segment Reporting

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker in making decisions regarding resource allocation and assessing performance. The Company views its operations and manages its business in one operating segment in the United States.

Net Loss Per Share

Basic net loss per share is computed by dividing the net loss by the weighted-average number of common shares outstanding for the period, without consideration for potentially dilutive securities and adjusted for the weighted-average number of common shares outstanding that are subject to repurchase. The Company has excluded weighted-average shares subject to repurchase of 32,000 shares and 87,000 shares from the weighted-average number of common shares outstanding for the three months ended March 31, 2020 and 2019, respectively. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of shares of common stock and dilutive common stock equivalents outstanding for the period determined using the treasury-stock and if-converted methods. For all periods presented, there is no difference in the number of shares used to calculate basic and diluted shares outstanding as inclusion of the potentially dilutive securities would be antidilutive.

Potentially dilutive securities not included in the calculation of diluted net loss per share, because to do so would be anti-dilutive, are as follows (in common stock equivalent shares; in thousands):

	March 31,	
	2020	2019
Redeemable convertible preferred stock	—	8,148
Warrants to purchase convertible preferred stock	—	372
Warrants to purchase common stock	841	—
Common stock options	2,168	503
Common stock subject to repurchase	30	74
	3,039	9,097

Recently Issued Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (“FASB”) or other standard setting bodies that are adopted by the Company as of the specified effective date. Unless otherwise discussed, the Company believes that the impact of recently issued standards that are not yet effective will not have a material impact on its condensed consolidated financial position or results of operations upon adoption.

In August 2018, the FASB issued Accounting Standards Update (“ASU”) 2018-13, Fair Value Measurement: Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement, which modifies the disclosure requirements for fair value measurements. The amendments relate to disclosures regarding unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty and are to be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of

adoption. All other amendments should be applied retrospectively to all periods presented upon their effective date. The amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years, and early adoption is permitted. The Company adopted this standard on January 1, 2020 and the adoption of this standard had no impact on the condensed consolidated financial statements.

2. Balance Sheet Details

Accrued liabilities consist of the following (in thousands):

	March 31, 2020	December 31, 2019
Research and development	$ 1,339	$ 1,206
Legal fees	417	424
Unvested share liability	20	24
Compensation	824	825
Other	178	252
	$ 2,778	$ 2,731

3. Commitments, Contingencies and Related Party Transactions

Lease

Rent expense was $41,000 and $9,000 for the three months ended March 31, 2020 and 2019, respectively. Until May 31, 2019, the Company subleased its office space in San Diego, California on a month-to-month basis.

On May 22, 2019, the Company entered into an office sublease agreement for office space of 4,677 square feet in San Diego, California ("San Diego Lease") which expires on March 31, 2021. Base rent is approximately $166,000 annually and the monthly rent expense is being recognized on a straight-line basis over the lease term.

The San Diego Lease is included in the accompanying condensed consolidated balance sheet at the present value of the lease payments. As the San Diego Lease does not have an implicit interest rate, the present value reflects a 10.0% discount rate which is the estimated rate of interest that the Company would have to pay in order to borrow an amount equal to the lease payments on a collateralized basis over a similar term and in a similar economic environment. The Company recognized a net operating lease right-of-use asset and an aggregate lease liability of $0.2 million as of March 31, 2020, in the accompanying condensed consolidated balance sheet. The weighted average remaining lease term was 1.0 year.

Maturities of lease liabilities due under this lease agreement as of March 31, 2020, are as follows (in thousands):

Maturity of lease liabilities	Operating Leases
2020 (9 months)	$ 124
2021	41
Total lease payments	165
Less imputed interest	(11)
Total operating lease liabilities	154
Less current portion of lease liability	(101)
Lease liability	$ 53

Related Party Transactions

Effective in September 2019, the Company and Shanghai Pharmaceutical (USA) Inc. ("SPH USA") entered into a Materials Supply and Services Agreement ("SPH USA Services Agreement"), pursuant to which the Company and SPH USA will execute various statements of work for the transfer to SPH USA of key reagents and other materials, and for the supply of certain services by the Company to SPH USA, as contemplated under and in furtherance of the License and Development Agreement between the Company and SPH USA effective as of November 2018. During the three months ended March 31, 2020, the Company recorded amounts receivable from SPH USA related to statements of work totaling $0.1 million. See Note 4.

Litigation Related to the Merger

Between April 10 and May 1, 2019, three putative class action lawsuits and one individual lawsuit were filed in the U.S. District Court for the District of Delaware (the "Delaware Actions"). In 2019, the Delaware Actions were voluntarily dismissed with prejudice. On April 11 and 23, 2019, two putative class actions were filed in the U.S. District Court for the Southern District of New York (the "New York Actions"). The New York Actions name as defendants us and our former board of directors. The New York Actions allege that defendants violated Sections 14(a) and 20(a) of the Exchange Act, as well as Rule 14a-9 promulgated thereunder,

in connection with our filing of the Registration Statement in connection with the Merger. On September 16, 2019, plaintiffs in the New York Actions filed an amended complaint, alleging violations of Sections 14(a) and 20(a) of the Exchange Act related to the value GTx's stockholders received in the Merger. The amended complaint seeks damages and other unspecified relief. On January 10, 2020, the defendants filed their motion to dismiss the amended complaint, on January 31, 2020, the plaintiffs filed their opposition to defendants' motion to dismiss, and on February 14, 2020, the defendants filed a reply in support of their motion to dismiss. The defendants' motion to dismiss the New York Actions is pending. The Company believes that the New York Actions are without merit and intend to vigorously defend these actions. The Company cannot predict the outcome of or estimate the possible loss or range of loss from any of these matters.

Zappia vs. GTx Incorporated

On October 15, 2019, Joseph Zappia and Karen Zappia filed a lawsuit against the Company in the U.S. District Court for the District of Delaware. The complaint alleges that the Company's former management (prior to the Merger) engaged in illegal insider trading and false, manipulative and deceptive practices in violation of Sections 10(b) (and Rule 10b-5 promulgated thereunder), with respect to the timing of the disclosure of failed clinical trial results of GTx's enobosarm product candidate in September 2018. The plaintiffs seek damages, interest, costs, attorneys' fees. The Company believes that this lawsuit is without merit and intends to vigorously defend this matter. The Company cannot predict the outcome of or estimate the possible loss or range of loss from this matter.

4. License, Collaboration and Research Subaward Agreements

Georgetown University ("Georgetown")

In March 2014, the Company entered into an Exclusive License Agreement (the "Georgetown License Agreement") with Georgetown, pursuant to which the Company: (i) licensed the exclusive worldwide right to patents and technologies for the development and commercialization of certain product candidates targeting EWS-FLI1 as an anti-tumor therapy for therapeutic, diagnostics, or research tool purposes, (ii) is solely responsible for all development and commercialization activities and costs, and (iii) is responsible for all costs related to the filing, prosecution and maintenance of the licensed patent rights.

Under the terms of the Georgetown License Agreement, commencing in 2015, the Company: (i) pays an annual license maintenance fee of $10,000 until the first commercial sale occurs, (ii) is required to make up to $0.2 million in aggregate milestone payments upon the achievement of certain regulatory milestones, and (iii) will be required to pay low single digit royalties based on annual net product sales. The Company accounted for the licensed technology as an asset acquisition because it did not meet the definition of a business. All milestone payments under the Georgetown License Agreement will be recognized as research and development expense upon completion of the required events, as the triggering events are not considered to be probable until they are achieved. As of March 31, 2020, the Company had not triggered or made any milestone payments under the Georgetown License Agreement.

The Georgetown License Agreement may be terminated by either party upon material breach or may be terminated by the Company as to one or more countries with 90 days written notice of termination. The term of the Georgetown License Agreement will continue until the expiration of the last valid claim within the patent rights covering the product. Georgetown may terminate the agreement in the event: (i) the Company fails to pay any amount and fails to cure such failure within 30 days after receipt of notice, (ii) the Company defaults in its obligation to obtain and maintain insurance and fails to remedy such breach within 60 days after receipt of notice, or (iii) the Company declares insolvency or bankruptcy. The Company may terminate the Georgetown License Agreement at any time upon at least 60 days' written notice.

The University of Texas MD Anderson Cancer Center ("MD Anderson")

In December 2014, the Company entered into a collaboration agreement (as amended, the "Collaboration") with MD Anderson, which provides for the conduct of preclinical and clinical research for TK216 in exchange for certain program payments. If MD Anderson successfully completes all the requirements of the Collaboration in full and the program is successfully commercialized, the Company will be required to pay aggregate milestone payments of $1.0 million based on net product sales. The amounts recorded as research and development expense for the three months ended March 31, 2020 and 2019 were not significant.

Agreements with the Regents of the University of California (the "Regents")

In March 2016, and as amended and restated in August 2018 in connection with the spin-off transactions described below, the Company entered into a license agreement (as amended, the "Regents License Agreement") for the development, manufacturing and distribution rights related to the development and commercialization of ROR1 related naked antibodies, antibody fragments or synthetic antibodies, and genetically engineered cellular therapy. The Regents License Agreement was amended on March 25, 2019 and May 15, 2019, to update the patents covered under the agreement. The Regents License Agreement provides for the following: (i) in May 2016, an upfront license fee of $0.5 million was paid and 107,108 shares of common stock were issued, (ii) $25,000 in annual license maintenance fees commencing in 2017, (iii) reimbursement of certain annual patent costs, (iv) certain development and regulatory milestones aggregating from $10.0 million to $12.5 million, on a per product basis, (v) certain worldwide sales milestones based on achievement of tiered revenue levels aggregating $75.0 million, (vi) low single-digit royalties, including potential future minimum annual royalties, on net sales of each target, and (vii) minimum diligence to advance licensed assets consisting of at least $1.0 million in development spend annually through 2021. Under the Regents License Agreement, the Company recorded: (i) no license maintenance fees as research and development expense for either of the three months ended March 31, 2020 and 2019, and (ii) $25,000 and $0.1 million in patent costs as general and administrative expense for the three months ended March 31, 2020 and 2019, respectively. As of March 31, 2020, the Company believes it has met its obligations under the Regents License Agreement.

In July 2016, and as modified by the amended and restated Regents License Agreement in August 2018, the Company entered into a Research Agreement (the "Research Agreement") with the Regents for further research on a ROR1 therapeutic development program. Under this five-year agreement, the Regents will have an aggregate budget of $3.6 million, with $125,000 payable quarterly. The Company recorded $0.1 million in research and development expense under this agreement for each of the three months ended March 31, 2020 and 2019. Such costs are includable as part of the Company's annual diligence obligations under the Regents License Agreement. The Regents License Agreement will expire upon the later of the expiration date of the longest-lived patent rights or the fifteenth anniversary of the first commercial sale of a licensed product.

The Regents may terminate the Regents License Agreement if: (i) a material breach by the Company is not cured within a reasonable time, (ii) the Company files a claim asserting the Regents licensed patent rights are invalid or unenforceable and (iii) the Company files for bankruptcy. The Company may terminate the agreement at any time upon at least 60 days' written notice.

University of Tennessee Research Foundation ("UTRF")

In July 2007, GTx and UTRF entered into a consolidated, amended and restated license agreement (the "SARM License Agreement"), pursuant to which the Company was granted exclusive worldwide rights in all existing selective androgen receptor modulator ("SARM") technologies owned or controlled by UTRF, including all improvements thereto, and exclusive rights to future SARM technology that may be developed by certain scientists at the University of Tennessee or subsequently licensed to UTRF under certain existing inter-institutional agreements with The Ohio State University. Under the SARM License Agreement, the Company is obligated to pay UTRF annual license maintenance fees, low single-digit royalties on net sales of products and mid-single-digit royalties on sublicense revenues. The amounts recorded as research and development expense for each of the three months ended March 31, 2020 and 2019 were not significant. On December 31, 2019, the Company provided UTRF notice of termination of the SARM License Agreement by and between the Company and UTRF, which termination was effective on March 31, 2020.

In March 2015, GTx and UTRF entered into a license agreement (the "SARD License Agreement") pursuant to which the Company was granted exclusive worldwide rights in all existing selective androgen receptor degrader ("SARD") technologies owned or controlled by UTRF, including all improvements thereto. Under the SARD License Agreement, the Company is obligated to employ active, diligent efforts to conduct preclinical research and development activities for the SARD program to advance one or more lead compounds into clinical development. The Company is also obligated to pay UTRF annual license maintenance fees, low single-digit royalties on net sales of products and additional royalties on sublicense revenues, depending on the state of development of a clinical product candidate at the time it is sublicensed. The Company recorded research and development expense under this agreement of $0.1 million and none for the three months ended March 31, 2020 and 2019, respectively. As of March 31, 2020, the Company believes it has met its obligations under the SARD License Agreement.

The California Institute for Regenerative Medicine ("CIRM") Award

In August 2017, CIRM awarded an $18.3 million grant to researchers at UC San Diego to advance the Company's Phase 1/2 clinical trial evaluating cirmtuzumab in combination with ibrutinib for the treatment of patients with B-cell lymphoid malignancies, including chronic lymphocytic leukemia and mantle cell lymphoma. The Company: (i) is conducting this study in collaboration with UC San Diego, (ii) estimates it will receive approximately $14.0 million in development milestones under research subaward agreements throughout the award project period, estimated to be from October 1, 2017 to March 31, 2022, (iii) is committed to certain co-funding requirements, (iv) received subaward payments of none and $1.3 million in three months ended March 31, 2020 and 2019, respectively, and (v) is required to provide UC San Diego progress and financial update reports throughout the award period. The subaward does not bear a royalty payment commitment, nor is the subaward otherwise

refundable. For the three months ended March 31, 2020 and 2019, the Company recorded revenue of $0.6 million and $0.5 million, respectively. Related qualifying subaward costs for the three months ended March 31, 2020 and 2019 were $1.3 million and $0.9 million, respectively. As of March 31, 2020, the Company believes it has met its obligations under the CIRM award and UC San Diego subawards.

In October 2017, CIRM awarded a $5.8 million grant to the researchers at the University of California San Diego School of Medicine ("UC San Diego") to develop a novel anti-cancer stem cell targeted therapy for patients with advanced solid and hematological malignancies. In connection with such CIRM award, the Company agreed to provide up to $1.0 million in contingency funds if required during the grant period. The Company recorded no research and development expense under such CIRM award for each of the three months ended March 31, 2020 and 2019.

Clinical Trial and Supply Agreement

In April 2018, the Company entered into a Clinical Trial and Supply Agreement with Pharmacyclics, LLC, an AbbVie Company ("Pharmacyclics") to supply ibrutinib for the Company's Phase 1/2 clinical trial evaluating cirmtuzumab in combination with ibrutinib, which agreement was amended in August 2019. Such agreement does not bear any upfront costs, inventory purchase costs, milestone or royalty payment commitments or other financial obligations.

License and Development Agreement with SPH USA, a Related Party

In November 2018, the Company entered into a License and Development Agreement ("LDA") with SPH USA for: (i) the territory of the People's Republic of China, Hong Kong, Macau, and Taiwan ("Greater China"), and (ii) rights to manufacture, develop, market, distribute and sell all of the Company's product candidates under the Georgetown License Agreement and the Regents License Agreement (exclusive to Greater China only). Under the LDA, SPH USA is solely responsible for: (a) all preclinical and clinical development activities required in order to obtain regulatory approval in Greater China for such product candidates, (b) any third-party license milestone or royalty payments owed under the Georgetown License Agreement and the Regents License Agreement, and (c) paying the Company a low single digit royalty on net sales in the territory.

The LDA will expire upon the expiration of the last royalty term for the last licensed product. The LDA may be terminated by: (i) SPH USA on a country by country or product by product basis with 180 days written notice, (ii) either party upon material breach that is not cured within 90 days, and (iii) either party in the event the other party declares insolvency or bankruptcy.

5. Stockholders' Equity

Convertible Preferred Stock

In connection with the Merger, all of the then outstanding shares of Private Oncternal's convertible preferred stock were converted into 8,148,268 shares of the Company's common stock. As of December 31, 2018, Private Oncternal's convertible preferred stock was classified as temporary equity on the accompanying condensed consolidated statement of convertible preferred stock and stockholders' equity (deficit) in accordance with authoritative guidance for the classification and measurement of potentially redeemable securities whose redemption is based upon certain change in control events outside of Private Oncternal's control, including liquidation, sale or transfer of control of Private Oncternal. Private Oncternal did not adjust the carrying values of the convertible preferred stock to the liquidation preferences of such shares because the occurrence of any such change of control event was not deemed probable.

Common Stock Warrants

In September, November and December 2017, Private Oncternal issued warrants to purchase of 371,624 shares of Series B-2 preferred stock, which converted into rights to purchase common stock of the Company at the Merger closing, at an exercise price of $6.13 per share. The warrants expire on various dates in September, November and December 2022. As of March 31, 2020, warrants to purchase 196 shares of common stock have been exercised.

On September 29, 2017, the Company completed a private placement transaction that included warrants to purchase an aggregate of 469,996 shares of the Company's common stock at an exercise price of $63.14 per share. The five-year warrants expire on September 29, 2022. As of March 31, 2020, no such warrants have been exercised.

After the Merger closing, the Company assessed whether the above warrants require accounting as liabilities and determined that the warrants meet the criteria to be classified in stockholders' equity.

Common Stock and Unvested Share Liability

Prior to the Merger, the Company issued restricted common stock subject to vesting and repurchase by the Company. For employee and non-employee awards, the issuance date fair value is recognized over the requisite service period of the award (usually the vesting period) on a straight-line basis. In addition, the Company has outstanding unvested shares related to the early exercise of stock options. The Company has the right, but not the obligation, to repurchase any unvested shares at the original purchase price upon any voluntary or involuntary termination. The consideration received in exchange for unvested shares is recorded as an unvested share liability on the accompanying condensed consolidated balance sheets and is reclassified into common stock and additional paid-in capital as the shares vest. At March 31, 2020 and December 31, 2019, the unvested share liability was $20,000 and $24,000, respectively.

A summary of the Company's unvested shares is as follows (in thousands):

	Number of Shares
Balance at December 31, 2019	35
Vested shares	(5)
Balance at March 31, 2020	30

Equity Incentive Plans

Contemporaneous with the Merger closing: (i) Private Oncternal's 2015 Equity Incentive Plan, as amended (the "2015 Plan") was assumed by the Company, and (ii) the Company adopted the 2019 Incentive Award Plan ("2019 Plan") under which the sum of: (a) 1,678,571 shares of common stock, (b) up to 275,579 shares of common stock which were subject to outstanding awards under the GTx 2013 Equity Incentive Plan (the "2013 Plan") as of June 7, 2019, that are subsequently cancelled will become available for issuance under the 2019 Plan, and (c) an annual increase on the first day of each calendar year beginning January 1, 2020, and ending on and including January 1, 2029, equal to the lesser of (A) 5% of the aggregate number of shares of common stock outstanding on the final day of the immediately preceding calendar year and (B) such smaller number of shares of common stock as is determined by the Board, are reserved for issuance. At March 31, 2020, 1,041,413 shares remain available for future issuance under the 2019 Plan.

As of March 31, 2020, under the 2013 Plan, there were: (i) 190,339 outstanding and fully vested options, and (ii) 85,240 cancelled options from the 2013 Plan that were added back to the 2019 Plan. As of March 31, 2020, the former GTx stock option plans had an aggregate of 225,498 outstanding and fully vested and exercisable options with a weighted average exercise price of $72.99 and a weighted average remaining contractual term of 0.7 years.

In July 2015, Private Oncternal adopted the 2015 Plan which provided for the issuance of up to 631,120 shares of common stock for incentive stock options, non-statutory stock options, restricted stock awards, restricted stock unit awards and other stock awards to its employees, members of its board of directors and consultants. In general, the options issued under the 2015 Plan expire ten years from the date of grant and vest over a four-year period. Certain grants vest based on the achievement of development or regulatory milestones. The 2015 Plan was terminated as to new grants in June 2019. The 2015 Plan allowed for the early exercise of all stock option grants if authorized by the board of directors at the time of grant. The Company has the option to repurchase any unvested shares at the original purchase price upon any voluntary or involuntary termination.

A summary of the Company's stock option activity under the 2019 Plan and 2015 Plan is as follows:

	Number of Options	Weighted-Average Exercise Price
Balance at December 31, 2019	1,662,253	$ 4.17
Granted	291,760	$ 3.56
Cancelled	(6,170)	$ 2.82
Exercised	(5,135)	$ 0.77
Balance at March 31, 2020	1,942,708	$ 4.09

The aggregate intrinsic value of stock options exercised during the three months ended March 31, 2020 was not material. The intrinsic value is calculated as the difference between the fair value of the Company's common stock at the time of the option exercise and the exercise price of that stock option.

Stock-Based Compensation Expense

The weighted-average assumptions used in the Black-Scholes option pricing model to determine the fair value of stock option grants, for the three months ended March 31, 2020, were as follows:

Risk-free interest rate	1.0%
Expected volatility	89.4%
Expected term (in years)	5.4
Expected dividend yield	—%

There were no stock options granted during the three months ended March 31, 2019.

Expected volatility. Prior to the Merger, Private Oncternal did not have a trading history for its common stock. Accordingly, the expected volatility assumption is based on volatilities of a peer group of similar companies whose share prices are publicly available. The peer group was developed based on companies in the life sciences industry. The Company will continue to apply this process until a sufficient amount of historical information regarding the volatility of its own stock price becomes available.

Expected term. The expected term represents the period of time that options are expected to be outstanding. Because Private Oncternal did not have historical exercise behavior, it determined the expected life assumption using the simplified method, which is an average of the contractual term of the option and its vesting period.

Risk-free interest rate. The risk-free interest rate is based on the implied yield on the U.S. Treasury securities with a maturity date similar to the expected term of the associated stock option award.

Expected dividend yield. The Company bases the expected dividend yield assumption on the fact that it has never paid cash dividends and has no present intention to pay cash dividends and, therefore, used an expected dividend yield of zero.

Stock-based compensation expense recognized for all equity awards has been reported in the statements of operations as follows (in thousands):

	Three Months Ended March 31,	
	2020	2019
Research and development	$ 139	$ 25
General and administrative	260	14
	$ 399	$ 39

As of March 31,2020, the total compensation cost related to non-vested awards not yet recognized and the weighted-average period over which it is expected to be recognized was $4.0 million and 3.2 years, respectively.

Common Stock Reserved for Future Issuance

Common stock reserved for future issuance is as follows (in thousands):

	March 31, 2020
Common stock warrants	841
Common stock options issued and outstanding	2,168
Common stock available for issuance under the 2019 Plan	1,041
	4,050

6. COVID-19 Pandemic and CARES Act

A novel strain of coronavirus (SAR-CoV-2) causing a severe respiratory disease, or COVID-19, was declared a global pandemic by the World Health Organization in March 2020. COVID-19 has presented substantial public health and economic challenges and is affecting economies, financial markets and business operations around the world. International and U.S. governmental authorities in impacted regions are taking action in an effort to slow the spread of COVID-19, including issuing varying forms of "stay-at-home" orders, and restricting business functions outside of one's home. In response, the Company has put restrictions on employee travel and working from its executive offices with many employees continuing their work remotely. While the Company is currently continuing the clinical trials it has underway in sites across the U.S., the Company expects that COVID-19 precautions may directly or indirectly impact the timeline for some of its clinical trials. For example, some of its clinical trial sites, including those located in areas severely impacted by the pandemic, have placed new patient enrollment into clinical trials on hold or, for patients travelling from out-of-state, have implemented a 14-day self-quarantine before appointments. The Company considered the impacts of COVID-19 on the assumptions and estimates used to prepare its financial statements and determined that there were no material adverse impacts on the Company's results of operations and financial position at March 31, 2020. The full extent to which the COVID-19 pandemic will directly or indirectly impact the Company's business, results of operations and financial condition, will depend on future developments that are highly uncertain, including as a result of new information that may emerge concerning COVID-19 and the actions taken to contain or treat it, as well as the economic impact on local, regional, national and international markets.

In response to the COVID-19 pandemic, the Coronavirus Aid, Relief and Economic Security Act, or CARES Act, was signed into law on March 27, 2020. The CARES Act, among other things, includes tax provisions relating to refundable payroll tax credits, deferment of employer's social security payments, net operating loss utilization and carryback periods, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property (QIP). The CARES Act had no material impact on the Company's income tax provision for the three months ended March 31, 2020. The Company continues to evaluate the impact of the CARES Act on its financial position, results of operations and cash flows.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with (i) our unaudited condensed consolidated financial statements and related notes thereto included elsewhere in this Quarterly Report on Form 10-Q for the period ended March 31, 2020 (ii) our audited financial statements and notes thereto for the year ended December 31, 2019 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in in our 2019 Annual Report on Form 10-K for the year ended December 31, 2019 and (iii) the unaudited condensed consolidated financial statements and related notes thereto for the period ended March 31, 2019 of privately-held Oncternal Therapeutics, Inc. ("Private Oncternal") prior to the merger (the "Merger") pursuant to the Agreement and Plan of Merger by and between us (doing business as GTx, Inc.), Grizzly Merger Sub, Inc. ("Merger Sub") and Private Oncternal pursuant which Merger Sub merged with and into Private Oncternal, with Private Oncternal surviving as our wholly-owned subsidiary. References to the Company's operating results prior to the Merger will refer to the operating results of Private Oncternal. Except as otherwise indicated herein or as the context otherwise requires, references in this Quarterly Report to "Oncternal" "the Company," "we," "us" and "our" refer to Oncternal Therapeutics, Inc., a Delaware corporation, on a post-Merger basis, and the term "Private Oncternal" refers to the business of privately-held Oncternal Therapeutics, Inc. prior to completion of the Merger.

Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements other than statements of historical facts contained in this Quarterly Report, including statements regarding our future results of operations and financial position, business strategies and plans, prospective products, product approvals, research and development costs, the expected impact of COVID-19, timing and likelihood of success, plans and objectives of management for future operations and future results of anticipated products, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "could," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology. These forward-looking statements are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this Quarterly Report and are subject to a number of risks, uncertainties and assumptions, including those described in our Annual Report on Form 10-K, filed with the SEC on March 16, 2020, and in Part II, Item 1A, "Risk Factors" of this Quarterly Report. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

Overview

We are a clinical-stage biopharmaceutical company focused on the development of novel oncology therapies for cancers with critical unmet medical need. Our development efforts are focused on promising, yet untapped, biological pathways implicated in cancer generation or progression. Our pipeline includes cirmtuzumab, an investigational monoclonal antibody that is designed to inhibit Receptor tyrosine kinase-like Orphan Receptor 1, or ROR1, a growth factor receptor that is widely expressed on many tumors and that activates pathways leading to increased tumor proliferation, invasiveness and drug resistance. Cirmtuzumab is being evaluated in a Phase 1/2 clinical trial in combination with ibrutinib (Imbruvica®) for the treatment of patients with B-cell lymphoid malignancies, including MCL and CLL and in an investigator-sponsored, Phase 1 clinical trial in combination with paclitaxel for the treatment of women with HER2-negative metastatic or locally advanced, unresectable breast cancer. We are also developing TK216, an investigational small molecule that is designed to inhibit the ETS, or E26 Transformation Specific, family of oncoproteins, which have been shown in preclinical studies to alter gene transcription and RNA processing and lead to increased cell proliferation and invasion. TK216 is being evaluated in a Phase 1 clinical trial as a single agent and in combination with vincristine in patients with relapsed or refractory Ewing sarcoma, a rare pediatric cancer. In addition, we are developing a chimeric antigen receptor T cell, or CAR-T, therapy candidate that targets ROR1, which is currently in preclinical development as a potential treatment for hematologic cancers and solid tumors.

Since Private Oncternal's inception in 2013, we have devoted most of our resources to organizing and staffing, business planning, raising capital, acquiring product candidates and securing related intellectual property rights and advancing our cirmtuzumab and TK216 clinical development programs. Under research subaward agreements between us and the University of California San Diego, or UC San Diego, we are eligible to receive approximately $14.0 million in development milestones throughout the award project period, estimated to be from October 1, 2017 to March 31, 2022. Through March 31, 2020, we have funded our operations primarily through: (i) gross proceeds of $49.0 million from the issuance of stock, (ii) receipt of $10.3 million in subaward grant payments received from UC San Diego, and (iii) cash proceeds of $18.3 million received in connection with the closing of the Merger described below. As of March 31, 2020, we had cash and cash equivalents of $16.0 million.

We have incurred net losses in each year since inception. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of one or more of our current or future product candidates. Our net loss was $4.7 million for the three months ended March 31, 2020. As of March 31, 2020, we had an accumulated deficit of $70.3 million. Substantially all of our net losses have resulted from costs incurred in connection with: (i) advancing our research and development programs, (ii) general and administrative costs associated with our operations, including the costs associated with operating as a public company, and (iii) in-process research and development costs associated with the Merger. We expect to continue to incur significant and increasing operating losses for at least the next several years. We expect that our expenses and capital funding requirements will increase substantially in connection with our ongoing activities, particularly if and as we:

- generate clinical proof-of-concept data with TK216 in Ewing sarcoma, an orphan pediatric cancer indication;
- advance cirmtuzumab through clinical development, initially in MCL, CLL and breast cancer;
- advance our ROR1-targeting CAR-T therapy candidate to clinical testing, initially in hematological cancers and then in solid tumors;
- respond to the impacts of the COVID-19 pandemic, which has slowed enrollment into our clinical trials;
- evaluate cirmtuzumab in additional ROR1-positive solid tumors;
- evaluate TK216 in additional tumors with ETS fusion proteins or overexpression;
- continue to develop additional product candidates;
- acquire or in-license other product candidates and technologies;
- maintain, expand and protect our intellectual property portfolio;
- establish a commercial manufacturing source and secure supply chain capacity sufficient to provide commercial quantities of any product candidates for which we may obtain regulatory approval;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain regulatory approval; and
- add operational, financial and management information systems and personnel, including personnel to support our planned product development and future commercialization efforts, as well as to support our transition to a public reporting company.

We will not generate product sales revenue unless and until we successfully complete clinical development and obtain regulatory approval for our product candidates. If we obtain regulatory approval for any of our product candidates and do not enter into a commercialization partnership, we expect to incur significant expenses related to developing our internal commercialization capability to support product sales, marketing and distribution. In addition, we expect to incur additional costs associated with operating as a public company.

As a result, we believe we will need substantial additional funding to support our continuing operations and pursue our business strategy. Until such time as we can generate significant product sales revenue, if ever, we expect to finance our operations through a combination of equity offerings, debt financings, government funding, or other sources, including potentially collaborations, licenses and other similar arrangements. We may not be able to raise additional funds or enter into such other agreements or arrangements when needed on favorable terms, or at all. If we fail to raise capital or enter into such agreements as and when needed, we may have to significantly delay, reduce or eliminate the development and commercialization of one or more of our product candidates or delay our pursuit of potential in-licenses or acquisitions.

Because of the numerous risks and uncertainties associated with product development, we are unable to predict the timing or amount of increased expenses or when or if we will be able to achieve or maintain profitability. Even if we are able to generate product sales, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce or terminate our operations.

We expect that our existing cash and cash equivalents will be sufficient to fund our operating expenses and capital expenditure requirements into the fourth quarter of 2020. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. See "*Liquidity and Going Concern*." Beyond that point, we will need to raise additional capital to finance our operations, which cannot be assured. We have concluded that this circumstance raises substantial doubt about our ability to continue as a going concern within one year after May 7, 2020, the issuance date of our quarterly condensed consolidated financial statements as of March 31, 2020. See Note 1 of our condensed consolidated financial statements and the related notes and other financial information included elsewhere in this Quarterly Report.

Similarly, in our report on our financial statements for the year ended December 31, 2019, our independent registered public accounting firm included an explanatory paragraph stating that our recurring losses from operations and required additional funding to finance our operations raise substantial doubt about our ability to continue as a going concern.

Business Update Regarding COVID-19

The current COVID-19 worldwide pandemic has presented substantial public health and economic challenges and is affecting economies, financial markets and business operations around the world. International and U.S. governmental authorities in impacted regions are taking action in an effort to slow the spread of COVID-19, including issuing varying forms of "stay-at-home" orders, and restricting business functions outside of one's home. In response, we have put restrictions on employee travel and working from our executive offices with many employees continuing their work remotely. To date, we have been able to continue to supply cirmtuzumab and TK216 clinical trial sites for patients currently enrolled in our ongoing clinical trials and do not currently anticipate any interruptions in the supply of cirmtuzumab or TK216. While we are currently continuing the clinical trials we have underway in sites across the U.S., we expect that COVID-19 precautions may directly or indirectly impact the timeline for some of our clinical trials. For example, some of our clinical trial sites, including those located in areas severely impacted by the pandemic, have placed new patient enrollment into clinical trials on hold or, for patients travelling from out-of-state, have implemented a 14-day self-quarantine before appointments. For our existing patients, we are actively working with all of our clinical trial sites to minimize disruptions and address concerns on an individual site or patient basis in order to allow participating patients to continue to receive treatment at home or in alternate healthcare settings while minimizing their potential exposure to the virus that causes COVID-19. Although we believe that we remain on track to meet our announced clinical trial milestones, if restrictions related to the COVID-19 outbreak continue for a prolonged period of time or if additional clinical trial sites pause patient enrollment or treatments, our clinical trial milestones would be negatively impacted. Additionally, our expectations for the timing of first-in-human dosing of our ROR1 CAR-T therapy in China has been delayed. Any delays in the completion of our clinical trials and any disruption in our supply chain could have a material adverse effect on our business, results of operations and financial condition. 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, including as a result of new information that may emerge concerning COVID-19 and the actions taken to contain or treat it, as well as the economic impact on local, regional, national and international markets.

Components of Results of Operations

Grant Revenue

We have not and do not expect to generate any product sales revenue in the foreseeable future. If our development efforts for our product candidates are successful and result in regulatory approval, we may generate product sales revenue in the future. We cannot predict if, when, or to what extent we will generate revenue from the commercialization and sale of our product candidates. We may never succeed in obtaining regulatory approval for any of our product candidates. Our total revenue to date has been derived from a California Institute for Regenerative Medicine ("CIRM") grant subaward with UC San Diego.

In August 2017, CIRM awarded an $18.3 million grant to researchers at UC San Diego to advance our Phase 1/2 clinical trial evaluating cirmtuzumab in combination with ibrutinib for the treatment of patients with B-cell lymphoid malignancies, including MCL and CLL. Oncternal is conducting this study in collaboration with UC San Diego and estimates it will receive approximately $14.0 million in development milestones under research subaward agreements throughout the award project period, estimated to be from October 1, 2017, to March 31, 2022. In addition, we are committed to certain co-funding requirements and are required to provide UC San Diego progress and financial update reports throughout the award project period. We received subaward payments of none and $1.3 million in the three months ended March 31, 2020 and 2019, respectively. As of March 31, 2020, we believe we have met our obligations under the CIRM award and UC San Diego subawards.

Operating Expenses

Research and Development

Research and development expenses consist primarily of costs incurred for the preclinical and clinical development of our lead product candidate, cirmtuzumab, as well as TK216, which include:

- expenses under agreements with third-party contract organizations, investigative clinical trial sites that conduct research and development activities on our behalf, and consultants;
- costs related to develop and manufacture preclinical study and clinical trial material;
- salaries and employee-related costs, including stock-based compensation;
- costs incurred under our collaboration and third-party licensing agreements; and
- laboratory and vendor expenses related to the execution of preclinical and clinical trials.

We accrue all research and development costs in the period for which they are incurred. Costs for certain development activities are recognized based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors, collaborators and third-party service providers. Advance payments for goods or services to be received in future periods for use in research and development activities are deferred and then expensed as the related goods are delivered and as services are performed. Any unearned advances would be refunded when known.

We expect our research and development expenses to increase substantially for the foreseeable future as we: (i) invest in additional operational personnel to support our planned product development efforts, and (ii) continue to invest in developing our product candidates preclinically, advance them into later stages of clinical development, and as we begin to conduct larger clinical trials. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials.

Our direct research and development expenses are tracked by product candidate and consist primarily of external costs, such as fees paid under third-party license agreements and to outside consultants, contract research organizations, or CRO, contract manufacturing organizations and research laboratories in connection with our preclinical development, process development, manufacturing and clinical development activities. We do not allocate employee costs and costs associated with our discovery efforts, laboratory supplies and facilities, including other indirect costs, to specific product candidates because these costs are deployed across multiple programs and, as such, are not separately classified. We use internal resources primarily to conduct our research as well as for managing our preclinical development, process development, manufacturing and clinical development activities. These employees work across multiple programs and, therefore, we do not track our costs by product candidate unless we can include them as subaward costs.

We cannot determine with certainty the timing of initiation, the duration or the completion costs of current or future preclinical studies and clinical trials of our product candidates due to the inherently unpredictable nature of preclinical and clinical development, including any potential expanded dosing beyond the original protocols based in part on ongoing clinical success. Clinical and preclinical development timelines, the probability of success and development costs can differ materially from expectations. We anticipate that we will make determinations as to which product candidates to pursue and how much funding to direct to each product candidate on an ongoing basis in response to the results of ongoing and future preclinical studies and clinical trials, regulatory developments and our ongoing assessments of each product candidate’s commercial potential. We will need to raise substantial additional capital in the future. In addition, we cannot forecast which product candidates may be subject to future collaborations, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

General and Administrative

General and administrative expenses consist primarily of personnel-related costs, insurance costs, facility costs and professional fees for legal, patent, consulting, investor and public relations, accounting and audit services. Personnel-related costs consist of salaries, benefits and stock-based compensation. We expect our general and administrative expenses will increase substantially as we: (i) incur additional costs associated with being a public company, including audit, legal, regulatory, and tax-related services associated with maintaining compliance with exchange listing and SEC requirements, director and officer insurance premiums, and investor relations costs, (ii) hire additional personnel, and (iii) protect our intellectual property.

Other Income

Change in Fair Value of Preferred Stock Warrant Liability

In connection with Private Oncternal’s Series B-2 preferred stock financing in 2017, Private Oncternal issued warrants to purchase shares of its Series B-2 preferred stock. We classified these warrants as a liability on our condensed consolidated balance

sheets through the Merger date of June 7, 2019, remeasured them to fair value at each reporting date, and recognized changes in the fair value of the warrant liability as a component of other income, net in our condensed consolidated statements of operations.

Upon the closing of the Merger, all outstanding warrants to purchase Private Oncternal Series B-2 preferred stock were converted into warrants to purchase our common stock. As a result, such warrants no longer require liability accounting and the fair value of the warrant liability has been reclassified to stockholders' equity.

Interest Income

Interest income consists of interest earned on our cash equivalents, which consist of money market funds. Our interest income has not been significant due to low interest earned on invested balances.

Results of Operations

Comparison of Three Months Ended March 31, 2020 and 2019

The following table summarizes our results of operations for the three months ended March 31, 2020 and 2019 (in thousands):

	Three Months Ended March 31,		
	2020	2019	Change
Grant revenue	$ 578	$ 470	$ 108
Operating expenses:			
Research and development	2,696	1,896	800
General and administrative	2,633	932	1,701
Total operating expenses	5,329	2,828	2,501
Loss from operations	(4,751)	(2,358)	(2,393)
Other income:			
Change in fair value of warrant liability	—	17	(17)
Interest income	13	47	(34)
Total other income	13	64	(51)
Net loss	$ (4,738)	$ (2,294)	$ (2,444)

Grant Revenue

Grant revenue for the three months ended March 31, 2020, was $0.6 million, compared to $0.5 million for the three months ended March 31, 2019. The increase was driven by higher research and development subaward related costs in 2020 as compared to 2019.

Research and Development Expenses

The following table summarizes our research and development expenses for the periods indicated (in thousands):

	Three Months Ended March 31,		Increase/
	2020	2019	(Decrease)
Cirmtuzumab	$ 1,360	$ 1,366	$ (6)
TK216	350	272	78
Unallocated expenses	986	258	728
Total research and development expenses	$ 2,696	$ 1,896	$ 800

Research and development expenses for the three months ended March 31, 2020 and 2019, were $2.7 million and $1.9 million, respectively, an increase of $0.8 million. The increase was due to a $0.7 million increase in unallocated expenses and a $0.1 million increase in direct product candidate costs.

Direct expenses for cirmtuzumab were $1.4 million for each of the three months ended March 31, 2020 and 2019, primarily due to the following offsetting factors: (i) a $0.3 million increase in clinical trial activities related to our ongoing Phase 1/2 clinical trial of cirmtuzumab in combination with ibrutinib for the treatment of patients with B-cell lymphoid malignancies, including MCL and CLL, and (ii) a $0.3 million decrease in milestone and licensing fees incurred.

Direct expenses for TK216 increased $0.1 million for the three months ended March 31, 2020, compared to the three months ended March 31, 2019, due to a $0.1 million increase in clinical trial costs related to our ongoing Phase 1 clinical trial of TK216 in relapsed/refractory Ewing sarcoma.

Unallocated expenses increased $0.7 million for the three months ended March 31, 2020, compared to the three months ended March 31, 2019, primarily due to higher personnel costs.

General and Administrative Expenses

General and administrative expenses for the three months ended March 31, 2020 and 2019, were $2.6 million and $0.9 million, respectively, an increase of $1.7 million. The increase is primarily due to: (i) personnel and related costs and professional fees of $1.0 million, (ii) legal fees of $0.3 million incurred to expand our intellectual property portfolios and for additional services incurred as a public company, (iii) director and officer liability insurance costs of $0.3 million, and (iv) other expenses to operate as a publicly-traded company of $0.1 million.

Other Income

Other income was $13,000 and $64,000 for the three months ended March 31, 2020 and 2019, respectively.

Liquidity and Going Concern

From our inception through March 31, 2020, we have devoted substantially all of our efforts to organizational activities including raising capital, building infrastructure, acquiring assets, developing intellectual property, and conducting preclinical studies, clinical trials and product development activities. We have a limited operating history and the sales and income potential of our business and market are unproven. We have experienced recurring net losses and negative cash flows from operating activities. At March 31, 2020, we had an accumulated deficit of $70.3 million and had cash and cash equivalents of $16.0 million. We will need to continue to raise a substantial amount of funds until we are able to generate revenues to fund our development and operating activities.

We expect to continue to incur net losses into the foreseeable future. Successful transition to attaining profitable operations is dependent upon achieving a level of revenues adequate to support our cost structure. We have incurred net losses since inception and have relied on our ability to fund our operations through debt and equity financings and grant funding. These conditions raise substantial doubt about our ability to continue as a going concern. The accompanying condensed consolidated financial statements have been prepared assuming that we will continue as a going concern and do not include any adjustments that might result from the outcome of this uncertainty. This basis of accounting contemplates the recovery of our assets and the satisfaction of liabilities in the normal course of business.

We plan to continue to fund our losses from operations and capital funding needs through a combination of equity offerings, debt financings, government funding, or other sources, including potentially collaborations, licenses and other similar arrangements. There can be no assurance that we will be able to obtain any sources of financing on acceptable terms, or at all. To the extent that we can raise additional funds by issuing equity securities, our stockholders may experience significant dilution. Any debt financing, if available, may involve restrictive covenants that impact our ability to conduct our business.

In February 2018, we entered into the ATM Sales Agreement, pursuant to which we may offer and sell, from time to time, through Stifel, shares of our common stock having an aggregate offering price of up to $50.0 million, of which approximately $25.0 million was available for sale at March 31, 2020. We are not obligated to sell any shares under the ATM Sales Agreement. Subject to the terms and conditions of the sales agreement, Stifel will use commercially reasonable efforts, consistent with its normal trading and sales practices, applicable state and federal law, rules and regulations and the rules of the Nasdaq Capital Market, to sell shares from time to time based upon our instructions, including any price, time or size limits specified by us. Under the ATM Sales Agreement, Stifel may sell shares by any method deemed to be an "at-the-market" offering as defined in Rule 415 under the Securities Act of 1933, as amended, or any other method permitted by law, including in privately negotiated transactions. We will pay Stifel a commission of up to 3.0% of the aggregate gross proceeds from each sale of shares.

Under current SEC regulations, if at any time our public float is less than $75.0 million, and for so long as our public float remains less than $75.0 million, the amount we can raise through primary public offerings of securities in any twelve-month period using shelf registration statements is limited to an aggregate of one-third of our public float, which is referred to as the baby shelf rules. As of May 1, 2020, our public float calculated pursuant to the instructions set forth in Form S-3 was approximately $45.2 million, based on 11,805,643 shares of outstanding common stock held by non-affiliates at a price of $3.83 per share, which is the last reported sale price of our common stock on the Nasdaq Capital Market on March 11, 2020. As of May 1, 2020, we calculated our future capacity to issue up to approximately $15.1 million of additional shares of common stock pursuant to the ATM Sales Agreement. If our public float decreases, the amount of securities we may sell under our Form S-3 shelf registration statement will also decrease. Future sales under the ATM Sales Agreement, if any, will depend on a variety of factors including, but not limited to, prevailing market conditions, the trading price of our common stock and our capital needs. There can be no assurance that Stifel will be successful in consummating future sales based on prevailing market conditions or in the quantities or at the prices that we deem appropriate

Cash Flows

The following table summarizes our sources and uses of cash for each of the periods presented (in thousands):

	Three Months Ended March 31,	
	2020	2019
Net cash provided by (used in):		
Operating activities	$ (4,036)	$ (3,633)
Investing activities	-	(79)
Financing activities	4	2
Net decrease in cash and cash equivalents	$ (4,032)	$ (3,710)

Operating activities

During the three months ended March 31, 2020, net cash used in operating activities was $4.0 million, resulting from our net loss of $4.7 million, which included non-cash charges of $0.4 million related to stock-based compensation charges, and a $0.3 million change in our operating assets and liabilities. The $0.3 million change in operating assets and liabilities primarily consisted of a $0.6 million decrease in deferred revenue, and a $0.9 million increase in accounts payable and accrued expenses.

During the three months ended March 31, 2019, net cash used in operating activities was $3.6 million, resulting from our net loss of $2.3 million and a $1.3 million change in operating assets and liabilities. The $1.3 million change in operating assets and liabilities consisted of the following offsetting factors: (i) a $2.2 million decrease in accounts payable and accrued expenses, (ii) a $0.6 million increase in deferred revenue, and (iii) a $0.2 million increase in prepaid expenses and other assets.

Investing activities

Net cash used in investing activities was nominal for each of the three months ended March 31, 2020 and 2019.

Financing activities

Net cash provided by financing activities was nominal for each of the three months ended March 31, 2020 and 2019.

We expect that our existing cash and cash equivalents will be sufficient to fund our operations into the fourth quarter of 2020. However, our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect. Additionally, the process of testing product candidates in clinical trials is costly, and the timing of progress, potential dose expansions beyond our planned study protocols based in part on our clinical progress, and expenses in these trials is uncertain.

Our future capital requirements will depend on many factors, including:

- the type, number, scope, progress, expansions, results, costs and timing of, our preclinical studies and clinical trials of our product candidates which we are pursuing or may choose to pursue in the future;
- the costs incurred as a result of the COVID-19 pandemic, including clinical trial delays; the costs and timing of manufacturing for our product candidates, including commercial manufacturing if any product candidate is approved;

- the costs of obtaining ibrutinib, for which we currently obtain supply at no cost under our clinical supply agreement with Pharmacyclics LLC, and vincristine to conduct our clinical trials of cirmtuzumab and TK216, respectively;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs of obtaining, maintaining and enforcing our patents and other intellectual property rights;
- our efforts to enhance operational systems and hire additional personnel to satisfy our obligations as a public company, including enhanced internal controls over financial reporting;
- the costs associated with hiring additional personnel and consultants as our preclinical and clinical activities increase;
- the costs and timing of establishing or securing sales and marketing capabilities if any product candidate is approved;
- our ability to achieve sufficient market acceptance, adequate coverage and reimbursement from third-party payors and adequate market share and revenue for any approved products;
- the terms and timing of establishing and maintaining collaborations, licenses and other similar arrangements; and
- costs associated with any products or technologies that we may in-license or acquire.

Until such time, if ever, as we can generate substantial product revenues to support our cost structure, we expect to finance our losses from operations and capital funding needs through a combination of equity offerings, debt financings, government funding and other sources, including potentially collaborations, licenses and other similar arrangements. To the extent we raise additional capital through the sale of debt or equity securities, the ownership interest of our stockholders will be or could be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing and preferred equity 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 funds through collaborations, licenses and other similar 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 and/or may reduce the value of our common stock. If we are unable to raise additional funds through debt or equity financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market our product candidates even if we would otherwise prefer to develop and market such product candidates by ourselves. There can be no assurance that we will be able to obtain any sources of financing on acceptable terms, or at all.

Contractual Obligations and Commitments

We are party to a number of license agreements, pursuant to which we have payment obligations that are contingent upon future events such as our achievement of specified development, regulatory and commercial milestones and are required to make royalty payments in connection with the sale of products developed under those agreements. As of March 31, 2020, we were unable to estimate the timing or likelihood of achieving the milestones or making future product sales. See Note 4 to our condensed consolidated financial statements included elsewhere in this Quarterly Report for a description of these agreements.

We enter into contracts in the normal course of business with clinical trial sites and clinical supply manufacturers and with vendors for preclinical studies, research supplies and other services and products for operating purposes. These contracts generally provide for termination after a notice period.

Government Contracts, Grant Agreements and Incentive Programs

The CIRM Award

In August 2017, CIRM awarded an $18.3 million grant to researchers at UC San Diego, to advance our Phase 1/2 clinical trial evaluating cirmtuzumab in combination with ibrutinib for the treatment of patients with B-cell lymphoid malignancies, including MCL and CLL. We: (i) are conducting this study in collaboration with UC San Diego, (ii) estimate we will receive approximately $14.0 million in development milestones under research subaward agreements throughout the award project period, estimated to be from October 1, 2017, to March 31, 2022, (iii) are committed to certain co-funding requirements, (iv) received subaward payments of none and $1.3 million for three months ended March 31, 2020 and 2019, respectively, and (v) are required to provide UC San Diego progress and financial update reports throughout the award project period. The subaward does not bear a royalty payment commitment, nor is the subaward otherwise refundable. For the three months ended March 31, 2020 and 2019, we recorded revenue of $0.6 million and $0.5 million, respectively. Related qualifying subaward costs during the three months ended March 31, 2020 and 2019 were $1.3 million and $0.9 million, respectively. As of March 31, 2020, we believe we have met our obligations under the CIRM award and UC San Diego subawards.

In October 2017, CIRM awarded a $5.8 million grant to the researchers at UC San Diego to develop a CAR-T as a novel anti-cancer stem cell targeted therapy for patients with advanced solid and hematological malignancies. In connection with such CIRM award, we agreed to provide up to $1.0 million in contingency funds if required during the grant period. We recorded no research and development expense under such CIRM award for the three months ended March 31, 2020 and 2019.

Critical Accounting Policies

Our management's discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States. The preparation of the financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported expenses incurred during the reporting periods.

Our estimates are based on our historical experience, trends and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We consider our critical accounting policies and estimates to be related to research and development expenses and accruals, the valuation of warrants to purchase convertible preferred stock (which did convert at the Merger closing), and revenue recognition. There have been no material changes to our critical accounting policies and estimates during the three months ended March 31, 2020 from those disclosed in "Oncternal's Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies," included in the Annual Report on Form 10-K.

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 RISKS

We are a smaller reporting company, as defined by Rule 12b-2 of the Exchange Act, and are not required to provide the information required under this item.

ITEM 4. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures" as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act that are designed to ensure that information required to be disclosed in the reports we file and submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, 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 judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, who serve as our principal executive officer and principal financial officer, respectively, has evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2020. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of such date.

Changes in Disclosure Controls and Procedures

There were no changes in our internal control over financial reporting during the three months ended March 31, 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.

Litigation Related to the Merger

Between April 10 and May 1, 2019, three putative class action lawsuits and one individual lawsuit were filed in the U.S. District Court for the District of Delaware (the "Delaware Actions"). In 2019, the Delaware Actions were voluntarily dismissed with prejudice. On April 11 and 23, 2019, two putative class actions were filed in the U.S. District Court for the Southern District of New York (the "New York Actions"). The New York Actions name as defendants us and our former board of directors. The New York Actions allege that defendants violated Sections 14(a) and 20(a) of the Exchange Act, as well as Rule 14a-9 promulgated thereunder, in connection with our filing of the Registration Statement in connection with the Merger. On September 16, 2019, plaintiffs in the New York Actions filed an amended complaint, alleging violations of Sections 14(a) and 20(a) of the Exchange Act related to the value GTx's stockholders received in the Merger. The amended complaint seeks damages and other unspecified relief. On January 10, 2020, the defendants filed their motion to dismiss the amended complaint, on January 31, 2020, the plaintiffs filed their opposition to defendants' motion to dismiss, and on February 14, 2020, the defendants filed a reply in support of their motion to dismiss. The defendants' motion to dismiss the New York Actions is pending. We believe that the New York Actions are without merit and intend to vigorously defend these actions. We cannot predict the outcome of or estimate the possible loss or range of loss from any of these matters.

Zappia vs. GTx Incorporated

On October 15, 2019, Joseph Zappia and Karen Zappia filed a lawsuit against us in the U.S. District Court for the District of Delaware. The complaint alleges that our former management (prior to the Merger) engaged in illegal insider trading and false, manipulative and deceptive practices in violation of Sections 10(b) (and Rule 10b-5 promulgated thereunder), with respect to the timing of the disclosure of failed clinical trial results of GTx's enobosarm product candidate in September 2018. The plaintiffs seek damages, interest, costs, attorneys' fees. We believe that this lawsuit is without merit and intend to vigorously defend this matter. We cannot predict the outcome of or estimate the possible loss or range of loss from this matter.

ITEM 1A. RISK FACTORS.

There have been no material changes to the risk factors included in "Item 1A. Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2019, other than and the changes to the risk factors below.

We will require substantial additional financing to achieve our goals, and a failure to obtain this necessary capital when needed and on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our product development programs, commercialization efforts or other operations.

The development of biopharmaceutical product candidates is capital-intensive. We expect our expenses to increase in connection with our ongoing activities, particularly as we conduct our ongoing and planned clinical trials of cirmtuzumab and TK216, continue research and development and initiate clinical trials of our other development programs and seek regulatory approval for our current product candidates and any future product candidates we may develop. In addition, as our product candidates progress through development and toward commercialization, we will need to make milestone payments to the licensors and other third parties from whom we have in-licensed or acquired our product candidates, including cirmtuzumab, TK216 and ROR1 CAR-T. If we obtain regulatory approval for any of our product candidates, we also expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. Because the outcome of any clinical trial or preclinical study is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of our product candidates. Furthermore, following the completion of the Merger, we have incurred additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

We have based our estimates on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. Our operating plans and other demands on our cash resources may change as a result of many factors currently unknown to us, and we may need to seek additional funds sooner than planned, through a combination of equity financings, debt financings, government funding or other capital sources, including potentially collaborations, licenses and other similar arrangements. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. Attempting to secure additional financing may divert our management from our day-to-day activities, which may adversely affect our ability to develop our product candidates.

Our future capital requirements will depend on many factors, including:

- the costs incurred as a result of the COVID-19 pandemic, including clinical trial delays;

- the type, number, scope, progress, expansions, results, costs and timing of, our clinical trials of cirmtuzumab and TK216, and preclinical studies or clinical trials of other product candidates that we may choose to pursue in the future;
- the costs and timing of manufacturing for our product candidates, including commercial manufacturing if any product candidate is approved;
- the costs of obtaining ibrutinib, for which we currently obtain supply at no cost under our clinical supply agreement with Pharmacyclics LLC, and vincristine to conduct our clinical trials of cirmtuzumab and TK216, respectively;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs of obtaining, maintaining and enforcing our patents and other intellectual property rights;
- our efforts to evaluate, develop or partner the SARD assets; our efforts to enhance operational systems and hire additional personnel to satisfy our obligations as a public company, including enhanced internal controls over financial reporting;
- the costs associated with hiring additional personnel and consultants as our clinical and other development activities increase;
- the timing and amount of the milestone or other payments we must make to the licensors and other third parties from whom we have in-licensed or acquired our product candidates or technology;
- the costs and timing of establishing or securing sales and marketing capabilities if any of our product candidates are approved;
- our ability to achieve sufficient market acceptance, coverage and adequate reimbursement from third-party payors and adequate market share and revenue for any approved products;
- the terms and timing of establishing and maintaining collaborations, licenses and other similar arrangements; and
- costs associated with any products or technologies that we may in-license or acquire.

Conducting clinical trials and preclinical studies is a time consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain regulatory approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of products that we do not expect to be commercially available for many years, if at all.

Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans.

For example, we entered into an At-the-Market Equity Offering^{SM} Sales Agreement, or the ATM Sales Agreement, with Stifel, Nicolaus & Company, Incorporated, or Stifel, under which we may, from time to time, sell shares of the our common stock, having an aggregate offering price of up to $50.0 million, of which approximately $25.0 million remains available at March 31, 2020. However, there can be no assurance that Stifel will be successful in consummating future sales based on prevailing market conditions or in the quantities or at prices that we deem appropriate. Furthermore, under current SEC regulations, at any time during which the aggregate market value of our common stock held by non-affiliates, or public float, is less than $75.0 million, the amount we can raise through primary public offerings of securities in any twelve-month period using shelf registration statements, including sales under the ATM Sales Agreement, is limited to an aggregate of one-third of our public float. As of May 1, 2020, our calculated public float was approximately $45.2 million, which would have yielded a capacity to issue up to approximately $15.1 million of shares of common stock pursuant to the ATM Sales Agreement. If our public float decreases in the future, the amount of securities we may sell under our Form S-3 shelf registration statement will also decrease. In addition, the ATM Sales Agreement may be terminated by us or Stifel at any time upon notice to the other party.

The COVID-19 outbreak may adversely impact our business.

The current COVID-19 worldwide pandemic has presented substantial public health and economic challenges and is affecting economies, financial markets and business operations around the world. International and U.S. governmental authorities in impacted regions are taking action in an effort to slow the spread of COVID-19, including issuing varying forms of “stay-at-home” orders, and restricting business functions outside of one’s home. In response, we have put restrictions on employee travel and working from our executive offices with many employees continuing their work remotely. In addition, while we are currently continuing the clinical trials we have underway in sites across the U.S., we expect that COVID-19 precautions may directly or indirectly impact the timeline for some of our clinical trials. For example, some of our clinical trial sites, including those located in areas severely impacted by the pandemic, have placed new patient enrollment into clinical trials on hold or, for patients traveling from out of state, have implemented

a 14-day self-quarantine before appointments. For our existing patients, we are actively working with all of our clinical trial sites to minimize disruptions and address concerns on an individual site or patient basis in order to allow participating patients to continue to receive treatment at home or in alternate healthcare settings while minimizing their potential exposure to the virus that causes COVID-19. Although we believe that we remain on track to meet our announced clinical trial milestones, if restrictions related to the COVID-19 outbreak continue for a prolonged period of time or if additional clinical trial sites pause patient enrollment or treatments, our clinical trial milestones would be negatively impacted. Additionally, our expectations for the timing of first-in-human dosing of our ROR1 CAR-T therapy in China has been delayed, due primarily to impacts resulting from the COVID-19 outbreak in China.

At the present time, we believe we have sufficient quantities of our cirmtuzumab and TK216 clinical trial materials to continue to treat patients in our clinical trials through at least the end of 2020. However, if our third-party manufacturers, including those located in China, experience additional manufacturing difficulties due to the COVID-19 outbreak or as a result of natural disasters, labor disputes, unstable political environments, or other public health emergencies, our ability to provide our product candidates to patients in clinical trials, or to provide product for treatment of patients if approved, would be jeopardized.

As the COVID-19 pandemic continues to spread around the globe, we may experience disruptions that could severely impact our business, clinical trials and manufacturing and supply chains, including:

- interruptions or delays in the operations of the FDA or other regulatory authorities, which may delay receiving feedback or approvals from the FDA or other regulatory authorities with respect to future clinical trials or regulatory submissions;
- further delays or difficulties in enrolling patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others or interruption of clinical trial subject visits and study procedures, which may impact the integrity of subject data and clinical study endpoints;
- limiting our ability to interact with our clinical trial investigators, present our data in person at scientific and investor conferences, develop and renew contracts due to travel limitations or cancellations of scientific or investor conferences;
- interruption of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems, including interruption of supply cirmtuzumab or TK216;
- delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials and interruption in global shipping that may affect the transport of clinical trial materials;
- limitations on employee resources that would otherwise be focused on the conduct of our clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- changes in local regulations as part of a response to COVID-19 which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or to discontinue the clinical trials altogether;
- delays in necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees; and
- difficulties launching or commercializing products, including due to reduced access to doctors as a result of social distancing protocols.

In addition, the spread of COVID-19 may have impacted, and may continue to impact, the trading price of shares of our common stock and could further severely impact our ability to raise additional capital on a timely basis, or at all, or enter into partnerships with pharmaceutical companies.

The COVID-19 pandemic continues to rapidly evolve. The extent to which the COVID-19 may impact our business, including our clinical trials, manufacturing and supply chains and financial condition will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the geographic spread of the disease, the duration of the pandemic, travel restrictions and social distancing in the U.S. and other countries, business closures or business disruptions and the effectiveness of actions taken in the U.S. and other countries to contain and treat the disease.

To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this section and in the “Risk Factors” section of our Annual Report on Form 10-K for the year ended December 31, 2019.

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

Unregistered Sales of Equity Securities

None.

Use of Proceeds

Not applicable.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

None.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

ITEM 5. OTHER INFORMATION.

Not applicable.

Item 6. Exhibits.

EXHIBIT INDEX

Exhibit Number	Description of Exhibit	Incorporated by Reference				Filed Herewith
		Form	File Number	Date of Filing	Exhibit Number	
3.1	Restated Certificate of Incorporation of the Registrant	S-3	333-127175	August 4, 2005	4.1	
3.2	Certificate of Amendment of Restated Certificate of Incorporation of the Registrant	8-K	000-50549	May 6, 2011	3.2	
3.3	Certificate of Amendment of Restated Certificate of Incorporation of the Registrant	8-K	000-50549	May 9, 2014	3.3	
3.4	Certificate of Amendment of Restated Certificate of Incorporation of the Registrant	10-Q	000-50549	May 11, 2015	3.4	
3.5	Certificate of Amendment of Restated Certificate of Incorporation of the Registrant	8-K	000-50549	December 5, 2016	3.1	
3.6	Certificate of Amendment of Restated Certificate of Incorporation of the Registrant	8-K	000-50549	June 10, 2019	3.1	
3.7	Certificate of Amendment of Restated Certificate of Incorporation of the Registrant	8-K	000-50549	June 10, 2019	3.2	
3.8	Amended and Restated Bylaws of the Registrant	8-K	000-50549	June 10, 2019	3.3	
4.1	Form of Amendment to Warrant to Purchase shares of Series B-2 Preferred Stock of Oncternal Therapeutics, Inc.	10-Q	000-50549	August 9, 2019	4.1	
4.2	Specimen of Common Stock Certificate	10-Q	000-50549	August 9, 2019	4.2	
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
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					X
32.2*	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X

101.LAB	XBRL Taxonomy Extension Label Linkbase Document	X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	X

* These certifications are being furnished solely to accompany this quarterly report pursuant to 18 U.S.C. Section 1350, and are not being filed for purposes of Section 18 of the Securities Exchange Act of 1934 and are not subject to the liability of that section. These certifications are not to be incorporated by reference into any filing of Oncternal Therapeutics, Inc., whether made before or after the date hereof, regardless of any general incorporation language in such filing.

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.

Company Name

Date: May 7, 2020

By: /s/ James B. Breitmeyer

Name: James B. Breitmeyer

Title: President and Chief Executive Officer

Date: May 7, 2020

By: /s/ Richard G. Vincent

Name: Richard G. Vincent

Title: Chief Financial Officer

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, James B. Breitmeyer, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Oncternal Therapeutics, 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 consolidated financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

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

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

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

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

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

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

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

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

/s/ James B. Breitmeyer
President and Chief Executive Officer
(Principal Executive Officer)

Dated: May 7, 2020

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Richard G. Vincent, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Oncternal Therapeutics, 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 consolidated financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

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

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

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

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

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

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

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

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

/s/ Richard G. Vincent
Chief Financial Officer
(Principal Financial Officer)

Dated: May 7, 2020

Exhibit 32.1

CERTIFICATION
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

In connection with the Quarterly Report on Form 10-Q of Oncternal Therapeutics, Inc. (the "Company") for the period ended March 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, James B. Breitmeyer, as Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my 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/ James B. Breitmeyer
President and Chief Executive Officer
(Principal Executive Officer)

Dated: May 7, 2020

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing. A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

In connection with the Quarterly Report on Form 10-Q of Oncternal Therapeutics, Inc. (the "Company") for the period ended March 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard G. Vincent, as Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my 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/ Richard G. Vincent
Chief Financial Officer
(Principal Financial Officer)

Dated: May 7, 2020

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing. A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.