UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2022

OR

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

For the transition period from _____ to _____

Commission File Number: 001-39575

ONCORUS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**47-3779757**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
50 Hampshire Street, Suite 401 Cambridge, Massachusetts	**02139**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (857) 320-6400

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	**ONCR**	**The Nasdaq Stock Market LLC**

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

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

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

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

As of July 29, 2022, the registrant had 25,973,135 shares of common stock, $0.0001 par value per share, outstanding.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts contained in this Quarterly Report on Form 10-Q, including statements regarding our future results of operations or financial condition, business strategy and plans, and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements because they contain words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “hope,” “intend,” “may,” “might,” “objective,” “ongoing,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will,” or “would” or the negative of these words or other similar terms or expressions. These forward-looking statements include, but are not limited to, statements concerning the following:

- the initiation, timing, progress and expected results of our preclinical studies and clinical trials for product candidates from our oncolytic HSV-1 platform, or HSV Platform, including our ongoing Phase 1 clinical trial of ONCR-177 and the reporting of additional clinical data from this trial;
- the initiation, timing, progress and expected results of our preclinical studies and planned clinical trials for product candidates from our selectively self-amplifying viral RNA immunotherapy platform, or vRNA Immunotherapy Platform, including ONCR-021 and ONCR-788;
- the potential therapeutic benefit of our therapies and their ability to improve upon existing immuno-oncology therapies, including other viral immunotherapies and immune checkpoint inhibitors;
- the ability of our HSV Platform to overcome the safety versus potency trade-off and its ability to stimulate multiple arms of the innate and adaptive immune system;
- the ability of our selectively self-amplifying vRNA Immunotherapy Platform to avoid the challenges associated with neutralizing antibodies;
- our manufacturing capabilities and the buildout of our good manufacturing practices, or GMP, compliant facility and related operational timelines, including the timeline associated with the relocation of our operations to this facility;
- the timing of certain regulatory milestones, including the submission of investigational new drug applications, or INDs, and our ability to receive the required regulatory approvals and clearances to successfully market and sell our products in the United States and certain other countries;
- impact of the COVID-19 pandemic on our business, operations, strategy, goals and anticipated timelines;
- our ability to fund our working capital requirements;
- our financial performance and our ability to effectively manage our anticipated growth; and
- the sufficiency of our existing funding and our ability to obtain additional funding for our operations.

These forward-looking statements are based on our management’s current expectations, estimates, forecasts and projections about our business and the industry in which we operate, and management’s beliefs and assumptions and are not guarantees of future performance or development. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described under the section titled “Risk Factors” under Part II, Item 1A, below and under "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2021, under Part II, Item 1A in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, and under similar captions in our periodic reports filed with the SEC from time to time. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Quarterly Report on Form 10-Q may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based on information available to us as of the date of this report. While we believe that information provides a reasonable basis for these statements, that information may be limited or incomplete. Our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all relevant information.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance, or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Quarterly Report on Form 10-Q to conform these statements to new information, actual results or changes in our expectations, except as required by law.

PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

ONCORUS, INC.
Condensed Consolidated Balance Sheets
(in thousands, except for par value data)
(unaudited)

	JUNE 30, 2022	DECEMBER 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 84,797	$ 100,752
Investments	15,442	23,173
Prepaid expenses and other current assets	2,525	5,185
Total current assets	102,764	129,110
Property and equipment, net	35,714	23,233
Right-of-use asset	39,673	45,218
Restricted cash	3,437	3,437
Other assets	952	589
Total assets	$ 182,540	$ 201,587
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 7,157	$ 13,009
Accrued expenses and other current liabilities	6,559	6,281
Lease liability - current portion	2,300	1,684
Total current liabilities	16,016	20,974
Term loan, non-current	19,078	—
Lease liability - net of current portion	49,269	50,388
Other long-term liabilities	169	203
Total liabilities	84,532	71,565
Stockholders' equity:		
Preferred stock, $0.0001 par value; authorized — 10,000 shares at June 30, 2022 and December 31, 2021; issued and outstanding — no shares at June 30, 2022 and December 31, 2021	—	—
Common stock, $0.0001 par value; authorized — 100,000 shares at June 30, 2022 and December 31, 2021; issued and outstanding — 25,972 and 25,848 shares at June 30, 2022 and December 31, 2021, respectively	3	3
Additional paid-in capital	329,504	324,620
Accumulated other comprehensive loss	(41)	(14)
Accumulated deficit	(231,458)	(194,587)
Total stockholders' equity	98,008	130,022
Total liabilities and stockholders' equity	$ 182,540	$ 201,587

The accompanying notes are an integral part of these interim condensed consolidated financial statements.

ONCORUS, INC.

Condensed Consolidated Statements of Operations and Comprehensive Loss
(in thousands, except per share data)
(unaudited)

	THREE MONTHS ENDED JUNE 30,		SIX MONTHS ENDED JUNE 30,	
	2022	2021	2022	2021
Operating expenses:				
Research and development	$ 12,480	$ 10,660	$ 24,949	$ 19,107
General and administrative	6,161	4,889	11,510	9,111
Total operating expenses	18,641	15,549	36,459	28,218
Loss from operations	(18,641)	(15,549)	(36,459)	(28,218)
Other income (expense):				
Other income (expense)	(33)	—	(71)	—
Interest income (expense)	(417)	21	(341)	27
Total other income (expense), net	(450)	21	(412)	27
Net loss	$ (19,091)	$ (15,528)	$ (36,871)	$ (28,191)
Comprehensive loss:				
Net unrealized loss on investments	(1)	—	$ (41)	$ —
Comprehensive loss	$ (19,092)	$ (15,528)	$ (36,912)	$ (28,191)
Net loss per share—basic and diluted	$ (0.74)	$ (0.60)	$ (1.43)	$ (1.13)
Weighted-average number of common shares outstanding—basic and diluted	25,883	25,684	25,874	24,851

The accompanying notes are an integral part of these interim condensed consolidated financial statements.

ONCORUS, INC.

Condensed Consolidated Statements of Stockholders' Equity
(in thousands, except share amounts)
(unaudited)

	COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED OTHER COMPREHENSIVE LOSS	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' EQUITY
	SHARES	AMOUNT				
Balance at December 31, 2020	**22,599,048**	**$ 2**	**$ 264,487**	**$ —**	**$ (129,825)**	**$ 134,664**
Proceeds from issuance of common stock, net of issuance costs of $4,017	3,000,000	—	52,983	—	—	52,983
Stock-based compensation expense	—	—	1,172	—	—	1,172
Vesting of restricted common stock	5,171	—	—	—	—	—
Exercise of stock options to purchase common stock	22,470	—	98	—	—	98
Net loss	—	—	—	—	(12,663)	(12,663)
Balance at March 31, 2021	**25,626,689**	**$ 3**	**$ 318,740**	**$ —**	**$ (142,488)**	**$ 176,255**
Stock-based compensation expense	—	—	1,656	—	—	1,656
Vesting of restricted common stock	5,170	—	—	—	—	—
Exercise of stock options to purchase common stock	109,213	—	249	—	—	249
Net loss	—	—	—	—	(15,528)	(15,528)
Balance at June 30, 2021	**25,741,072**	**$ 3**	**$ 320,645**	**$ —**	**$ (158,016)**	**$ 162,632**
Balance at December 31, 2021	**25,848,229**	**$ 3**	**$ 324,620**	**$ (14)**	**$ (194,587)**	**$ 130,022**
Stock-based compensation expense	—	—	1,980	—	—	1,980
Exercise of stock options to purchase common stock	34,967	—	62	—	—	62
Other comprehensive loss	—	—	—	(26)	—	(26)
Net loss	—	—	—	—	(17,780)	(17,780)
Balance at March 31, 2022	**25,883,196**	**$ 3**	**$ 326,662**	**$ (40)**	**$ (212,367)**	**$ 114,258**
Stock-based compensation expense	—	—	2,180	—	—	2,180
Exercise of stock options to purchase common stock	103	—	—	—	—	—
Issuance of common stock under employee stock purchase plans	89,112	—	95	—	—	95
Issuance of warrants in connection with term loan financing	—	—	567	—	—	567
Other comprehensive loss	—	—	—	(1)	—	(1)
Net loss	—	—	—	—	(19,091)	(19,091)
Balance at June 30, 2022	**25,972,411**	**$ 3**	**$ 329,504**	**$ (41)**	**$ (231,458)**	**$ 98,008**

The accompanying notes are an integral part of these interim condensed consolidated financial statements.

ONCORUS, INC.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	SIX MONTHS ENDED JUNE 30,	
	2022	2021
Operating activities:		
Net loss	$ (36,871)	$ (28,191)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,143	817
Loss on disposal of assets	15	—
Stock-based compensation	4,160	2,828
Non-cash interest expense related to term loan	178	—
Amortization of premium/discount on investments	69	—
Non-cash interest income	(42)	—
Changes in:		
Prepaid expenses and other assets	2,283	151
Operating lease right-of-use asset	1,034	1,354
Tenant improvement allowance reimbursements	4,511	—
Accounts payable	(11,142)	676
Accrued expenses and other current liabilities	(1,528)	116
Operating lease liability	(504)	711
Net cash used in operating activities	(36,694)	(21,538)
Investing activities		
Purchase of property and equipment	(6,561)	(2,177)
Proceeds from sales and maturities of investments	7,676	—
Net cash provided by (used in) investing activities	1,115	(2,177)
Financing activities		
Proceeds from exercise of stock options to purchase common stock	62	347
Proceeds from purchases of common stock under employee stock purchase plan	95	—
Proceeds from borrowings under term loan, net of issuance costs	19,467	—
Proceeds from issuance of common stock, net of issuance costs	—	52,983
Net cash provided by financing activities	19,624	53,330
Increase (decrease) in cash and cash equivalents	(15,955)	29,615
Cash, cash equivalents and restricted cash at beginning of period	104,189	133,182
Cash, cash equivalents and restricted cash at end of period	$ 88,234	$ 162,797
Supplemental disclosure of non-cash investing and financing activities		
Issuance of warrants in connection with term loan financing	$ 567	$ —
Purchase of property and equipment in accrued expenses and accounts payable	$ 7,063	$ 3,878

The accompanying notes are an integral part of these interim condensed consolidated financial statements.

1. Nature of the Business and Liquidity

Oncorus, Inc. (the "Company") is a clinical-stage biopharmaceutical company focused on developing next-generation viral immunotherapies to transform outcomes for cancer patients. Using its two platforms, the Company is developing a pipeline of intratumorally and intravenously administered product candidates designed to selectively attack and kill tumor cells.

The Company's operations to date have focused on organization and staffing, business planning, raising capital, acquiring and developing the Company's technology, establishing the Company's intellectual property portfolio, identifying potential product candidates and undertaking preclinical studies, commencing a clinical trial and manufacturing scale-up activities. The Company does not have any product candidates approved for sale and has not generated any revenue from product sales. The Company's product candidates are subject to long development cycles and the Company may be unsuccessful in its efforts to develop, obtain regulatory approval for or market its product candidates.

On October 6, 2020, the Company completed an initial public offering ("IPO"), in which the Company issued and sold 5,800,000 shares of its common stock at a public offering price of $15.00 per share. On October 14, 2020, the Company sold an additional 757,991 shares of common stock at $15.00 per share pursuant to the underwriters' partial exercise of their option to purchase additional shares of common stock. The total gross proceeds from the IPO were $98.4 million and the Company raised $88.3 million in net proceeds after deducting underwriting discounts and commissions and offering expenses payable by the Company.

Upon the closing of the IPO, all of the outstanding shares of convertible preferred stock automatically converted into 14,951,554 shares of common stock at the applicable conversion ratio then in effect. Subsequent to the closing of the IPO, there were no shares of preferred stock outstanding.

In February 2021, the Company completed a follow-on public offering of its common stock in which it sold 3,000,000 shares at an offering price of $19.00 per share, resulting in gross proceeds of $57.0 million and net proceeds of $53.0 million, after deducting underwriting discounts and commissions and offering expenses payable by the Company.

In November 2021, the Company entered into an open market sale agreement pursuant to which the Company may issue and sell shares of its common stock from time to time for aggregate gross proceeds of up to $50.0 million. There have been no sales under this agreement as of June 30, 2022.

The Company is subject to risks and uncertainties common to early-stage companies in the biotechnology industry, including, but not limited to, possible failure of preclinical studies or clinical trials, the need to obtain marketing approval for its product candidates, development by competitors of new technological innovations, dependence on key personnel, protection of proprietary technology, compliance with government regulations, the need to successfully commercialize and gain market acceptance of any of the Company's products that are approved and the ability to secure additional capital to fund operations. Product candidates currently under development will require significant additional research and development efforts, including extensive preclinical and clinical testing, and regulatory approval prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel and infrastructure, and extensive compliance-reporting capabilities. Even if the Company's drug development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales. The Company expects to continue to incur losses from operations for the foreseeable future and additional capital will be required to fund future operations. The Company expects that its cash and cash equivalents as of June 30, 2022, will be sufficient to fund its operating expenses and capital expenditure requirements through at least the next 12 months from the date these financial statements were issued.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited interim condensed consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP"). Any reference in these notes to applicable guidance is meant to refer to authoritative United States generally accepted accounting principles as found in the Accounting Standards Codification ("ASC") and as amended by Accounting Standards Updates ("ASU") of the Financial Accounting Standards Board ("FASB").

In the opinion of management, the accompanying unaudited interim condensed consolidated financial statements include all normal and recurring adjustments (which consist primarily of accruals and estimates that impact the financial statements) which are considered necessary to present fairly the Company's financial position as of June 30, 2022, its results of operations for the three and

six months ended June 30, 2022 and 2021, its changes in stockholders' equity for the three and six months ended June 30, 2022 and 2021 and its cash flows for the six months ended June 30, 2022 and 2021.

The results of operations for the interim periods are not necessarily indicative of the results of operations to be expected for the full year. These unaudited interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements as of and for the year ended December 31, 2021, and the notes thereto, which are included in the Company's Annual Report on Form 10-K (the "Annual Report") filed with the Securities and Exchange Commission (the "SEC") on March 9, 2022. The condensed consolidated balance sheet data as of December 31, 2021 presented for comparative purposes was derived from the Company's audited consolidated financial statements but does not include all disclosures required by GAAP. The results for the three and six months ended June 30, 2022, are not necessarily indicative of the operating results to be expected for the full year or for any other subsequent interim period.

The Company's significant accounting policies are disclosed in the audited consolidated financial statements for the year ended December 31, 2021, included in its Annual Report. Any changes to the Company's significant accounting policies are further discussed below.

COVID-19 Pandemic

With the ongoing COVID-19 global pandemic, the Company has implemented business continuity plans designed to address and mitigate the impact of the COVID-19 pandemic on its employees and its business, including its preclinical studies, its ongoing clinical trial, and its regulatory filings. The Company has taken measures to secure its research and development activities, while work in its laboratories and facilities has been re-organized to reduce risks of COVID-19 transmission. Given the global impact and the other risks and uncertainties associated with the pandemic, the Company's business, financial condition and results of operations could be materially adversely affected. The Company continues to closely monitor the COVID-19 pandemic and evolve its business continuity plans, clinical development plans and response strategy to mitigate any potential impact. As of the date of issuance of these financial statements, the Company is not aware of any specific event or circumstance that would require the Company to update its estimates, assumptions and judgments or revise the carrying value of its assets or liabilities. Actual results could differ from those estimates, and any such differences may be material to the Company's financial statements.

Going Concern

At each reporting period, the Company evaluates whether there are conditions or events that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued. The Company is required to make certain additional disclosures if it concludes substantial doubt exists and it is not alleviated by the Company's plans or when its plans alleviate substantial doubt about the Company's ability to continue as a going concern.

Principles of Consolidation

The accompanying unaudited interim condensed consolidated financial statements of the Company include the accounts of its wholly owned subsidiary, Oncorus Securities Corporation. All intercompany transactions have been eliminated in consolidation. The Company has one operating segment.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. On an ongoing basis, the Company's management evaluates its estimates, which include, but are not limited to, the estimated fair value of the Company's common stock and share-based awards utilized for stock-based compensation purposes, accrued expenses, and amounts of expenses during the reported period. The Company bases its estimates on historical experience and other market-specific or other relevant assumptions that it believes to be reasonable under the circumstances. Actual results may differ from those estimates or assumptions.

Deferred Offering Costs

The Company capitalizes certain legal, professional, accounting and other third-party fees that are directly associated with in-process equity issuances or debt financings as deferred offering costs until such equity issuances or debt financings are consummated. After consummation, these costs are recorded as a reduction in the capitalized amount associated with the equity issuance or debt financing.

Debt Related Costs

The carrying value of the Company's Term Loan is recorded net of issuance costs and discount relating to the issuance of warrants and fees paid to the lender. Debt related costs are amortized over the term of the debt using the effective interest method and recognized as interest expense.

Warrants

In accordance with ASC Topic 470-20-25, when the Company issues debt with warrants, the Company treats the warrants as a debt discount, recorded as a contra-liability against the debt, and amortizes the balance over the life of the underlying debt as amortization of debt discount expense in the statements of operations. The offset to the contra-liability is recorded as additional paid-in capital in the Company's consolidated balance sheet if the warrants are not treated as a derivative or as liability warrants. The Company determines the fair value of the warrants at issuance using the Black-Scholes option pricing model.

Concentration of Credit Risk and of Significant Suppliers

Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents and short-term investments. The Company has all of its cash at one financial institution that management believes to be of high credit quality, in amounts that exceed federally insured limits. The Company invests its excess cash, in line with its investment policy, primarily in money market funds and high credit quality debt instruments.

The Company is dependent upon a third-party contract manufacturer and third-party contract research organizations for the performance of portions of its testing for pre-clinical and clinical studies. The Company believes that its relationships with these organizations are satisfactory, and that alternative suppliers of these services are available in the event of the loss of one or more of these suppliers.

Restricted Cash

The Company maintains a balance in a segregated bank account in connection with a letter of credit for the benefit of the landlord in connection with an operating lease. As of June 30, 2022, restricted cash consisted of $3.4 million held for the benefit of the landlord. This amount has been classified as part of non-current assets on the Company's unaudited interim condensed consolidated balance sheets.

The Company includes its restricted cash balance in the cash, cash equivalents and restricted cash reconciliation of operating, investing, and financing activities in the unaudited interim condensed consolidated statements of cash flows. The following table provides a reconciliation of cash, cash equivalents and restricted cash in the unaudited interim condensed consolidated balance sheets that sum to the total of the same such amounts shown in the unaudited interim condensed consolidated statements of cash flows:

	JUNE 30,	
	2022	2021
	(in thousands)	
Cash and cash equivalents	$ 84,797	$ 159,920
Restricted cash	3,437	2,877
Total cash, cash equivalents and restricted cash shown in the unaudited interim consolidated statements of cash flows	$ 88,234	$ 162,797

Investments

Short-term investments consist of commercial paper, corporate bonds, asset-backed securities, and U.S. treasury securities with original maturities greater than three months. The Company may sell investments at any time for use in current operations even if the investments have not yet reached maturity. As a result, the Company classifies its investments, including securities with maturities beyond twelve months, as current assets. As of June 30, 2022, all investments are classified as available-for-sale securities, which are recorded at fair value. Unrealized holding gains and losses on available-for-sale securities are reported as a net amount in accumulated other comprehensive income or loss in stockholders' equity until realized. Purchase premiums and discounts are amortized to interest income over the terms of the related securities. Realized gains and losses and declines in fair value that are deemed to be other than temporary are reflected in the statements of operations and comprehensive loss using the specific-identification method. The Company periodically reviews all available-for-sale securities for other than temporary declines in fair value below the cost basis whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The Company also evaluates whether it has plans or is required to sell short-term investments before recovery of their amortized cost bases. For the six months ended June 30, 2022, the Company has not identified any other than temporary declines in fair value of its short-term investments.

Fair Value Measurements

Certain assets and liabilities of the Company are carried at fair value under GAAP. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

Level 1—Valuations based on quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.

Level 2—Valuations based on quoted prices for similar assets or liabilities in markets that are not active or for which all significant inputs are observable, either directly or indirectly, such as quoted market prices, interest rates, and yield curves.

Level 3—Valuations that require inputs that reflect the Company's own assumptions that are both significant to the fair value measurement and unobservable.

To the extent a valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair values requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized as Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

The Company believes that the carrying amounts of prepaid expenses, other current assets, accounts payable, and accrued expenses approximate their fair value due to the short-term nature of those instruments.

Operating Leases

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on specific facts and circumstances, the existence of an identified asset(s), if any, and the Company's control over the use of the identified asset(s), if applicable. The lease liability is measured at the present value of future lease payments, discounted using the discount rate as of the lease commencement date. Future lease payments may include payments that depend on an index or a rate (such as the consumer price index or other market index). The Company initially measures payments based on an index or rate by using the applicable rate at lease commencement and subsequent changes in such rates are recognized as variable lease costs. Variable payments that do not depend on a rate or index are not included in the lease liability and are recognized as they are incurred. The Company's contracts typically do not have variable payments based on index or rate. The Company's contracts that include a lease component generally include additional services that are transferred to the lessee (e.g., common-area maintenance services), which are non-lease components. Contracts typically also include other costs and fees that do not provide a separate service to the lessee, such as costs paid by the lessee to reimburse the lessor for administrative costs or payment for the lessor's costs for property taxes, insurance related to the leased asset, and other lessor costs. The Company elected the practical expedient to account for the lease and its associated non-lease components as a single lease component for its real estate leases, including the office, lab, and its manufacturing space.

When readily determinable, the discount rate used to calculate the lease liability is the rate implicit in the lease. As the Company's leases typically do not provide an implicit rate, the Company uses its incremental borrowing rate based on the lease term and economic environment at the lease commencement date. The lease term used to calculate the lease liability includes options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. With limited exceptions, the nature of the Company's facility leases is such that there are no economic or other conditions that would indicate that it is reasonably certain at lease commencement that the Company will exercise options to extend the term.

The Company recognizes a corresponding right-of-use ("ROU") asset, initially measured as the amount of lease liability, adjusted for any initial lease costs or lease payments made before or at the commencement of the lease, and reduced by any lease incentives. In certain instances when there is unpredictability of payout of leasehold improvement reimbursements, the ROU asset and lease liability will be adjusted on a prospective basis as construction related to leasehold improvements is performed over the life of the lease.

The Company's leases consist of only operating leases. Operating leases are recognized on the balance sheet as ROU assets, lease liabilities current and lease liabilities non-current. Fixed rents are included in the calculation of the lease balances while certain variable costs paid for certain operating and pass-through costs are excluded. Lease expense is recognized over the expected lease term on a straight-line basis. For leases with a term of one year or less, or short-term leases, the Company has elected to not recognize the lease liability for these arrangements and the lease payments are recognized in the consolidated statements of operations and comprehensive loss.

Recently Issued Accounting Pronouncements

In August 2020, the FASB issued ASU No. 2020-06, Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40): *Accounting for Convertible Instruments and Contracts in an Entity's Own Equity.* This amendment simplifies accounting for convertible instruments by removing major separation models required under current U.S. GAAP. It also removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exception, and simplifies the diluted earnings per share calculation in certain areas. ASU No. 2020-06 is effective for public companies for annual periods beginning after December 15, 2021, including interim periods within those fiscal years. The Company early adopted the provisions of ASU 2020-06 effective January 1, 2022, using the modified retrospective method for transition with no significant impact to its consolidated financial statements at the time of adoption.

3. Cash Equivalents and Investments

The following tables summarize the amortized cost and fair value of the Company's cash equivalents and investments (in thousands):

	JUNE 30, 2022			
	AMORTIZED COST BASIS	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	ESTIMATED FAIR VALUE
Cash Equivalents				
Money market funds	$ 80,069	$ —	$ —	$ 80,069
Total Cash Equivalents	$ 80,069	$ —	$ —	$ 80,069
Investments				
Commercial paper	$ 8,693	$ —	$ —	$ 8,693
Asset-backed securities	2,005	—	(4)	2,001
U.S. treasury securities	4,785	—	(37)	4,748
Total Investments	$ 15,483	$ —	$ (41)	$ 15,442

	DECEMBER 31, 2021			
	AMORTIZED COST BASIS	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	ESTIMATED FAIR VALUE
Cash Equivalents				
Money market funds	$ 98,900	$ —	$ —	$ 98,900
Total Cash Equivalents	$ 98,900	$ —	$ —	$ 98,900
Investments				
Commercial paper	$ 11,084	$ —	$ —	$ 11,084
Asset-backed securities	2,020	—	(2)	2,018
U.S. treasury securities	4,812	—	(8)	4,804
Corporate bonds	5,271	—	(4)	5,267
Total Investments	$ 23,187	$ —	$ (14)	$ 23,173

As of June 30, 2022, the Company held two investments with unrealized losses. All investments in an unrealized loss position were in this position for less than 12 months. The Company evaluated its securities for potential other-than-temporary impairment and considered the decline in market value to be primarily attributable to current economic and market conditions. Additionally, the Company does not intend to sell the securities in an unrealized loss position and does not expect it will be required to sell the securities before recovery of the unamortized cost basis. Given the Company's intent and ability to hold such securities until recovery, and the lack of a significant change in credit risk for these investments, the Company does not consider these investments to be impaired as of June 30, 2022.

There were no realized gains or losses recognized on investments in the six months ended June 30, 2022. Interest on investments is recognized as interest income in the consolidated statements of operations and comprehensive loss.

All investments held as of June 30, 2022 were classified as available-for-sale securities and had contractual maturities of less than one year.

4. Fair Value Measurements

The following table presents information about the Company’s financial assets and liabilities measured at fair value on a recurring basis (in thousands):

	FAIR VALUE MEASUREMENTS AS OF JUNE 30, 2022			
	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
Assets:				
Money market funds	$ 80,069	$ —	$ —	$ 80,069
U.S. treasury securities	4,748	—	—	4,748
Commercial paper	—	8,693	—	8,693
Asset-backed securities	—	2,001	—	2,001
Total Assets	$ 84,817	$ 10,694	$ —	$ 95,511

	FAIR VALUE MEASUREMENTS AS OF DECEMBER 31, 2021			
	LEVEL 1	LEVEL 2	LEVEL 3	TOTAL
Assets:				
Money market funds	$ 98,900	$ —	$ —	$ 98,900
U.S. treasury securities	4,804	—	—	4,804
Commercial paper	—	11,084	—	11,084
Asset-backed securities	—	2,018	—	2,018
Corporate bonds	—	5,267	—	5,267
Total Assets	$ 103,704	$ 18,369	$ —	$ 122,073

The Company classifies its money market funds and U.S. treasury securities as Level 1 assets since it measures fair value using quoted prices in active markets for identical assets. The Level 2 assets include commercial paper, asset-backed securities, and corporate bonds and are valued based on quoted prices for similar assets in active markets and inputs other than quoted prices that are derived from observable market data. The Company did not hold any Level 3 assets during the periods presented.

The Company evaluates transfers between levels at the end of each reporting period. There were no transfers between Level 1 and Level 2 assets during the periods presented.

5. Leases

The Company has an operating lease in Cambridge, Massachusetts for its corporate headquarters. The lease will expire in January 2024 and includes an optional extension for an additional three year period.

The Company also has an operating lease for approximately 33,518 square feet (the “Pod 4 Portion”), approximately 54,666 square feet (the “Pod 5 Portion”), and approximately 17,150 square feet ("Pod 3 Portion") of a manufacturing facility located in Andover, Massachusetts that expires in December 2036. The Company has two options to extend the term of the lease for a period of ten years each. As of June 30, 2022, the Company had not exercised its options to extend the lease term for either lease and it does not deem it reasonably certain that these options will be exercised. The Company agreed to provide the landlord with a $3.4 million letter of credit as support for its obligations under the Andover facility lease. The lease provides a lease incentive in the form of reimbursable leasehold improvements of approximately $14.9 million. Due to the unpredictability of the payout of leasehold improvement reimbursements, the Right of Use asset will be adjusted on a prospective basis to reflect any payments relating to the lease incentive as construction related to these improvements is performed over the life of the lease. As of June 30, 2022, the Company capitalized $28.9 million of leasehold improvement costs, of which $6.2 million was reimbursed through the lease incentive. The lease payments include fixed base rent payments and variable rents for certain shared facility operating and other costs.

During the three and six months ended June 30, 2022, the Company recognized total rent expense related to the leases described above of $1.5 million and $3.1 million, respectively, compared to $1.4 million and $2.8 million in the same periods of 2021. The amount of variable rent expense and rent for short-term leases for the three and six months ended June 30, 2022 and 2021, was $0.7 million, $1.6 million, $0.5 million, and $0.8 million, respectively.

Other supplemental information related to leases is as follows:

	AS OF AND FOR SIX MONTHS ENDED JUNE 30,	
	2022	2021
Weighted average remaining lease term	13.3 years	14.0 years
Weighted average discount rate	8.1%	8.5%
Cash paid for amounts included in the measurement of lease liabilities (in thousands)	$2,557	$762

Maturities of operating lease liabilities are as follows as of June 30, 2022 (in thousands):

Year	Amount
2022	$ 3,147
2023	6,380
2024	4,995
2025	5,145
2026	5,299
Thereafter	62,575
Total lease payments	87,541
Less imputed interest	(35,972)
Total lease liabilities	$ 51,569
Current portion	2,300
Long-term portion	49,269

6. Accrued Expenses and Other Liabilities

Accrued expenses and other liabilities consisted of the following (in thousands):

	JUNE 30, 2022	DECEMBER 31, 2021
Accrued research and development costs	$ 1,866	$ 1,474
Accrued leasehold improvement costs	1,628	999
Accrued compensation	1,954	2,697
Accrued professional fees	804	846
Accrued interest expense	144	—
Miscellaneous accrued expenses	332	468
Total accrued expenses and other liabilities	$ 6,728	$ 6,484

As of June 30, 2022, other long-term liabilities of $0.2 million was the value of unmet conditions associated with a governmental grant received in 2021. The Company anticipates meeting these conditions between 2024 and 2026 and, upon satisfaction, will reduce these liabilities with a corresponding reduction to research and development expenses.

7. Convertible Debt

On April 1, 2022, the Company entered into a loan and security agreement (the "Loan Agreement") with K2 HealthVentures LLC ("K2HV"), and together with any other lender from time to time party thereto, the “Lenders”), K2HV as administrative agent for the Lenders, and Ankura Trust Company, LLC, as collateral agent for the Lenders. The Loan Agreement provides term loan commitments of up to $45.0 million in four potential tranches: (i) a $20.0 million term loan funded on April 1, 2022, (the “First Tranche Term Loan”), (ii) a $5.0 million term loan commitment (the “Second Tranche Term Loan Commitment”), (iii) a $15.0 million term loan commitment (reduced to $10.0 million if a second tranche term loan is made) (the “Third Tranche Term Loan Commitment”), and (iv) a $10.0 million term loan commitment (the “Fourth Tranche Term Commitment”). The timing and availability of the tranche term loan commitments are subject to various conditions, including that no events of default have occurred. The availability period of the Second Tranche Term Loan Commitment ends December 31, 2022. The availability of the Third Tranche Term Loan Commitment begins January 1, 2023 and ends no later than July 31, 2023 and is subject to the achievement of a clinical milestone event. The Fourth Term Loan Commitment availability ends May 1, 2024, unless the third tranche milestone is met, which would adjust such date to May 1, 2025. The Second Tranche Term Loan Commitment and Fourth Tranche Term Loan Commitment are subject to a satisfactory loan review by the Lenders who may provide the advances in their sole discretion. The Fourth Tranche Term Loan Commitment is also subject to an additional 1% facility fee.

The facility carries a 48-month term with interest only payments for 24 months, subject to increase to up to 36 months upon the Company drawing on the Third Tranche Loan Commitment and no event of default having occurred. Subsequent to the interest-only period, the Company is required to make equal monthly payments of principal plus interest until the loans mature on April 1, 2026. The term loans bear a variable interest rate equal to the greater of 7.75% and (ii) the sum of (A) the prime rate last quoted in The Wall Street Journal (or a comparable replacement rate if The Wall Street Journal ceases to quote such rate) and (B) 4.25%. The variable interest rate at June 30, 2022, was 9.0%. Upon final payment or prepayment of the loans, the Company must pay a final payment equal to 5.45% of the loans borrowed ("Final Fee"), which is being accrued to interest expense over the term of the loan. The Company has an option to prepay the loans in whole, subject to a prepayment fee of 3% prior to the first anniversary of the April 1, 2022, funding date, 2% after the first anniversary but prior the second anniversary of the funding date, and 1% thereafter if prior to the maturity date.

The Lenders may elect at any time prior to the full repayment of the term loans to convert any portion of the principal amount of the term loans then outstanding, up to an aggregate of $5.0 million in principal amount, into shares of the Company's common stock at a conversion price of $2.2689, subject to customary beneficial ownership limitations.

The Loan Agreement contains customary representations and warranties, events of default and affirmative and negative covenants, including covenants that limit or restrict the Company's ability to, among other things, dispose of assets, make changes to the Company's business, management, ownership or business locations, merge or consolidate, incur additional indebtedness, pay dividends or other distributions or repurchase equity, make investments, and enter into certain transactions with affiliates, in each case subject to certain exceptions. As security for its obligations under the Loan Agreement, the Company granted the Lenders a first priority security interest on substantially all of the Company's assets (other than intellectual property), subject to certain exceptions. Upon occurrence of an event of default, which includes the failure to maintain solvency, the Company may have to prepay the term loans in an amount equal to the sum of (a) outstanding principal together with accrued interest (b) prepayment fee, and (c) Final Fee.

In connection with entering into the Loan Agreement, the Company also issued to K2HV a warrant to purchase a number of shares of Common Stock equal to the quotient of 2.95% of the aggregate funded term loan amount divided by $1.5126, the exercise price, up to a maximum of 877,627 shares (the "Warrant"). The Warrant expires on April 1, 2032. The Warrant has been classified within equity since it (i) is indexed to the Company's own equity and (ii) meets the equity classification conditions. As of June 30, 2022, the Warrant is exercisable for 390,056 shares of common stock. The Company allocated the proceeds between the term loan and the Warrant on a relative fair value basis, resulting in a discount on the term loan. The Loan Agreement and the Warrant each provide the Lenders with certain piggyback registration rights with respect to the shares issuable upon conversion under the Loan Agreement or upon exercise of the Warrant.

The Company incurred fees and issuance costs associated with the Loan Agreement of approximately $0.5 million. The Company recorded contractual interest expense related to the Loan Agreement of $0.4 million and additional interest expense related to the amortization of the debt discount and issuance costs and accretion of the Final Fee of $0.2 million in the three and six months ended June 30, 2022. The effective interest rate at June 30, 2022, which includes each of the interest components noted above, was 12.51%.

Future principal debt payments on the Loan Agreement are as follows (in thousands):

	JUNE 30, 2022
2022	$ —
2023	—
2024	6,255
2025	10,127
2026	3,618
Total principal payments	20,000
Final Fee	1,090
Total principal payments and Final Fee	21,090
Less: Unamortized debt discount	(932)
Less: Unamortized debt issuance costs	(78)
Less: Unaccreted Final Fee	(1,002)
Term loan, non-current	$ 19,078

8. Common Stock

Each share of the Company's common stock is entitled to one vote. The holders of shares of common stock are entitled to receive dividends, if and when declared by the Board of Directors. Prior to the IPO, the voting, dividend, and liquidation rights of the holders of common stock were subject to, and qualified by, the rights, powers, and preferences of the holders of preferred stock.

Upon the closing of the IPO, the Company amended and restated its certificate of incorporation to provide for 100,000,000 shares designated as common stock with a par value of $0.0001 per share as part of its authorized capital.

Restricted Stock

The Company issued restricted stock to its founders and certain officers of the Company. In general, the shares of restricted stock vested over a four-year period, with 25% of the shares vesting after one year, followed by monthly vesting over the remaining three years. As of June 30, 2022, all restricted stock awards were fully vested.

Common Stock Warrants

The Company issued warrants to purchase common stock in connection with a preferred stock financing in March 2016. These common stock warrants allow for the holders to purchase 71,544 shares of common stock at $1.21 per share. As of June 30, 2022, all of the common stock warrants were fully exercisable. The common stock warrants expire in 2031.

On April 1, 2022, in connection with the K2HV Loan Agreement, the Company issued a warrant to K2HV to purchase 390,056 shares of common stock. This warrant expires in 2032. Refer to Footnote 7 for further discussion.

Reserved Shares

The Company has reserved the following shares of common stock for the conversion or exercise of the following securities:

	JUNE 30, 2022	DECEMBER 31, 2021
Exercise of common stock warrants	461,600	71,544
Exercise of options to purchase common stock	5,188,778	3,681,793
Shares available for issuance under employee stock purchase plan	190,888	—
Shares available for issuance under equity incentive plans	1,880,377	2,132,067
Total	7,721,643	5,885,404

9. Equity Incentive Plans

The Company adopted the 2016 Equity Incentive Plan, as amended (the “2016 Plan”) on March 31, 2016. The 2016 Plan provided for the granting of stock options, restricted stock awards, restricted stock units, stock appreciation rights and other stock awards to employees, directors and non-employees. All option awards were granted with an exercise price equal to or greater than the market price of the Company’s stock at the date of grant. Option awards generally vest over three to four years. Certain option awards provide for accelerated vesting if there is a change in control as defined in the 2016 Plan. The provisions of the 2016 Plan allow for early exercises for options that have not yet vested. Early exercises have historically been for a de minimis number of shares.

On September 23, 2020, the Company adopted the 2020 Equity Incentive Plan (the “2020 Plan”), which became effective upon the execution of the underwriting agreement related to the IPO and serves as the successor to the 2016 Plan. The 2020 Plan authorizes the award of stock options, restricted stock awards, stock appreciation rights, restricted stock units, cash awards, performance awards and stock bonus awards. The number of shares reserved for issuance under the 2020 Plan increases automatically on January 1 of each fiscal year, through and including January 1, 2030, by the number of shares equal to 5% of the aggregate number of outstanding shares of common stock as of the immediately preceding December 31, or a lesser number of shares as may be determined by the board of directors (or an authorized committee thereof). On January 1, 2022, the board of directors authorized an increase in the number of shares reserved for issuance under the 2020 Plan by 1,292,458 shares of common stock.

At June 30, 2022, there were 1,880,377 shares of common stock available for issuance under the 2020 Plan.

On September 23, 2020, the Company adopted the 2020 Employee Stock Purchase Plan (the "ESPP"), which became effective upon the execution of the underwriting agreement related to the IPO. The Company initially reserved 280,000 shares of common stock for sale under the ESPP. The aggregate number of shares reserved for sale under the ESPP increases automatically on January 1st of each fiscal year through and including January 1, 2030, by the number of shares equal to the lesser of (a) 1% of the total number of shares of common stock outstanding on the last day of the fiscal year prior to the date of such automatic increase and (b) 560,000 shares, provided that prior to the date of any such increase, the board of directors may determine a lesser number of shares for such increase. In December 2021, the board of directors determined that there would be no automatic increase in the number of shares of common stock reserved under the ESPP on January 1, 2022. The ESPP provides for six-month offering periods commencing on January 1 and ending on June 30 and commencing on July 1 and ending on December 31 of each calendar year. The Company began its first offering period on January 1, 2022, and issued 89,112 shares of common stock on June 30, 2022 at the end of the offering period.

Total stock-based compensation was classified as follows on the unaudited interim condensed consolidated statements of operations (in thousands):

	THREE MONTHS ENDED JUNE 30,		SIX MONTHS ENDED JUNE 30,	
	2022	2021	2022	2021
General and administrative	$ 1,476	$ 1,029	$ 2,738	$ 1,768
Research and development	704	627	1,422	1,060
Total stock-based compensation	$ 2,180	$ 1,656	$ 4,160	$ 2,828

In December 2020, the Company granted an employee an option to purchase 113,000 shares of the Company's common stock with an exercise price per share equal to the fair value of the Company's common stock on the date of grant. This grant is included in the outstanding options in the summary table below. The option grant includes three separate tranches (each tranche representing one-third of the total grant) that will each vest four years from the date of grant. This option grant and its tranches are subject to accelerated vesting in the event that the Company achieves certain defined milestones related to the Company's manufacturing efforts. As of June 30, 2022, the Company determined that the requisite service period for two of the three tranches of this award is four years and recognized $0.2 million of stock-based compensation expense for the six months ended June 30, 2022. Accelerated vesting was considered to be probable for one of the tranches as of June 30, 2022. Accordingly, the Company recognized stock-based compensation expense of $0.2 million for this tranche in the six months ended June 30, 2022, which included a cumulative adjustment reflecting the retroactive application of the accelerated vesting.

A summary of option activity for the six months ended June 30, 2022 is presented below:

	SHARES	WEIGHTED AVERAGE EXERCISE PRICE	WEIGHTED-AVERAGE REMAINING CONTRACTUAL TERM (YEARS)	AGGREGATE INTRINSIC VALUE (IN THOUSANDS)
Outstanding at December 31, 2021	3,681,793	$ 10.84		
Granted	1,723,500	$ 1.75		
Exercised	(34,863)	$ 1.77		
Canceled, expired or forfeited	(181,652)	$ 8.34		
Outstanding at June 30, 2022	5,188,778	$ 7.97	8.29	$ 33
Vested and expected to vest at June 30, 2022	5,188,778	$ 7.97	8.29	$ 33
Exercisable at June 30, 2022	1,670,042	$ 7.73	6.98	$ 25

The weighted average grant date fair value per share of options granted to employees, directors and non-employee consultants during the six months ended June 30, 2022 and 2021 was $1.28 and $11.69, respectively. The total intrinsic value of options exercised was $0.02 million and $1.7 million for the six months ended June 30, 2022 and 2021, respectively. Total unrecognized stock-based compensation expense related to options is $17.1 million at June 30, 2022, and is expected to be recognized over a weighted-average period of 2.7 years.

10. Commitments and Contingencies

The Company is not currently party to any material legal proceedings. At each reporting date, the Company evaluates whether or not a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company expenses costs related to such legal proceedings as incurred.

11. Net Loss Per Share

The following securities that could potentially dilute basic net loss per share in the future were not included in the computation of diluted net loss per share for the periods presented, because to do so would have been antidilutive:

	SIX MONTHS ENDED JUNE 30,	
	2022	2021
Outstanding stock options	5,188,778	3,636,492
Restricted stock	—	6,893
Shares available for purchase under employee stock purchase plan	190,888	—
Common stock warrants	461,600	71,544
Potential conversion of note payable	2,203,711	—
Total	8,044,977	3,714,929

12. Subsequent Events

The Company has evaluated subsequent events from the balance sheet date through the date on which these financial statements were issued. Subsequent to the issuance of the financial statements, there were no events that occurred that required disclosure in, or revision to, the financial statements.

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

You should read the following discussion of our financial condition and results of operations in conjunction with our unaudited interim condensed consolidated financial statements and the related notes and other financial information included elsewhere in this Quarterly Report on Form 10-Q. In addition to historical financial information, this discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties, such as statements of our plans, objectives, expectations, intentions and belief. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in the section titled "Risk Factors" under Part II, Item 1A, below and under "Part I, Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the Securities and Exchange Commission, or the SEC, on March 9, 2022, and under Part II, Item 1A in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, filed with the SEC on May 4, 2022.

These statements are based upon information available to us as of the date of this Quarterly Report on Form 10-Q, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and investors are cautioned not to unduly rely upon these statements.

Introduction

Our Management's Discussion and Analysis of Financial Condition and Results of Operations, or MD&A, is provided in addition to the accompanying unaudited interim condensed consolidated financial statements and notes to assist readers in understanding our results of operations, financial condition, and cash flows. Our MD&A is organized as follows:

Overview - A discussion of our business and overall analysis of financial and other highlights in order to provide context for the remainder of MD&A.

Results of Operations - An analysis of our financial results comparing the three and six months ended June 30, 2022, to the three and six months ended June 30, 2021.

Liquidity and Capital Resources - An analysis of changes in our unaudited interim condensed consolidated balance sheets and cash flows, and discussion of our financial condition and potential sources of liquidity.

Critical Accounting Policies and Significant Judgments and Estimates - A discussion of critical accounting policies and those that require us to make subjective estimates and judgments.

Overview

We are a clinical-stage biopharmaceutical company focused on developing next-generation, systemically active viral immunotherapies to transform outcomes for cancer patients. Using our two distinct proprietary platforms, we are developing a pipeline of intratumorally and intravenously administered product candidates designed to selectively attack and kill tumor cells and deliver transgenes to stimulate multiple arms of the immune system against tumors. We believe that the therapies we are developing could bring significant benefit to many patients who are currently underserved by approved immuno-oncology therapies, including other viral immunotherapies and immune checkpoint inhibitors.

Our HSV Platform

Our lead product candidate, ONCR-177, is an intratumorally administered viral immunotherapy based on our oncolytic HSV-1 platform, referred to as our HSV Platform, which leverages the Herpes Simplex Virus type 1, or HSV-1, a virus which has been clinically proven to effectively treat certain cancers. Using our HSV Platform, we engineered ONCR-177 to overcome the limitations of existing viral immunotherapies by enhancing potency and driving strong systemic anti-tumor immune responses at injected as well as distant non-injected tumor sites. ONCR-177 is armed with five immunostimulatory transgenes—a greater number of transgenes than viral immunotherapies that are either currently approved or in clinical development. Product candidates from our HSV Platform are designed to maintain full viral replication competency in tumors and to be selectively attenuated in healthy tissues, meaning they replicate and express transgenes only in tumor cells while disabling potentially harmful effects on healthy tissues. In multiple preclinical cancer models, we observed that these attributes of ONCR-177 were achieved without either the systemic release of cytokines that can be associated with toxicity or significant presence of the virus in non-injected tumors or in circulation, in addition to favorable tolerability when administered via intravenous and intratumoral injection in a validated murine model of HSV-1 infection. We believe this combination of features allows our HSV Platform to overcome the safety versus potency trade-off that has generally limited the viral immunotherapy field to date. Based on safety and tolerability profile observed to date and its ability to stimulate multiple arms of the immune system to attack cancer systemically, we also believe that ONCR-177 has potential in pre-surgical, or neoadjuvant, settings.

In June 2020, we initiated our Phase 1 clinical trial of ONCR-177 in patients with several different types of solid tumors, including breast cancers and cutaneous tumors. We presented our preliminary findings from the Phase 1 clinical trial in November 2021, which

included data from 14 patients in the fully enrolled and completed dose escalation cohorts of the trial and five patients enrolled in the dose expansion monotherapy portion of the trial. In the fully enrolled and completed surface lesion dose escalation portion of the trial, ONCR-177 administered to heavily pretreated patients with advanced, injectable solid tumors was well tolerated with no dose-limiting toxicities. No treatment-related adverse events exceeded Grade 2, and no infectious virions were detected in skin swabs. After four weeks of monotherapy treatment with ONCR-177 at the recommended Phase 2 dose, or RP2D, three of eight evaluable patients (one with cutaneous melanoma, one with squamous cell carcinoma of the head and neck, or SCCHN, and one with mucosal melanoma) had demonstrated clinical benefit. We have initiated enrollment in the surface lesion dose combination expansion portion of the clinical trial. Patients in the trial will receive ONCR-177 in combination with Merck's KEYTRUDA® (pembrolizumab), an immune checkpoint inhibitor. In addition, we are enrolling and currently dosing separate cohorts of patients with visceral tumors in the liver with the goal of showing additional safety data. We plan to report additional surface lesion monotherapy expansion data as well as initial surface lesion combination expansion data in the second half of 2022.

In addition to ONCR-177, we also have additional preclinical stage programs leveraging our HSV Platform that are intended to yeield both intratumoral and intravenous solutions to other unmet medical needs. These preclinical programs include ONCR-GBM, which is designed to target brain cancer through intratumoral injection.

Our Selectively Self-Amplifying vRNA Immunotherapy Platform

We are also developing a broad pipeline of product candidates that leverages our second platform, our selectively self-amplifying viral RNA, or vRNA, immunotherapy platform, referred to as our vRNA Immunotherapy Platform, which aims to enable repeat intravenous, or IV, administration of viral immunotherapies to treat cancers that are less amenable to intratumoral injection due to safety and feasibility reasons, such as cancers of the lung. Our IV-administered approach involves encapbsulating in a lipid nanoparticle, or LNP, the genomes of RNA viruses known to kill cancer cells, creating a selectively self-amplifying vRNA immunotherapy. We believe this approach can avoid the rapid immune clearance from circulation caused by neutralizing antibodies otherwise observed to date with IV-administered oncolytic viruses and is thought to limit their effectiveness in the clinic. Once inside the tumor, the synthetic viral genome from our synthetic viruses is first amplified and then instructs tumor cells to synthesize actual infectious virions, which can cause tumor lysis before infecting nearby tumor cells while stimulating immune cell recruitment and activity.

Our two product candidates from our vRNA Immunotherapy Platform are ONCR-021 and ONCR-788. ONCR-021 encodes an optimized strain of Coxsackievirus A21, or CVA21, and ONCR-788 encodes for a modified version of the Seneca Valley Virus, or SVV. Both CVA21 and SVV have extensive clinical experience and favorable safety profiles when administered IV. We believe our selectively self-amplifying vRNA Immunotherapy Platform holds the potential for IV administration and avoids the challenge of neutralizing antibodies seen in previous approaches with IV-administered RNA-based oncology therapeutics. We plan to investigate our novel vRNA immunotherapies in multiple histologies, including cancers of the lung, both as monotherapy and in combination with immune checkpoint inhibitors and other cancer treatments. We plan to submit an investigational new drug application, or IND, to the U.S. Food and Drug Administration, or FDA, for ONCR-021 in mid-2023 to enable clinical development for non-small cell lung cancer and other cancers such as clear cell renal cell carcinoma and melanoma, both as a single agent and in combination with immune checkpoint inhibitors. Following the IND submission for ONCR-021 and pending additional financing, we plan to submit an IND for ONCR-788 to enable its development in small cell lung cancer, neuroendocrine prostate and other neuroendocrine cancers, both as a single agent and in combination with immune checkpoint inhibitors and other cancer treatments. In the process of developing our vRNA Immunotherapy Platform, we also developed a proprietary LNP platform intended to efficiently deliver large nucleic acids with minimal endosomal escape.

Manufacturing

We plan to manufacture our product candidates at our approximately 105,000 square foot manufacturing facility in Andover, Massachusetts, 41,000 square feet of which is specifically dedicated to processes that are compliant with good manufacturing practices, or GMP. We began process development activities at the facility in 2021 and we anticipate this facility will be operational in late 2022.

Financial

Since inception in 2015, our operations have focused on organizing and staffing our company, business planning, raising capital, acquiring and developing our technology, establishing our intellectual property portfolio, identifying potential product candidates and undertaking preclinical studies, commencing a clinical trial, and manufacturing scale-up activities. We do not have any products approved for sale and have not generated any revenue from product sales. We will not generate revenue from product sales unless and until we successfully complete clinical development and obtain regulatory approval for our product candidates. In addition, if we obtain regulatory approval for our product candidates and do not enter into a third-party commercialization partnership, we expect to incur significant expenses related to developing our commercialization capability to support product sales, marketing, manufacturing and distribution activities.

We have funded our operations primarily through the sale of redeemable convertible preferred stock and from our initial public offering, or IPO, of our common stock in 2020 and a follow-on public offering of common stock in 2021. From inception through June 30, 2022, we raised an aggregated $306.3 million of gross proceeds from these financing transactions. On April 1, 2022, we entered into a Loan Agreement with K2HV which provides term loan commitments of up to $45.0 million in four potential tranches. As of June 30, 2022, we have borrowed $20.0 million under this Loan Agreement. In November 2021, we also entered into an open market sale agreement pursuant to which we may sell shares of common stock from time to time for aggregate gross proceeds of up to $50.0 million, although, to date, we have not made any sales under this agreement.

Since inception, we have incurred significant operating losses. Our net losses were $19.1 million and $15.5 million for the six months ended June 30, 2022 and 2021, respectively. As of June 30, 2022, we had an accumulated deficit of $231.5 million. We expect to continue to incur significant and increasing expenses and operating losses for the foreseeable future as we advance our current and future product candidates through preclinical and clinical development, manufacture drug product and drug supply, seek regulatory approval for our current and future product candidates, maintain and expand our intellectual property portfolio, hire additional research and development and business personnel and operate as a public company.

We will need substantial additional funding to support our continuing operations and pursue our growth strategy. Until we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of public or private equity offerings and debt financings or other sources, such as potential collaboration agreements, strategic alliances and licensing arrangements. We may be unable to raise additional funds or enter into such other agreements or arrangements when needed on acceptable terms, or at all. Our failure to raise capital or enter into such agreements as and when needed could have a material adverse effect on our business, results of operations and financial condition.

As of June 30, 2022, we had aggregate cash and cash equivalents and investments of $100.2 million. We believe that our existing cash and cash equivalents and investments will enable us to fund our operating expenses and capital expenditure requirements into early 2024.

Recent Developments

On April 1, 2022, we entered into a loan and security agreement, or the Loan Agreement, with K2 HealthVentures LLC, or K2HV, which we refer to together with any other lender from time to time party thereto, as the Lenders. The Loan Agreement provides for a loan of up to $45.0 million to be funded upon the achievement of certain time-based, clinical and regulatory milestones (the "Term Loan"). The Term Loan will mature on April 1, 2026 and bears a variable interest rate equal to the greater of (i) 7.75% and (ii) the sum of (A) the prime rate last quoted in The Wall Street Journal (or a comparable replacement rate if The Wall Street Journal ceases to quote such rate) and (B) 4.25%. The variable interest rate was 9.0% as of June 30, 2022. The Loan Agreement contains customary representations and warranties, events of default and affirmative and negative covenants, including covenants that limit or restrict our ability to, among other things, dispose of assets, make changes to our business, management, ownership or business locations, merge or consolidate, incur additional indebtedness, pay dividends or other distributions or repurchase equity, make investments, and enter into certain transactions with affiliates, in each case subject to certain exceptions. As security for our obligations under the Loan Agreement, we granted the Lenders a first priority security interest on substantially all of our assets (other than intellectual property), subject to certain exceptions.

The Lenders may elect at any time prior to the full repayment of the Term Loan to convert any portion of the principal amount of the Term Loan then outstanding, up to an aggregate of $5.0 million in principal amount, into shares of our common stock at a conversion price of $2.2689, subject to customary beneficial ownership limitations. In connection with entering into the Loan Agreement, we also issued to K2HV a warrant to purchase a number of shares of our common stock equal to the quotient of 2.95% of the aggregate funded term loan amount divided by $1.5126, the exercise price, up to a maximum of 877,627 shares. As of June 30, 2022, the Warrant is exercisable for 390,056 shares of common stock. The warrant expires on April 1, 2032.

In April 2022, we announced plans to relocate all of our company operations to the Andover facility, which we anticipate will be complete in the fourth quarter of 2022.

Impact of the COVID-19 Pandemic on Our Business

In response to the COVID-19 pandemic, we implemented a work-from-home policy allowing employees who can work from home to do so. We are in the process of transitioning back to in-office work for the majority of our employees. We have taken measures to secure our research and development project activities, while work in laboratories has been organized to reduce risk of COVID-19 transmission. Business travel was previously suspended but is now limited, and online and teleconference technology continues to be used regularly. We continue to monitor health guidance measures and will adjust our plans if there is any change in the COVID-19 pandemic.

Components of Operating Results

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research and development activities, including our product candidate discovery efforts, preclinical and clinical studies under our research programs, which include:

- employee-related expenses, including salaries, bonuses, benefits and stock-based compensation expense for our research and development personnel;
- costs of funding research performed by third parties that conduct research and development and preclinical and clinical activities on our behalf;
- costs of manufacturing drug product and drug supply related to our current or future product candidates;
- costs of conducting preclinical studies and clinical trials of our product candidates;
- consulting and professional fees related to research and development activities, including stock-based compensation to non-employees;
- costs of maintaining our laboratory, including purchasing laboratory supplies and non-capital equipment used in our preclinical studies;
- costs related to compliance with clinical regulatory requirements;
- facility costs and other allocated expenses, which include expenses for rent and maintenance of facilities, insurance, depreciation and other supplies; and
- fees for maintaining licenses and other amounts due under our third-party licensing agreements.

Research and development costs are expensed as incurred. Costs for certain activities are recognized based on an evaluation of the progress to completion of specific tasks using data such as information provided to us by our vendors and analyzing the progress of our preclinical and clinical studies or other services performed. Significant judgment and estimates are made in determining the accrued expense balances at the end of any reporting period.

We track external research and development costs on a program-by-program basis beginning, with respect to each program, upon our internal nomination of a candidate in that program for further preclinical and clinical development. For example, ONCR-021 and ONCR-788 were both nominated as candidates in May 2021, at which time we began tracking their external research and development costs. External costs include fees paid to consultants, contractors and vendors, including contract manufacturing organizations, or CMOs, and clinical research organizations, or CROs, in connection with our preclinical, clinical and manufacturing activities and license milestone payments related to candidate development. We do not allocate employee costs, costs associated with our discovery efforts, costs incurred for laboratory supplies, and facilities, including depreciation, or other indirect costs, to specific product development programs because these costs are deployed across multiple product development programs and, as such, are not separately classified.

The successful development of our product candidates is highly uncertain. We cannot reasonably estimate or know the nature, timing, and estimated costs of the efforts that will be necessary to complete development of our current or future product candidates. We are also unable to predict when, if ever, material net cash inflows will commence from the sale of our product candidates, if they are approved. This is due to the numerous risks and uncertainties associated with developing product candidates, including the uncertainty of:

- the scope, rate of progress, and expenses of our ongoing research activities as well as any preclinical studies and clinical trials and other research and development activities;
- establishing an appropriate safety profile;
- successful enrollment in and completion of clinical trials;
- whether our product candidates show safety and efficacy in our clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- commercializing product candidates, if and when approved, whether alone or in collaboration with others; and
- continued acceptable safety profile of the products following any regulatory approval.

A change in the outcome of any of these variables with respect to the development of our current and future product candidates would significantly change the costs and timing associated with the development of those product candidates.

Research and development activities are central to our business model. 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. We expect research and development costs to increase significantly for the foreseeable future as we commence clinical trials and continue the development of our current and future product candidates. However, we do not believe that it is possible at this time to accurately project expenses through commercialization. There are numerous factors associated with the successful commercialization of any of our product candidates, including future trial design and various regulatory requirements, many of which cannot be determined with accuracy at this time based on our stage of development. Additionally, future commercial and regulatory factors beyond our control will impact our clinical development programs and plans.

General and Administrative Expenses

General and administrative expenses include salaries, bonuses and other compensation-related costs, including stock-based compensation, for personnel in executive, finance and accounting, business development, operations and administrative roles. Other significant costs include professional service and consulting fees including legal fees relating to intellectual property and corporate matters, audit and tax fees, recruiting costs, costs for consultants who we utilize to supplement our personnel and insurance costs. General and administrative expenses also include travel costs, facility and office-related costs that are not included in research and development expenses, as well as depreciation and amortization.

We anticipate that our general and administrative expenses will increase in the future as our business expands to support expected growth in research and development activities, including our future clinical programs. These increases will likely include increased costs related to the hiring of additional personnel and fees to outside service providers, among other expenses. We also anticipate increased expenses associated with being a public company, including costs for audit, legal, regulatory and tax-related services related to compliance with the rules and regulations of the SEC and Nasdaq listing standards, director and officer insurance premiums, and investor relations costs. In addition, if we obtain regulatory approval for any of our product candidates and do not enter into a third-party commercialization collaboration, we expect to incur significant expenses related to building a sales and marketing team to support product sales, marketing and distribution activities.

Other Income (Expense)

Other income (expense) consists primarily of interest expense associated with our Loan Agreement with K2HV and interest income earned on our investments and cash equivalents.

Results of Operations

The following table summarizes our results of operations for the periods indicated.

	THREE MONTHS ENDED JUNE 30,		CHANGE		SIX MONTHS ENDED JUNE 30,		CHANGE	
	2022	2021	$	%	2022	2021	$	%
	(in thousands, except percentages)							
Operating expenses:								
Research and development	$ 12,480	$ 10,660	$ 1,820	17%	$ 24,949	$ 19,107	$ 5,842	31%
General and administrative	6,161	4,889	1,272	26%	11,510	9,111	2,399	26%
Total operating expenses	18,641	15,549	3,092	20%	36,459	28,218	8,241	29%
Loss from operations	(18,641)	(15,549)	(3,092)	-20%	(36,459)	(28,218)	(8,241)	-29%
Total other income (expense), net	(450)	21	(471)	-2243%	(412)	27	(439)	-1626%
Net loss	$ (19,091)	$ (15,528)	$ (3,563)	-23%	$ (36,871)	$ (28,191)	$ (8,680)	-31%

Three Months Ended June 30, 2022, Compared to the Three Months Ended June 30, 2021

Research and Development Expenses

The table below summarizes our research and development expenses by product candidate or development program and unallocated research and development expenses for each of the periods presented:

	THREE MONTHS ENDED JUNE 30,		
	2022	2021	CHANGE
	(in thousands)		
Direct external expenses by program			
ONCR-177	$ 1,739	$ 2,778	$ (1,039)
ONCR-021	2,526	468	2,058
ONCR-788	41	84	(43)
Platform development, early stage research and unallocated expenses:			
Employee compensation and related	4,251	3,523	728
External research, development and consulting	453	732	(279)
Laboratory supplies	728	935	(207)
Facility-related	2,011	1,533	478
Other expenses	731	607	124
Total research and development	$ 12,480	$ 10,660	$ 1,820

Research and development expenses increased from $10.7 million for the three months ended June 30, 2021, to $12.5 million for the three months ended June 30, 2022. The increase of $1.8 million, or 17%, was primarily the result of:

- a $1.1 million decrease in direct external expenses for ONCR-177 due to timing of clinical trial dose manufacturing. In the three months ended June 30, 2022, we were in the final stages of concluding a manufacturing run and incurred minimal manufacturing-related costs. In the three months ended June 30, 2021, where we had commenced a manufacturing run and were incurring associated materials and service expenses;
- a $2.1 million increase in direct external expenses for ONCR-021, which was attributable to pre-clinical development costs that were incurred subsequent to candidate nomination in May 2021;
- a $0.7 million increase in employee compensation costs, including salaries, bonus and employee benefits due to increased headcount in 2022 as compared to 2021;
- a $0.5 million decrease in external research, development and consulting costs and laboratory supplies costs as expenses in these categories related to ONCR-021 are now being captured as program costs following candidate nomination in May 2021;
- a $0.5 million increase in facility-related costs from rent and associated expenses for our manufacturing facility in Andover, Massachusetts for which we commenced payments in July 2021; and
- a $0.1 million increase in other expenses primarily related to increased support costs attributable to our growth.

General and Administrative Expenses

	THREE MONTHS ENDED JUNE 31,		
	2022	2021	CHANGE
		(in thousands)	
Employee compensation and related	$ 2,916	$ 2,092	$ 824
Professional service and consultant fees	2,235	2,273	(38)
Facility-related	547	98	449
Other expenses	463	426	37
Total general and administrative expenses	$ 6,161	$ 4,889	$ 1,272

General and administrative expenses increased from $4.9 million for the three months ended June 30, 2021, to $6.2 million for the three months ended June 30, 2022. The increase of $1.3 million, or 26%, was primarily the result of:

- a $0.8 million increase in employee compensation costs primarily related to higher stock compensation expense incurred from increased stock option grants to existing and new employees in 2021 and 2022 as well as higher salaries and bonus expenses from annual salary increases and changes in employee composition due to turnover in 2022 as compared to 2021; and
- a $0.4 million increase in facility-related costs primarily due to additional rent expense incurred from entering into an amendment to our Andover lease in December 2021 and increasing total leased space by 17,150 square feet, changes in rent expense allocation driven by changes in our employee headcount, and rent-associated expenses for the Andover manufacturing facility for which we commenced payments in July 2021.

Other Income (Expense)

Other income (expense) for the three months ended June 30, 2022, decreased by $0.5 million compared to the three months ended June 30, 2021. This decrease was driven by interest expense incurred as a result of our debt arrangement with K2HV, which we entered into on April 1, 2022.

Six Months Ended June 30, 2022, Compared to the Six Months Ended June 30, 2021

Research and Development Expenses

The table below summarizes our research and development expenses by product candidate or development program and unallocated research and development expenses for each of the periods presented:

	SIX MONTHS ENDED JUNE 30,		
	2022	2021	CHANGE
	(in thousands)		
Direct external expenses by program			
ONCR-177	$ 4,867	$ 4,408	$ 459
ONCR-021	3,451	468	2,983
ONCR-788	87	84	3
Platform development, early stage research and unallocated expenses:			
Employee compensation and related	8,869	6,534	2,335
External research, development and consulting	646	1,590	(944)
Laboratory supplies	1,575	1,860	(285)
Facility-related	4,003	3,055	948
Other expenses	1,451	1,108	343
Total research and development	$ 24,949	$ 19,107	$ 5,842

Research and development expenses increased from $19.1 million for the six months ended June 30, 2021, to $24.9 million for the six months ended June 30, 2022. The increase of $5.8 million, or 30%, was primarily the result of:

- a $0.5 million increase in direct external expenses for our product candidate ONCR-177, which was attributable to increased clinical trial and dose manufacturing costs associated with our Phase 1 trial of ONCR-177;
- a $3.0 million increase in direct external expenses for our product candidate ONCR-021, which is attributable to pre-clinical development costs that were incurred subsequent to candidate nomination in May 2021;
- a $2.3 million increase in employee compensation costs, including salaries, bonus and employee benefits, due to increased headcount and annual salary increases in 2022, as compared to 2021. Employee compensation costs also increased due to higher stock compensation expense incurred from increased stock option grants to existing and new employees in 2021 and 2022;
- a $1.2 million decrease in external research, development, and consulting as well as laboratory supplies as costs in these categories related to ONCR-021 are now being captured as program costs following candidate nomination in May 2021;
- a $0.9 million increase in facility-related costs primarily due to additional rent expense incurred from entering into an amendment to our Andover lease in December 2021 and increasing total leased space by 17,150 square feet, changes in rent expense allocation driven by changes in our employee headcount, and rent-associated expenses for the Andover manufacturing facility for which we commenced payments in July 2021; and
- a $0.3 million increase in other expenses primarily related to increased support costs attributable to our growth.

General and Administrative Expenses

	SIX MONTHS ENDED JUNE 30,		
	2022	2021	CHANGE
	(in thousands)		
Employee compensation and related	$ 5,455	$ 3,741	$ 1,714
Professional service and consultant fees	4,157	4,362	(205)
Facility-related	943	206	737
Other expenses	955	802	153
Total general and administrative expenses	$ 11,510	$ 9,111	$ 2,399

General and administrative expenses increased from $9.1 million for the six months ended June 30, 2021, to $11.5 million for the six months ended June 30, 2022. The increase of $2.4 million, or 26%, was primarily the result of:

- a $1.7 million increase in employee compensation costs primarily related to higher stock compensation expense from increased stock option grants to existing and new employees in 2021 and 2022 as well as higher salaries, bonus and employee benefits costs, due to increased headcount and annual salary increases in 2022 as compared to 2021;
- a $0.2 million decrease in professional service and consultant fees primarily related to the continuing buildout of the G&A function and work being completed by our personnel instead of being outsourced; and
- a $0.7 million increase in facility-related expenses primarily as a result of commencing payments on rent-associated expenses in July 2021 and changes in rent expense allocation driven by changes in our employee headcount.

Other Income (Expense)

Other income (expense) for the six months ended June 30, 2022 decreased by $0.4 million compared to the six months ended June 30, 2021. This decrease was primarily driven by interest expense incurred as a result of our debt arrangement with K2HV, which we entered into on April 1, 2022.

Liquidity and Capital Resources

Sources of Liquidity

From inception through June 30, 2022, we funded our operations with aggregate gross proceeds of $306.3 million from equity financings and $20.0 million from our debt arrangement with K2HV. As of June 30, 2022, our cash and cash equivalents and investments totaled $100.2 million.

In November 2021, we entered into an open market sale agreement pursuant to which we may sell shares of common stock from time to time for aggregate gross proceeds of $50.0 million. There have been no sales under this agreement as of June 30, 2022.

Cash Flows

	SIX MONTHS ENDED JUNE 30,	
	2022	2021
	(in thousands)	
Net cash (used in) provided by:		
Operating activities	$ (36,694)	$ (21,538)
Investing activities	1,115	(2,177)
Financing activities	19,624	53,330
Net (decrease) increase in cash and cash equivalents	$ (15,955)	$ 29,615

Operating Activities

Net cash used in operating activities for the six months ended June 30, 2022 was $36.7 million and was primarily related to our net loss for the period of $36.9 million, partially offset by non-cash charges consisting primarily of depreciation and amortization of $1.1 million, stock-based compensation expense of $4.2 million and non-cash interest expense related to our term loan of $0.2 million. Our net cash used in operating activities also included a net use of cash of $5.3 million related to changes in operating assets and liabilities as follows:

- a net use of cash of $12.7 million from decreases in accounts payable and accrued expenses primarily due to the timing of Andover construction invoices;
- a source of cash of $4.5 million from the reimbursement of certain Andover construction costs through our tenant improvement allowance;
- a source of cash of $2.3 million due to a decrease in prepaid expenses and other current assets primarily due to services being performed on amounts already paid to vendors; and
- a net source of cash of $0.5 million from changes in operating lease liability and associated right-of-use asset due to the difference in the timing of rent expense compared to rent payments.

Net cash used in operating activities for the six months ended June 30, 2021, was $21.5 million and was primarily related to our net loss for the period of $28.2 million, partially offset by non-cash charges consisting of depreciation and amortization of $0.8 million

and stock-based compensation expense of $2.8 million. Our net cash used in operating activities also included a net source of cash of $3.0 million related to changes in operating assets and liabilities as follows:

- a net source of cash of $2.1 million from changes in the operating lease liability and associated right-of-use asset due to the difference in the timing of rent expense compared to rent payments;
- a net source of cash of $0.7 million from an increase in accounts payable as a result of overall expense growth and the timing of invoicing; and
- a net source of cash of $0.2 million from a decrease in prepaid expenses and other current assets primarily due to a decrease in payments to vendors in advance of services being performed.

Investing Activities

Net cash provided by investing activities for the six months ended June 30, 2022, was $1.1 million, which consisted of maturities of investments of $7.7 million, offset by purchases of property and equipment of $6.6 million. Net cash used by investing activities of $2.2 million for the six months ended June 30, 2021, was associated with purchases of property and equipment and, specifically, leasehold improvements and laboratory equipment for our Andover facility.

Financing Activities

Net cash provided by financing activities for the six months ended June 30, 2022, was $19.6 million, which consisted primarily of borrowings under our term loan from K2HV. Net cash provided by financing activities for the six months ended June 30, 2021, was $53.3 million and consisted primarily of net proceeds from the issuance of common stock in connection with our follow-on offering.

Funding Requirements

We expect our expenses to increase in connection with our ongoing activities, particularly as we continue our research and development, initiate clinical trials, continue the buildout of our Andover manufacturing facility and seek marketing approval for our current and any of our future product candidates. In addition, if we obtain marketing approval for any of our current or our future product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution, which costs we may seek to offset through entry into collaboration agreements with third parties. We also expect to incur 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 acceptable terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

We believe that our existing cash and cash equivalents will enable us to fund our operating expenses and capital expenditure requirements into early 2024. We have based this estimate on assumptions that may prove to be wrong, and we may use our available capital resources sooner than we currently expect. Our future capital requirements will depend on a number of factors, including:

- the costs of conducting preclinical studies and clinical trials;
- the costs of manufacturing;
- the scope, progress, results and costs of discovery, preclinical development, laboratory testing, and clinical trials for product candidates we may develop, if any;
- the costs, timing, and outcome of regulatory review of our product candidates;
- our ability to establish and maintain collaborations on favorable terms, if at all;
- the achievement of milestones or occurrence of other developments that trigger payments under any license or collaboration agreements we might have at such time;
- the costs associated with the ongoing buildout of our Andover facility;
- the costs and timing of future commercialization activities, including product sales, marketing, manufacturing and distribution, for any of our product candidates for which we receive marketing approval;
- the amount of revenue, if any, received from commercial sales of our product candidates, should any of our product candidates receive marketing approval;
- the costs of preparing, filing and prosecuting patent applications, obtaining, maintaining and enforcing our intellectual property rights, and defending intellectual property-related claims;
- our headcount growth and associated costs as we expand our business operations, research and development activities and manufacturing capabilities; and

- the costs of operating as a public company.

Our cash and cash equivalents and investments as of June 30, 2022, will not be sufficient to complete development of ONCR-177 or any other product candidate. Accordingly, we will be required to obtain further funding to achieve our business objectives.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of public or private equity offerings and debt financings or other sources, such as potential collaboration agreements, strategic alliances and licensing arrangements. We may also raise additional capital from sales of common stock under our Sales Agreement. To the extent that we raise additional capital through the sale of equity or convertible debt securities, ownership interests of stockholders may be diluted, and the terms of these securities may include liquidation or other preferences that could adversely affect the rights of our common stockholders. In addition to the Term Loan, additional debt financing, if available, may involve agreements that include restrictive covenants that limit our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends, that could adversely impact our ability to conduct our business.

If we raise funds through potential collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates, or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds 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 product candidates that we would otherwise prefer to develop and market ourselves.

Critical Accounting Policies and Significant Judgments and Estimates

Our unaudited interim condensed consolidated financial statements and accompanying notes have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these unaudited interim condensed consolidated financial statements requires us to make judgments and estimates that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the unaudited interim condensed consolidated financial statements and the reported amounts of expenses during the reported periods. We base our estimates on historical experience, known trends and events, and various other factors that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. On an ongoing basis, we evaluate our judgments and estimates in light of changes in circumstances, facts, and experience. The effects of material revisions in estimates, if any, will be reflected in the consolidated financial statements prospectively from the date of change in estimates.

There have been no significant changes to our critical accounting policies or other significant judgements and estimates from those described in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 9, 2022.

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.

Contractual Obligations

On April 1, 2022, we entered into a Loan Agreement with K2HV which increased our contractual obligations and commitments related to future principal and interest payments. See "—Recent Developments" above for further discussion about this Loan Agreement.

As of June 30, 2022, there have been no other material changes to our contractual obligations and commitments, consisting of operating lease obligations, from those described in our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 9, 2022.

Emerging Growth Company and Smaller Reporting Company Status

We are an ‘‘emerging growth company,’’ or EGC, under the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. Section 107 of the JOBS Act provides that an EGC can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Thus, an EGC can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of the delayed adoption of new or revised accounting standards and, therefore, we will be subject to the same requirements to adopt new or revised accounting standards as private entities.

As an EGC, we may also take advantage of certain exemptions and reduced reporting requirements under the JOBS Act. Subject to certain conditions, as an EGC:

- we may present only two years of audited financial statements and only two years of related Management's Discussion and Analysis of Financial Condition and Results of Operations in our annual reports on Form 10-K filed with the SEC;
- we will avail ourselves of the exemption from providing an auditor's attestation report on our internal control over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act;
- we will avail ourselves of the exemption from complying with any requirement that may be adopted by the Public Company Accounting Oversight Board, or PCAOB, regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements, known as the auditor discussion and analysis;
- we may provide reduced disclosure about our executive compensation arrangements in our proxy statements filed with the SEC; and
- we will not require nonbinding advisory votes on executive compensation or stockholder approval of any golden parachute payments.

We will remain an EGC until the earliest of (i) December 31, 2025, (ii) the last day of the fiscal year in which we have total annual gross revenues of $1.07 billion or more, (iii) the date on which we have issued more than $1 billion in non-convertible debt during the previous rolling three-year period, or (iv) the date on which we are deemed to be a large accelerated filer under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

We are also a ''smaller reporting company,'' meaning that the market value of our stock held by non-affiliates is less than $700 million and our annual revenue was less than $100 million during our most recently completed fiscal year. We may continue to be a smaller reporting company for so long as (i) the market value of our stock held by non-affiliates is less than $250 million or (ii) our annual revenue is less than $100 million during our most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700 million.

If we are a smaller reporting company at the time we cease to be an EGC, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to EGCs, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

Recent Accounting Pronouncements

Refer to Note 2 in the accompanying notes to our unaudited interim condensed consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q for a discussion of recent accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risk related to changes in interest rates. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because of our variable rate debt and our cash equivalents, in the form of a money market fund, are primarily invested in U.S. treasury obligations.

Based on the $20.0 million outstanding principal balance under our term loan at June 30, 2022, a 100-basis point increase in interest rates would increase our interest expense on the term loan by $0.2 million annually.

Because of the short-term nature of the investments in our portfolio, an immediate one percentage point change in market interest rates would not have a material impact on the fair market value of our investment portfolio.

We are not currently exposed to significant market risk related to changes in foreign currency exchange rates; however, we have contracted with, and may continue to contract with, foreign vendors that are located in Europe. Our operations may be subject to fluctuations in foreign currency exchange rates in the future.

Inflation generally affects us by increasing our cost of labor and certain supply chain costs. We do not believe that inflation had a material effect on our business, financial condition or results of operations during the year ended December 31, 2021, and the three and six months ended June 30, 2022.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain “disclosure controls and procedures,” as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2022, the end of the period covered by this Quarterly Report on Form 10-Q. Based on the evaluation of our disclosure controls and procedures as of June 30, 2022, our principal executive officer and principal financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving the desired control objectives. Our management recognizes that any control system, no matter how well designed and operated, is based upon certain judgments and assumptions and cannot provide absolute assurance that its objectives will be met. Similarly, an evaluation of controls cannot provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. We are not currently a party to any material legal proceedings, and we are not aware of any pending or threatened legal proceeding against us that we believe could have an adverse effect on our business, operating results or financial condition.

Item 1A. Risk Factors.

Our business is subject to risks and events that, if they occur, could adversely affect our financial condition and results of operations and the trading price of our securities. Except as provided below, our risk factors as of the date of this Quarterly Report on Form 10-Q have not changed materially from those described in "Part I, Item 1A. Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 9, 2022, and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, filed with the SEC on May 4, 2022.

We are exposed to interest rate risk under our Loan Agreement with K2HV, which could cause our debt service obligations to increase significantly.

We are exposed to market risk from changes in interest rates. On April 1, 2022, we entered into a loan and security agreement, or the Loan Agreement, with K2 HealthVentures LLC, or K2HV. The Loan Agreement provides for a loan of up to $45.0 million to be funded upon the achievement of certain time-based, clinical and regulatory milestones, or the Term Loan. The Term Loan bears a variable interest rate equal to the greater of (i) 7.75% and (ii) the sum of (A) the prime rate last quoted in The Wall Street Journal (or a comparable replacement rate if The Wall Street Journal ceases to quote such rate) and (B) 4.25%. The Federal Reserve has recently raised, and may in the future further raise, interest rates to combat the effects of recent high inflation. An increase in interest rates by the Federal Reserve has and could in the future cause the prime rate to increase, which has and could in the future increase our debt service obligations. Significant increases in such obligations could have a negative impact on our financial position or operating results, including cash available for servicing our indebtedness, or result in increased borrowing costs in the future.

Market and economic conditions may negatively impact our business, financial condition and stock price.

Market conditions such as inflation, volatile energy costs, geopolitical issues, unstable global credit markets and financial conditions could lead to periods of significant economic instability, diminished liquidity and credit availability, diminished expectations for the global economy and expectations of slower global economic growth going forward. Our business and operations may be adversely affected by such instability, including any such inflationary fluctuations, economic downturns, volatile business environments and continued unstable or unpredictable economic and market conditions. Additionally, supply chain issues or rising costs of goods and services that we purchase, including raw materials or supplies used in manufacturing our product candidates and the conducting of our clinical and preclinical studies, or rising salary inflation to retain and recruit biotech talent, may have an adverse effect on our financial results in future periods. If economic and market conditions continue to deteriorate or do not improve, it may make any future financing efforts more difficult to complete, more costly and more dilutive to our stockholders. Additionally, due to our volatile industry and industry-wide declining stock values, investors may seek to pursue non-biotech investments with steadier returns. Failure to secure any necessary financing in a timely manner or on favorable terms could have a material adverse effect on our operations, financial condition or stock price or could require us to delay or abandon development or commercialization plans. In addition, our current or future service providers, contract manufacturers, suppliers and other partners could be negatively affected by such difficult economic factors, which could have an adverse impact on our operations or financial condition.

We are subject to new legislation, regulatory proposals and third-party payor initiatives that may increase our costs of compliance, and adversely affect our ability to market our products, obtain collaborators, and raise capital.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any products for which we obtain marketing approval. We expect that current laws, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we may receive for any approved products.

For example, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or ACA, was passed in March 2010 and substantially changed the way healthcare is financed by both governmental and private insurers, and continues to significantly impact the United States pharmaceutical industry. Since its enactment, there have been executive, judicial and political challenges to certain aspects of the ACA. For example, the Tax Cuts and Jobs Act, or the Tax Act, includes a provision repealing the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." On June 17, 2021 the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress. Thus, the ACA will remain in effect in its current form. Further, prior to the U.S.

Supreme Court ruling, on January 28, 2021, President Biden issued an executive order that initiated a special enrollment period for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is possible that the ACA will be subject to judicial or Congressional challenges in the future. It is unclear how any such challenges and the healthcare reform measures of the Biden administration will impact the ACA and our business.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. For example, in August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2012 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of up to 2% per fiscal year, which went into effect in April 2013 and, due to subsequent legislative amendments to the statute, will remain in effect until 2031, with the exception of a temporary suspension from May 1, 2021 through March 31, 2022 due to the COVID-19 pandemic, unless additional Congressional action is taken. Under current legislation, the actual reduction in Medicare payments will vary from 1% in 2022 to up to 4% in the final fiscal year of this sequester. On March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which eliminates the statutory Medicaid drug rebate cap, currently set at 100% of a drug's average manufacturer price, for single source and innovator multiple source drugs, beginning January 1, 2024. In January 2013, the American Taxpayer Relief Act of 2012, among other things, further reduced Medicare payments to certain providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There has been heightened governmental scrutiny in the United States of pharmaceutical pricing practices in light of the rising cost of prescription drugs and biologics. Such scrutiny has resulted in several recent congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. For example, the Trump administration used several means to propose or implement drug pricing reform, including through federal budget proposals, executive orders and policy initiatives. For example, on July 24, 2020 and September 13, 2020, the Trump administration announced several executive orders related to prescription drug pricing that seek to implement several of the administration's proposals. As a result, the FDA released a final rule and guidance in September 2020, providing pathways for states to build and submit importation plans for drugs from Canada. Further, on November 20, 2020, the Department of Health and Human Services, or HHS, finalized a regulation removing safe harbor protection for price reductions from pharmaceutical manufacturers to plan sponsors under Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law. The rule also creates a new safe harbor for price reductions reflected at the point-of-sale, as well as a safe harbor for certain fixed fee arrangements between pharmacy benefit managers and manufacturers. The implementation of the rule has been delayed until January 1, 2027. On November 20, 2020, the Centers for Medicare & Medicaid Services, or CMS, issued an interim final rule implementing President Trump's Most Favored Nation executive order, which would tie Medicare Part B payments for certain physician-administered drugs to the lowest price paid in other economically advanced countries, effective January 1, 2021. As a result of litigation challenging the Most Favored Nation model, on December 27, 2021, CMS published a final rule that rescinded the Most Favored Nation model interim final rule. In July 2021, the Biden administration released an executive order, "Promoting Competition in the American Economy," with multiple provisions aimed at prescription drugs. In response to Biden's executive order, on September 9, 2021, HHS released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform and sets out a variety of potential legislative policies that Congress could pursue to advance these principles. No legislation or administrative actions have been finalized to implement these principles. In addition, Congress is considering drug pricing as part of other reform initiatives. Any new laws or regulations that result in additional reductions in Medicare and other healthcare funding could have a material adverse effect on customers for our products, if approved, and, accordingly, on our results of operations.

We cannot predict what healthcare reform initiatives may be adopted in the future. However, we expect that the ACA, as well as other federal and state healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria, increased regulatory burdens and operating costs, decreased net revenue from our biopharmaceutical products, decreased potential returns from our development efforts, and additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government healthcare programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from commercializing our products and being able to generate revenue, and we could be prevented from or significantly delayed in achieving profitability. It is also possible that additional governmental action is taken in response to the COVID-19 pandemic.

In addition, there have been a number of other legislative and regulatory proposals aimed at changing the biopharmaceutical industry. For instance, the Drug Quality and Security Act of 2013 imposes obligations on manufacturers of biopharmaceutical products related to product tracking and tracing. Further, manufacturers have product investigation, quarantine, disposition, and notification responsibilities related to counterfeit, diverted, stolen, and intentionally adulterated products that would result in serious adverse

health consequences of death to humans, as well as products that are the subject of fraudulent transactions or which are otherwise unfit for distribution such that they would be reasonably likely to result in serious health consequences or death.

Compliance with the federal track and trace requirements may increase our operational expenses and impose significant administrative burdens. As a result of these and other new proposals, we may determine to change our current manner of operation, provide additional benefits or change our contract arrangements, any of which could have a material adverse effect on our business, financial condition, results of operations, stock price and prospects.

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

(a) Sales of Unregistered Securities

None.

(b) Use of Proceeds from Initial Public Offering of Common Stock

On October 1, 2020, our Registration Statement on Form S-1, as amended (File No. 333-248757), was declared effective in connection with the IPO of our common stock, pursuant to which we registered an aggregate of 6,670,000 shares of our common stock, of which we sold 6,557,991 shares, including the partial exercise of the underwriters' option to purchase additional shares, at a price to the public of $15.00 per share. The offering closed on October 6, 2020, and, as a result, we received net proceeds of $88.3 million (after deducting underwriters' discounts and commissions of approximately $6.9 million and additional offering related costs of approximately $3.2 million). The joint book-running managers of the offering were Jefferies LLC, Evercore Group L.L.C. and Piper Sandler & Co.

No expenses incurred by us in connection with our IPO were made directly or indirectly to (i) any of our officers or directors or their associates, (ii) any persons owning 10% or more of any class of our equity securities, or (iii) any of our affiliates.

As of the end of June 30, 2022, we have applied all of the offering proceeds from our IPO in the manner described in the final prospectus filed by us with the SEC pursuant to Rule 424(b) on October 2, 2020, and all expenses of the offering have been paid in full.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

On August 4, 2022, Mr. Scott Canute notified us and our board of directors of his resignation as a director of the Company, effective August 8, 2022. Mr. Canute's resignation was not the result of any dispute or disagreement with us on any matter relating to the company's operations, policies or practices.

We have also updated the subsections titled "Other Healthcare Laws and Regulations" and "Health Reform" under the Government Regulation section in our business description, as set forth below, which replace the text in those subsections in our Form 10-K for the year ended December 31, 2021, filed with the SEC on March 9, 2022, in their entirety.

Other Healthcare Laws and Regulations

Healthcare providers and third-party payors play a primary role in the recommendation and use of pharmaceutical products that are granted marketing approval. Arrangements with third-party payors, existing or potential customers and referral sources, including healthcare providers, are subject to broadly applicable fraud and abuse, and these laws and regulations may constrain the business or financial arrangements and relationships through which manufacturers conduct clinical research, market, sell and distribute the products for which they obtain marketing approval. Such restrictions under applicable federal and state healthcare laws and regulations include the following:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in cash or kind, in exchange for, or to induce, either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers, on the one hand, and prescribers, purchasers, formulary managers and other individuals and entities on the other. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the ACA, amended the intent

requirement of the federal Anti-Kickback Statute such that a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to commit a violation;

- the federal civil and criminal false claims, including the civil False Claims Act, or the FCA, and civil monetary penalties laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid or other third-party payors that are false or fraudulent, or making a false statement to avoid, decrease, or conceal an obligation to pay money to the federal government. Certain marketing practices, including off-label promotion, also may implicate the FCA. In addition, the ACA codified case law that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA.
- the federal Physician Payments Sunshine Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or the CMS, information related to payments and other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain other healthcare providers (such as physician assistants and nurse practitioners) and teaching hospitals, and ownership and investment interests held by physicians and their immediate family members;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability, among other things, for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and their implementing regulations, which imposes certain obligations, including mandatory contractual terms, with respect to safeguarding the transmission, security and privacy of protected health information by entities subject to HIPAA, such as health plans, health care clearinghouses and certain healthcare providers, and their respective business associates and their covered subcontractors that access protected health information; and
- state and foreign law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers and drug pricing and/or marketing expenditures; and state and local laws requiring the registration of pharmaceutical sales representatives and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Violation of the laws described above or any other governmental laws and regulations may result in significant penalties, including administrative, civil and criminal penalties, damages, fines, the curtailment or restructuring of operations, the exclusion from participation in federal and state healthcare programs, disgorgement, contractual damages, reputational harm, diminished profits and future earnings, imprisonment, and additional reporting requirements and oversight if a person becomes subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws. Furthermore, efforts to ensure that business activities and business arrangements comply with applicable healthcare laws and regulations can be costly for manufacturers of branded prescription products.

Health Reform

The United States and some foreign jurisdictions are considering or have enacted a number of reform proposals to change the healthcare system. There is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by federal and state legislative initiatives, including those designed to limit the pricing, coverage, and reimbursement of pharmaceutical and biopharmaceutical products, especially under government-funded health care programs, and increased governmental control of drug pricing.

By way of example, in March 2010, the ACA was signed into law, intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add transparency requirements for the healthcare and health insurance industries, impose taxes and fees on the healthcare industry and impose additional health policy reforms. Among the provisions of the ACA of importance to our business are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs;

- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13.0% of the average manufacturer price for branded and generic drugs, respectively;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- extension of a manufacturer's Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- a new Medicare Part D coverage gap discount program, in which manufacturers must now agree to offer 70% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for a manufacturer's outpatient drugs to be covered under Medicare Part D;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Since its enactment, there have been executive, judicial and Congressional challenges to certain aspects of the ACA. As a result, there have been delays in the implementation of, and action taken to repeal or replace, certain aspects of the ACA. For example, former President Trump signed several Executive Orders and other directives designed to delay the implementation of certain provisions of the ACA. Concurrently, Congress considered legislation to repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, it has enacted laws that modify certain provisions of the ACA such as removing penalties, effective January 1, 2019, for not complying with the ACA's individual mandate to carry health insurance and delaying the implementation of certain ACA-mandated fees. In addition, on June 17, 2021 the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress. Thus, the ACA will remain in effect in its current form. Further, prior to the U.S. Supreme Court ruling, on January 28, 2021, President Biden issued an executive order to initiate a special enrollment period for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructs certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is possible the ACA will be subject to judicial or Congressional challenges in the future. It is unclear how any such challenges and the healthcare reform measures of the Biden administration will impact the ACA and our business.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. For example, in August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2012 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of up to 2% per fiscal year, which went into effect in April 2013 and, due to subsequent legislative amendments to the statute, will remain in effect until 2031, with the exception of a temporary suspension from May 1, 2020 through March 31, 2022 due to the COVID-19 pandemic, unless additional Congressional action is taken. Under current legislation, the actual reduction in Medicare payments will vary from 1% in 2022 to up to 4% in the final fiscal year of this sequester. On March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which eliminates the statutory Medicaid drug rebate cap, currently set at 100% of a drug's average manufacturer price, for single source and innovator multiple source drugs, beginning January 1, 2024. In January 2013, the American Taxpayer Relief Act of 2012, among other things, further reduced Medicare payments to certain providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There also has been heightened governmental scrutiny in the United States of pharmaceutical pricing practices in light of the rising cost of prescription drugs and biologics. Such scrutiny has resulted in several recent congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. At the federal level, the Trump administration used several means to propose or implement drug pricing reform, including through federal budget proposals, executive orders and policy initiatives.

For example, on July 24, 2020 and September 13, 2020, the Trump administration announced several executive orders related to prescription drug pricing that seek to implement several of the administration's proposals. As a result, the FDA released a final rule and guidance in September 2020 providing pathways for states to build and submit importation plans for drugs from Canada. Further, on November 20, 2020, HHS finalized a regulation removing safe harbor protection for price reductions from pharmaceutical manufacturers to plan sponsors under Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law. The rule also creates a new safe harbor for price reductions reflected at the point-of-sale, as well as a safe harbor for certain fixed fee arrangements between pharmacy benefit managers and manufacturers. The implementation of the rule has been

delayed until January 1, 2027. On November 20, 2020, CMS issued an interim final rule implementing President Trump's Most Favored Nation executive order, which would tie Medicare Part B payments for certain physician-administered drugs to the lowest price paid in other economically advanced countries, effective January 1, 2021. As a result of litigation challenging the Most Favored Nation model, on December 27, 2021, CMS published a final rule that rescinded the Most Favored Nation model interim final rule. In July 2021, the Biden administration released an executive order, "Promoting Competition in the American Economy," with multiple provisions aimed at prescription drugs. In response to Biden's executive order, on September 9, 2021, HHS released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform and sets out a variety of potential legislative policies that Congress could pursue to advance these principles. No legislation or administrative actions have been finalized to implement these principles. In addition, Congress is considering drug pricing as part of other reform initiatives. At the state level, individual states in the United States have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

We expect that these initiatives, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and lower reimbursement, and in additional downward pressure on the price that we receive for any approved product. It is also possible that additional governmental action is taken in response to the COVID-19 pandemic. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our product candidates.

Item 6. Exhibits.

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation of the Registrant (incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-39575), filed with the SEC on October 6, 2020).
3.2	Amended and Restated Bylaws of the Registrant (incorporated herein by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-39575), filed with the SEC on October 6, 2020).
4.1	Warrant to Purchase Shares of Common Stock by and between the Registrant and K2 HealthVentures LLC, dated April 1, 2022 (incorporated herein by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K (File No. 001-39575), filed with the SEC on April 5, 2022).
10.1+	Loan and Security Agreement, by and among the Registrant, K2 HealthVentures LLC and Ankura Trust Company, LLC, dated April 1, 2022 (incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 001-39575), filed with the SEC on April 5, 2022).
10.2*#	Employment Agreement by and between the registrant and Richard Wanstall, dated as of May 10, 2022.
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.
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.
32.1^	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2^	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the inline XBRL document)
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.
+ Portions of this exhibit have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K.
# Indicates management contract or compensatory plan.
^ This certification is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing by the registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, 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.

ONCORUS, INC.

Date: August 4, 2022 By: /s/ Theodore (Ted) Ashburn

Theodore (Ted) Ashburn, M.D., Ph.D.
President, Chief Executive Officer and Director
(Principal Executive Officer)

ONCORUS, INC.

Date: August 4, 2022 By: /s/ Richard Wanstall

Richard Wanstall
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 10.2

ONCORUS, INC.

EMPLOYMENT AGREEMENT

This Employment Agreement (the "Agreement"), effective as of May 10, 2022 (the "Effective Date"), is made by and among Oncorus, Inc., a Delaware corporation (the "Company") and Rick Wanstall (the "Executive" and, together with the Company, the "Parties").

WHEREAS, the Company desires to employ Executive as its Chief Financial Officer, and to enter into an agreement embodying the terms of such employment;

WHEREAS, Executive desires to provide services to the Company on the terms herein provided; and

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, including the respective covenants and agreements set forth below, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. Employment.

(a) General. The Company shall employ Executive upon the terms and conditions provided herein effective as of the Effective Date.

(b) Position and Duties. Effective on the Effective Date (as defined above), Executive: (i) shall serve as the Company's Chief Financial Officer, with responsibilities, duties, and authority usual and customary for such position, subject to direction by the Company's Board of Directors (the "Board"); (ii) shall report directly to the Chief Executive Officer; and (iii) agrees promptly and faithfully to comply with (A) all reasonable and lawful directions and requests of the Board or a designated Committee thereof' and (B) all present and future policies of the Company in connection with the Company's business. At the Company's request, Executive shall serve the Company and/or its subsidiaries and affiliates in such other capacities in addition to the foregoing as the Company shall designate, provided that such additional capacities are consistent with Executive's position as the Company's Chief Financial Officer. In the event that Executive serves in any one or more of such additional capacities, Executive's compensation shall not automatically be increased on account of such additional service beyond that specified in this Agreement.

(c) Exclusivity. Except with the prior written approval of the Board (which may grant or withhold in its sole and absolute discretion), Executive shall devote substantially all of Executive's working time, attention, and energies to the business of the Company, except during any paid vacation or other excused absence periods. Nothing in this section prevents Executive from (i) engaging in additional activities in connection with personal investments and community affairs, and (ii) serving as a member of the board of directors of no more than three (3) organizations that are not a competitor of the Company and is approved by the Board; *provided* such activities do not individually or in the aggregate interfere with the performance of Executive's duties under this Agreement, violate the Company's standards of conduct then in

effect, comply with the Company's insider trading policies, or raise a conflict under the Company's conflict of interest policies.

2. **Term**. The period of Executive's employment under this Agreement shall commence on the Effective Date and shall continue until Executive's employment with the Company is terminated pursuant to Section 4 below. The phrase "Term of Employment" as used in this Agreement shall refer to the entire period of employment of Executive by the Company.

3. **Compensation and Related Matters**.

(a) Annual Base Salary. As of the Effective Date, Executive shall receive a base salary at the rate of $35,000.00 per month ($420,000 on an annualized basis) (as may be adjusted and in effect from time to time, the "Annual Base Salary"), subject to withholdings and deductions, which shall be paid to Executive in accordance with the customary payroll practices and procedures of the Company. Such Annual Base Salary shall be reviewed by the Board from time to time and is subject to such adjustments as determined necessary or appropriate by the Board.

(b) Annual Bonus. Beginning for the 2022 calendar year and continuing during the Term of Employment, Executive shall be eligible to receive a discretionary annual bonus based on Executive's achievement of performance objectives as set by the Board, after consultation with the Executive, each year as well as overall Company performance, such bonus to be targeted at forty percent (40%) (the "Target Percentage") of Executive's Base Salary in effect at the later of the Effective Date or the beginning of the applicable calendar year (the "Annual Bonus"). For purposes of clarification, the 2022 Annual Bonus will not be prorated. The actual bonus award may be greater or less than 40% and may be zero. Executive must remain employed by the Company through the date of payment in order to remain eligible for such Annual Bonus. Any bonus awarded will be paid on or before March 15 of the year following the year for which the bonus is awarded.

(c) Signing Bonus. The Company will pay the Executive a sign-on bonus of $50,000, less applicable deductions for employment taxes and other required withholdings, payable on the next regular payroll date following the Effective Date.

(d) Benefits. Executive shall be eligible to participate in such employee and executive benefit plans and programs as the Company may from time to time offer to provide to its executives, subject to the terms and conditions of such plans and programs. Notwithstanding the foregoing, nothing herein is intended, or shall be construed, to require the Company to institute or continue any particular plan, program or benefits. While serving as an executive of the Company, Executive shall be covered by the Company's Directors and Officers Liability Insurance. If the Company has entered into indemnification agreements with members of its Board, the Company will enter into the same form of indemnification agreement with Executive in Executive's capacity as a member of the Board.

(e) Business Expenses. The Company shall reimburse Executive for all reasonable, documented, out-of-pocket travel and other business expenses incurred by Executive

in the performance of Executive's duties to the Company in accordance with the Company's applicable expense reimbursement policies and procedures as are in effect from time to time.

4. Stock Option.

(a) Option Grant. As soon as reasonably practicable following the Effective Date, the Company shall recommend to the Board that it grant to Executive under the Oncorus, Inc. 2020 Equity Incentive Plan (the "Plan") and Executive's Oncorus, Inc. 2020 Equity Incentive Plan Option Agreement (the "Option Agreement"), an option to purchase 225,000 shares of the Company's common stock or, at the election of Executive, a restricted stock award (the "Award") having an exercise or purchase price per share equal to fair market value on the date of grant, as determined by the Board in its sole discretion. If the award is a stock option, it shall be an "incentive stock option" within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code") to the maximum extent permitted by applicable law. The Award shall vest and become exercisable with respect to 25% of the shares subject thereto on the first anniversary of the Effective Date and with respect to 1/48th of the shares subject thereto on each monthly anniversary of the Effective Date thereafter, in each case, subject to Executive's continued service to the Company through each vesting date. The Award will be subject to all of the terms and conditions of the Plan and the Option Agreement to be entered into by the parties pursuant to which it is granted.

(b) Future Annual Stock Option Awards. Executive remains eligible to be considered for future equity awards as may be determined by the Board (or the Compensation Committee of the Board) in its discretion in accordance with the terms of any applicable equity plan or arrangement that may be in effect from time to time.

5. Termination.

(a) At-Will Employment. The Company and Executive acknowledge that Executive's employment is and shall continue to be at-will, as defined under applicable law. This means that it is not for any specified period of time and can be terminated by Executive or by the Company at any time, with or without advance notice, and for any or no particular reason or cause. This "at-will" nature of Executive's employment shall remain unchanged during Executive's tenure as an employee and may not be changed, except in an express writing signed by Executive. If Executive's employment terminates for any reason, Executive shall not be entitled to any payments, benefits, damages, award, or compensation other than as provided in this Agreement.

(b) Notice of Termination. During the Term of Employment, any termination of Executive's employment by the Company or by Executive (other than by reason of death) shall be communicated by written notice (a "Notice of Termination") from one Party hereto to the other Party hereto (i) indicating the specific termination provision in this Agreement relied upon, if any, (ii) setting forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of Executive's employment under the provision so indicated, and (iii) specifying the Date of Termination (as defined below). The failure by either the Company or Executive to set forth in the Notice of Termination all of the facts and circumstances which

contribute to a showing of Cause (as defined below) or Good Reason (as defined below) shall not waive any right of the Company or Executive hereunder or preclude the Company or Executive from asserting such fact or circumstance in enforcing their rights hereunder.

(c) Termination Date. For purposes of this Agreement, "Date of Termination" shall mean the date of the termination of Executive's employment with the Company specified in a Notice of Termination.

(d) Deemed Resignation. Upon termination of Executive's employment for any reason, Executive shall be deemed to have resigned from all offices and board memberships, if any, then held with the Company or any of its affiliates, and, at the Company's request, Executive shall promptly execute such documents as are necessary or desirable to effectuate such resignations.

6. Consequences of Termination.

(a) Payments of Accrued Obligations upon all Terminations of Employment. Upon a termination of Executive's employment for any reason, Executive (or Executive's estate or legal representative, as applicable) shall be entitled to receive, on or before the date required by applicable law and in any case within thirty (30) days after Executive's Date of Termination: (i) any portion of Executive's Annual Base Salary earned through Executive's Date of Termination not theretofore paid, (ii) any expenses owed to Executive under Section 3(d) above, (iii) any accrued but unused paid time-off owed to Executive, and (iv) any amount arising from Executive's participation in, or benefits under, any employee benefit plans, programs, or arrangements under Section 3(c) above, which amounts shall be payable in accordance with the terms and conditions of such employee benefit plans, programs, or arrangements (together, the "Accrued Obligations"). Except as otherwise set forth in Section 6(b) below, the Accrued Obligations shall be the only payments and benefits payable in the event of Executive's termination of employment for any reason; provided that such amount may be reduced in lieu of Executive's repayment obligation as described in Section 6(c) if applicable.

(b) Severance Payments upon Termination without Cause or For Good Reason Not in Connection with a Change in Control. If, during the Term of Employment, Executive's employment is terminated by the Company without Cause or Executive resigns for Good Reason, not in connection with a Change in Control (as defined below), in addition to the Accrued Obligations, and subject to Executive's delivery to the Company of a waiver and release of claims agreement in a form approved by the Company, which will include a 12-month non-competition clause, confidentiality clause, non-disparagement clause, and cooperation post-termination clause, that becomes effective and irrevocable in accordance with Section 11(d) hereof (a "Release," the effective date of the Release the "Release Effective Date") and Executive's continued compliance with Executive's obligations pursuant to Sections 6(e) and 8(a) hereof, and all other post-termination obligations to the Company with respect to confidential information, non-competition and non-solicitation, Executive will also be eligible for the following "Severance Benefits":

(i) Severance in an amount equal to twelve (12) months (the "Severance Period") of Executive's Annual Base Salary as of Executive's Date of Termination, less all applicable withholdings and deductions, paid in equal installments beginning on the Company's first regularly scheduled payroll date following the Release Effective Date, with the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter.

(i) During the period commencing on the Date of Termination and ending upon expiration of the Severance Period or, if earlier, the date on which Executive becomes eligible for comparable replacement coverage under a subsequent employer's group health plan (in any case, the "COBRA Period"), subject to Executive's valid election to continue healthcare coverage under Section 4980B of the Internal Revenue Code of 1986, as amended (the "Code") and the regulation thereunder, payment by the Company of one-hundred percent (100%) of the COBRA premiums necessary to continue Executive and Executive's covered dependents' health insurance coverage in effect for Executive (and Executive's covered dependents) on the termination date (the "COBRA Severance"); *provided, however*, that if (1) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the continuation coverage period to be, exempt from the application of Section 409A under Treasury Regulation Section 1.409A-1(a)(5), (2) the Company is otherwise unable to continue to cover Executive or Executive's dependents under its group health plans, or (3) the Company cannot provide the benefit without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then, in any such case, an amount in cash equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments over the COBRA Period (or remaining portion thereof).

(ii) Any previously Board-approved unpaid Annual Bonus from the previously completed calendar year, paid at the same time as the first severance payment installment.

(iii) Acceleration of the vesting of all outstanding unvested time-based equity awards that are held by Executive as of the date of Executive's Date of Termination as to the number of shares that would have vested in accordance with the applicable vesting schedule as if Executive had been in service for an additional twelve (12) months as of Executive's termination date (based upon months of service and not the occurrence of corporate events or milestones).

(c) Severance Payments upon Termination without Cause or For Good Reason In Connection with a Change in Control. In the event that the Company terminates Executive's employment without Cause or Executive resigns for Good Reason within sixty (60) days prior to or twelve (12) months following the effective date of a Change in Control ("Change in Control Termination Date"), then Executive shall be entitled to the Accrued Obligations and, subject to Executive's compliance with the requirements of this Section 6, including but not limited to delivery to the Company of the Release and compliance with his obligations pursuant to Sections 6(e) and 8(a), then Executive will be eligible for the following "Change in Control Severance Benefits":

(i) Executive shall be eligible to receive the Severance Benefits set forth in Section 6(b)(i)-(iii) under the terms and conditions described in this Section 6, however such severance payments on Section 6(b)(i) shall not be paid in installments, and rather shall be paid in a lump sum on the Company's first regularly scheduled payroll date following the Release Effective Date; and

(ii) Effective as of the later of Executive's Change in Control Termination Date or the effective date of the Change in Control, the vesting and exercisability of all outstanding equity awards that are held by Executive as of immediately prior to the Change in Control Termination Date shall be accelerated (and lapse, in the case of reacquisition or repurchase rights) in full. Executive's equity awards shall remain outstanding following Executive's Change in Control Termination Date if and to the extent necessary to give effect to this Section 6(c)(ii), subject to earlier termination under the terms of the equity plan under which such awards were granted and the original maximum term of the award (without regard to Executive's termination).

(d) No Other Severance. The provisions of this Section 6 shall supersede in their entirety any severance payment provisions in any severance plan, policy, program, or other arrangement maintained by the Company.

(e) Company Property. Executive hereby acknowledges and agrees that all Personal Property (as defined below) and equipment furnished to, or prepared by, Executive in the course of, or incident to, Executive's employment, belongs to the Company and shall be promptly returned to the Company upon termination of Executive's employment (and will not be kept in Executive's possession or delivered to anyone else). For purposes of this Agreement, "Personal Property" includes, without limitation, all books, manuals, records, reports, notes, contracts, lists, blueprints, and other documents, or materials, or copies thereof (including computer files), keys, building card keys, company credit cards, telephone calling cards, computer hardware and software, cellular and portable telephone equipment, personal digital assistant (PDA) devices, and all proprietary information relating to the business of the Company or its subsidiaries or affiliates. Following termination, Executive shall not retain any written or other tangible material containing any proprietary information of the Company or its subsidiaries or affiliates.

(f) No Requirement to Mitigate; Survival. Executive shall not be required to mitigate the amount of any payment provided for under this Agreement by seeking other employment or in any other manner. Notwithstanding anything to the contrary in this Agreement, the termination of Executive's employment shall not impair the rights or obligations of any Party.

(g) Definition of Cause. For purposes hereof, "Cause" shall mean any one of the following: (i) Executive's violation of any applicable material law or regulation respecting the business of the Company; (ii) Executive's conviction of, or plea of nolo contendere to, a felony or a crime involving moral turpitude; (iii) any act of dishonesty, fraud, or misrepresentation in relation to Executive's duties to the Company which act is materially and demonstrably injurious to the Company; (iv) Executive's willful and repeated failure to perform

in any material respect Executive's duties hereunder after fifteen (15) days' notice and an opportunity to cure such failure and a reasonable opportunity to present to the Board Executive's position regarding any dispute relating to the existence of such failure (other than on account of disability); (v) Executive's failure to attempt in good faith to implement a clear and reasonable directive from the Board or to comply with any of the Company's policies and procedures which failure is either material or occurs after written notice from the Board; (vi) any act of gross misconduct which is materially and demonstrably injurious to the Company; or (vii) Executive's breach of fiduciary duty owed to the Company.

(h) Definition of Change in Control. For purposes hereof, "Change in Control" shall have the meaning assigned to it in Section 14(j) of the Plan.

(i) Definition of Good Reason. For purposes hereof, "Good Reason" shall mean any one of the following: (i) a material reduction in Executive's Base Salary (other than a reduction of not more than 10% that is applicable to similarly situated executives of the Company or a reduction of three (3) months or less due to financial exigency), (ii) the material reduction of Executive's duties, authority and responsibilities as set forth herein, (iii) the Company's material breach of this Agreement, or (iv) the relocation of Executive's principal place of employment by more than fifty (50) miles, provided, that, in each case, Executive will not be deemed to have Good Reason unless (i) Executive first provides the Board with written notice of the condition giving rise to Good Reason within thirty (30) days of its initial occurrence, (ii) the Company or the successor company fails to cure such condition within thirty (30) days after receiving such written notice (the "Cure Period"), and (iii) Executive's resignation based on such Good Reason is effective within thirty (30) days after the expiration of the Cure Period.

7.Assignment and Successors. The Company shall assign its rights and obligations under this Agreement to any successor to all or substantially all of the business or the assets of the Company (by merger or otherwise). This Agreement shall be binding upon and inure to the benefit of the Company, Executive, and their respective successors, assigns, personnel, and legal representatives, executors, administrators, heirs, distributees, devisees, and legatees, as applicable. None of Executive's rights or obligations may be assigned or transferred by Executive, other than Executive's rights to payments hereunder, which may be transferred only by will, operation of law, or as otherwise provided herein.

8.Miscellaneous Provisions.

(a) Non-Competition Agreement. Executive shall execute and abide by the Company's standard form Employee Confidential Information and Invention Assignment Agreement (the "Non-Competition Agreement"). No later than the first pay period following the Effective Date, the Company will pay Executive $500 in exchange for your agreement to the provisions in Section 6 of the Non-Competition Agreement.

(b) Governing Law. This Agreement shall be governed, construed, interpreted, and enforced in accordance with its express terms, and otherwise in accordance with the substantive laws of the Commonwealth of Massachusetts, without giving effect to any principles

of conflicts of law, whether of the Commonwealth of Massachusetts or any other jurisdiction, and where applicable, the laws of the United States, that would result in the application of the laws of any other jurisdiction.

(c) Validity. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

(d) Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original, but all of which together will constitute one and the same Agreement. Signatures delivered by facsimile shall be deemed effective for all purposes.

(e) Entire Agreement. The terms of this Agreement, together with the Non-Competition Information Agreement and any indemnification agreement Executive has with the Company, are intended by the Parties to be the final expression of their agreement with respect to the employment of Executive by the Company and supersede all prior understandings and agreements, whether written or oral, regarding Executive's service to the Company. The Parties further intend that this Agreement, together with the Non-Competition Agreement, shall constitute the complete and exclusive statement of their terms and that no extrinsic evidence whatsoever may be introduced in any judicial, administrative, or other legal proceeding to vary the terms of this Agreement.

(f) Amendments; Waivers. This Agreement may not be modified, amended, or terminated except by an instrument in writing signed by Executive and a duly authorized representative of the Company. By an instrument in writing similarly executed, Executive or a duly authorized officer of the Company, as applicable, may waive compliance by the other Party with any specifically identified provision of this Agreement that such other Party was or is obligated to comply with or perform; *provided*, *however*, that such waiver shall not operate as a waiver of, or estoppel with respect to, any other or subsequent failure. No failure to exercise and no delay in exercising any right, remedy, or power hereunder shall preclude any other or further exercise of any other right, remedy, or power provided herein or by law or in equity.

(g) Dispute Resolution. To ensure the timely and economical resolution of disputes that may arise in connection with Executive's employment with the Company, Executive and the Company agree that any and all disputes, claims, or causes of action arising from or relating to the enforcement, breach, performance, negotiation, execution, or interpretation of this Agreement, Confidential Information Agreement, or Executive's employment, or the termination of Executive's employment, including but not limited to all statutory claims (including, but not limited to, the Massachusetts Antidiscrimination Act, Mass. Gen. Laws ch.151B and the Massachusetts Wage Act, Mass. Gen. Laws ch. 149), will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding and confidential arbitration, in Cambridge, Massachusetts, by a single arbitrator conducted by Judicial Arbitration and Mediation Services Inc. ("JAMS") under the then applicable JAMS rules (at the following web address: https://www.jamsadr.com/rules-employment-arbitration/); provided, however, this arbitration

provision shall not apply to sexual harassment claims to the extent prohibited by applicable law. A hard copy of the rules will be provided to Executive upon request. **By agreeing to this arbitration procedure, both Executive and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.** In addition, all claims, disputes, or causes of action under this section, whether by Executive or the Company, must be brought in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class or representative proceeding, nor joined or consolidated with the claims of any other person or entity. The Arbitrator may not consolidate the claims of more than one person or entity, and may not preside over any form of representative or class proceeding. To the extent that the preceding sentences regarding class claims or proceedings are found to violate applicable law or are otherwise found unenforceable, any claim(s) alleged or brought on behalf of a class shall proceed in a court of law rather than by arbitration. The Company acknowledges that Executive will have the right to be represented by legal counsel at any arbitration proceeding. Questions of whether a claim is subject to arbitration under this Agreement shall be decided by the arbitrator. Likewise, procedural questions which grow out of the dispute and bear on the final disposition are also matters for the arbitrator. The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; (b) issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award; and (c) be authorized to award any or all remedies that Executive or the Company would be entitled to seek in a court of law. Executive and the Company shall equally share all JAMS' arbitration fees. Except as modified in the Confidential Information Agreement, each party is responsible for its own attorneys' fees. Nothing in this Agreement is intended to prevent either Executive or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

(h) Enforcement. If any provision of this Agreement is held to be illegal, invalid, or unenforceable under present or future laws, such provision shall be fully severable; this Agreement shall be construed and enforced as if such illegal, invalid, or unenforceable provision had never comprised a portion of this Agreement; and the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance from this Agreement. Furthermore, in lieu of such illegal, invalid, or unenforceable provision there shall be added automatically as part of this Agreement a provision as similar in terms to such illegal, invalid, or unenforceable provision as may be possible and be legal, valid, and enforceable.

(i) Withholding. The Company shall be entitled to withhold from any amounts payable under this Agreement any federal, state, local, or foreign withholding or other taxes or charges which the Company is required to withhold. The Company shall be entitled to rely on an opinion of counsel if any questions as to the amount or requirement of withholding shall arise.

(j) Notices. Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by electronic mail if sent during normal business hours of the recipient, and if not, then on the next

business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at its primary office location and to Executive at Executive's address as listed on the Company payroll or to Executive's Company-issued email address, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

9.Prior Employment. Executive represents and warrants that Executive's acceptance of employment with the Company has not breached, and the performance of Executive's duties hereunder will not breach, any duty owed by Executive to any prior employer or other person. Executive further represents and warrants to the Company that (a) the performance of Executive's obligations hereunder will not violate any agreement between Executive and any other person, firm, organization, or other entity; (b) Executive is not bound by the terms of any agreement with any previous employer or other party to refrain from competing, directly or indirectly, with the business of such previous employer or other party that would be violated by Executive entering into this Agreement and/or providing services to the Company pursuant to the terms of this Agreement; and (c) Executive's performance of Executive's duties under this Agreement will not require Executive to, and Executive shall not, rely on in the performance of Executive's duties or disclose to the Company or any other person or entity or induce the Company in any way to use or rely on any trade secret or other confidential or proprietary information or material belonging to any previous employer of Executive.

10.Section 280G Matters.

(a) Best Pay. Any provision of this Agreement to the contrary notwithstanding, if any payment or benefit Executive would receive from the Company, whether pursuant to this Agreement or otherwise, ("Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then such Payment will be equal to the Reduced Amount (as defined below). The "Reduced Amount" will be either (A) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (B) the entire Payment, whichever amount, after taking into account all applicable federal, state, and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate, net of the maximum reduction in federal income taxes which could be obtained from a deduction of such state and local taxes, if applicable), results in Executive' s receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (A) of the preceding sentence, the reduction shall occur in the manner (the "Reduction Method") that results in the greatest economic benefit for Executive. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the "Pro Rata Reduction Method"). Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A (as defined below) that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method

and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (1) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for Executive as determined on an after-tax basis; (2) as a second priority, Payments that are contingent on future events (*e.g.*, being terminated without cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (3) as a third priority, Payments that are "deferred compensation" within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

(b) Accounting or Law Firm. The accounting firm or law firm engaged by the Company for general tax purposes as of the day prior to the Change of Control will perform the calculations set forth in Section 10(a) above. If the firm so engaged by the Company is serving as the accountant or auditor, or lawyer for the acquiring company, the Company may appoint a nationally recognized accounting or law firm to make the determinations required hereunder. The Company will bear all reasonable expenses with respect to the determinations by such firm required to be made hereunder. The firm engaged to make the determinations hereunder will provide its calculations, together with detailed supporting documentation, at such time as requested by the Company. If the firm determines that no Excise Tax is payable with respect to a Payment, either before or after the application of the Reduced Amount, it will furnish the Company with documentation reasonably acceptable to the Company that no Excise Tax will be imposed with respect to such Payment. Any good faith determinations of the firm made hereunder will be final, binding and conclusive upon the Company and Executive.

11. Section 409A; Release.

(a) General. The intent of the Parties is that the payments and benefits under this Agreement comply with or be exempt from Section 409A of the Code and the Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Effective Date, ("Section 409A") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be exempt from or in compliance therewith. Notwithstanding anything herein to the contrary, in no event shall the Company or its affiliates have any liability to Executive or to any other person in the event that the Agreement is no so exempt from or compliant with Section 409A.

(b) Separation from Service. Notwithstanding any provision to the contrary in this Agreement: (i) no amount that constitutes "deferred compensation" under Section 409A shall be payable pursuant to Section 6(b) above unless the termination of Executive's employment constitutes a "separation from service" within the meaning of Section 1.409A-1(h) of the Department of Treasury Regulations ("Separation from Service"); (ii) for purposes of Section 409A, Executive's right to receive installment payments shall be treated as a right to receive a series of separate and distinct payments; and (iii) to the extent that any reimbursement of expenses or in-kind benefits constitutes "deferred compensation" under Section 409A, such reimbursement or benefit shall be provided no later than December 31st of the year following the year in which the expense was incurred. The amount of expenses reimbursed in one year shall not affect the amount eligible for reimbursement in any subsequent year. The amount of any

in-kind benefits provided in one year shall not affect the amount of in-kind benefits provided in any other year.

(c) Specified Employee. Notwithstanding anything in this Agreement to the contrary, if Executive is deemed by the Company at the time of Executive's Separation from Service to be a "specified employee" for purposes of Section 409A, to the extent delayed commencement of any portion of the benefits to which Executive is entitled under this Agreement is required in order to avoid a prohibited distribution under Section 409A, such portion of Executive's benefits shall not be provided to Executive prior to the earlier of (i) the expiration of the six (6)-month period measured from the date of Executive's Separation from Service with the Company or (ii) the date of Executive's death. Upon the first business day following the expiration of the applicable Section 409A period, all payments deferred pursuant to the preceding sentence shall be paid in a lump sum to Executive (or Executive's estate or beneficiaries), and any remaining payments due to Executive under this Agreement shall be paid as otherwise provided herein.

(d) Release. Notwithstanding anything to the contrary in this Agreement, to the extent that any payments due under this Agreement as a result of Executive's termination of employment are subject to Executive's execution and delivery of a Release, and if Executive fails to execute the Release on or prior to the Release Expiration Date (as defined below) or timely revokes Executive's acceptance of the Release thereafter, Executive shall not be entitled to any payments or benefits otherwise conditioned on the Release, and (iii) in any case where Executive's Date of Termination and the Release Expiration Date fall in two separate taxable years, any payments required to be made to Executive that are conditioned on the Release and are treated as nonqualified deferred compensation for purposes of Section 409A shall be made in the later taxable year. For purposes of this Section 11(d), "Release Expiration Date" shall mean the date that is twenty-one (21) days following the date upon which the Company timely delivers the Release to Executive, or, in the event that Executive's termination of employment is "in connection with an exit incentive or other employment termination program" (as such phrase is defined in the Age Discrimination in Employment Act of 1967), the date that is forty-five (45) days following such delivery date. To the extent that any payments of nonqualified deferred compensation (within the meaning of Section 409A) due under this Agreement as a result of Executive's termination of employment are delayed pursuant to this Section 11(d), such amounts shall be paid in a lump sum on the first payroll date following the date that Executive executes and does not revoke the Release (and the applicable revocation period has expired) or, in the case of any payments subject to Section 11(d)(iii), on the first payroll period to occur in the subsequent taxable year, if later.

5.Employee Acknowledgement. Executive acknowledges that Executive has read and understands this Agreement, is fully aware of its legal effect, has not acted in reliance upon any representations or promises made by the Company other than those contained in writing herein, and has entered into this Agreement freely based on Executive's own judgment.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the date and year first above written.

ONCORUS, INC.

By: /s/ Ted Ashburn

Name: Theodore (Ted) Ashburn, M.D., PhD.

Title: President and Chief Executive Officer

EXECUTIVE

By: /s/ Richard Wanstall

Name: Richard Wanstall

Address: [ADDRESS]

Exhibit A

ONCORUS, INC.

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTION ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by ONCORUS, INC., its subsidiaries, parents, affiliates, successors and assigns (together "***Company***"), and the compensation paid to me now and during my employment with Company, and the Company's agreement to provide me with access to its Confidential Information (as defined below), I hereby enter into this Employee Confidential Information and Invention Assignment Agreement (the "***Agreement***") and agree as follows:

1.Confidential Information Protections.

1.1 Recognition of Company's Rights; Nondisclosure. I understand and acknowledge that my employment by Company creates a relationship of confidence and trust with respect to Company's Confidential Information (as defined below) and that Company has a protectable interest therein. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information, except as such disclosure, use or publication may be required in connection with my work for Company, or unless an officer of Company expressly authorizes such disclosure. I will obtain Company's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that discloses and/or incorporates any Confidential Information. I hereby assign to Company any rights I may have or acquire in such Confidential Information and recognize that all Confidential Information will be the sole and exclusive property of Company and its assigns. I will take all reasonable precautions to prevent the inadvertent accidental disclosure of Confidential Information. Notwithstanding the foregoing, pursuant to 18 U.S.C. Section 1833(b), I will not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that: (1) is made in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney, and solely for the purpose of reporting or investigating a suspected violation of law; or (2) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

1.2 Confidential Information. The term "***Confidential Information***" means any and all confidential knowledge, data or information of Company. By way of illustration but not limitation, "***Confidential Information***" includes (a) trade secrets, inventions, mask works, ideas, processes, formulas, software in source or object code, data, programs, other works of authorship, know-how, improvements, discoveries, developments, designs and techniques and any other proprietary technology and all Intellectual Property Rights (as defined below) therein (collectively, "***Inventions***"); (b) information regarding research, development, new products, marketing and selling, business plans, budgets and unpublished financial statements, licenses, prices and costs, margins, discounts, credit terms, pricing and billing policies, quoting procedures, methods of obtaining business, forecasts, future plans and potential strategies, financial projections and business strategies, operational plans, financing and capital-raising plans, activities and agreements, internal services and operational manuals, methods of conducting Company business, suppliers and supplier information, and purchasing; (c) information regarding customers and potential customers of Company, including customer lists, names, representatives, their needs or desires with respect to the types of products or services offered by Company, proposals, bids, contracts and their contents and parties, the type and quantity of products and services provided or sought to be provided to customers and potential customers of Company and other non-public information relating to customers and potential customers; (d) information regarding any of Company's business partners and their services, including names, representatives, proposals, bids, contracts and their contents and parties, the type and quantity of products and services received by Company, and other non-public information relating to business partners; (e) information regarding personnel, employee lists, compensation, and employee skills; and (f) any other non-public information which a competitor of Company could use to the competitive disadvantage of Company. Notwithstanding the foregoing, it is understood that, at all such times, I am free to use information which was known to me prior to my employment with Company or which is generally known in the trade or industry through no breach of this Agreement or other act or omission by me. Notwithstanding the foregoing or anything to the contrary in this Agreement or any other agreement between the Company and me, nothing in this Agreement will limit my right to discuss my employment or report possible violations of law or regulation with the Equal Employment Opportunity Commission, United States Department of Labor, the National Labor Relations Board, the Securities and Exchange Commission, or other federal government agency or similar state or local agency or to discuss the terms and conditions of my employment with others to the extent expressly permitted by Section 7 of the National Labor Relations Act or to the extent that such disclosure is protected under the applicable provisions of law or regulation, including but not limited to "whistleblower" statutes or other similar provisions that protect such disclosure.

1.3 Third Party Information. I understand, in addition, that Company has received and in the future will receive from third parties their confidential and/or proprietary knowledge, data or information (**"*Third Party Information*"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During the term of my employment and thereafter, I will hold Third Party Information in confidence

and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, except in connection with my work for Company, Third Party Information or unless expressly authorized by an officer of Company in writing.

1.4 Term of Nondisclosure Restrictions. I understand that Confidential Information and Third Party Information is never to be used or disclosed by me, as provided in this Section 1. If a temporal limitation on my obligation not to use or disclose such information is required under applicable law, and the Agreement or its restriction(s) cannot otherwise be enforced, I agree and Company agrees that the two year period after the date my employment ends will be the temporal limitation relevant to the contested restriction; ***provided, however,*** that this sentence will not apply to trade secrets protected without temporal limitation under applicable law.

1.5 No Improper Use of Information of Prior Employers and Others. During my employment by Company, I will not improperly use or disclose confidential information or trade secrets, if any, of any former employer or any other person to whom I have an obligation of confidentiality, and I will not bring onto the premises of Company any unpublished documents or any property belonging to any former employer or any other person to whom I have an obligation of confidentiality unless consented to in writing by that former employer or person.

2.Assignments of Inventions.

2.1 Definitions. As used in this Agreement, the term ***"Intellectual Property Rights"*** means all trade secrets, Copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country; the term "***Copyright***" means the exclusive legal right to reproduce, perform, display, distribute and make derivative works of a work of authorship (as a literary, musical, or artistic work) recognized by the laws of any jurisdiction or country; and the term "***Moral Rights***" means all paternity, integrity, disclosure, withdrawal, special and any other similar rights recognized by the laws of any jurisdiction or country.

2.2 Excluded Inventions and Other Inventions. Attached hereto as **Exhibit A** is a list describing all existing Inventions, if any, (a) that are owned by me or in which I have an interest and were made or acquired by me prior to my date of first employment by Company, (b) that may relate to Company's business or actual or demonstrably anticipated research or development, and (c) that are not to be assigned to Company ("***Excluded Inventions***"). If no such list is attached, I represent and agree that it is because I have no Excluded Inventions. For purposes of this Agreement, "***Other Inventions***" means Inventions in which I have or may have an interest, as of the commencement of my employment or thereafter, other than Company Inventions (as defined below) and Excluded Inventions. I acknowledge and agree that if I use any Excluded Inventions or any Other Inventions in the scope of my employment, or if I include any Excluded Inventions or Other Inventions in any product or service of Company, or if my rights in any Excluded Inventions or Other Inventions may block or interfere with, or may otherwise be required for, the exercise by Company of any rights assigned to Company under this Agreement, I will immediately so notify Company in writing. Unless Company and I agree otherwise in writing as to particular Excluded Inventions or Other Inventions, I hereby grant to Company, in such circumstances (whether or not I give Company notice as required above), a non-exclusive, perpetual, transferable, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Excluded Inventions and Other Inventions. To the extent that any third parties have rights in any such Other Inventions, I hereby represent and warrant that such third party or parties have validly and irrevocably granted to me the right to grant the license stated above.

2.3 Assignment of Company Inventions. Inventions assigned to Company or to a third party as directed by Company pursuant to Section 2.6 are referred to in this Agreement as "***Company Inventions***." Subject to Section 2.4 and except for Excluded Inventions set forth in **Exhibit A** and Other Inventions, I hereby assign to Company all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company. To the extent required by applicable Copyright laws, I agree to assign in the future (when any copyrightable Inventions are first fixed in a tangible medium of expression) my Copyright rights in and to such Inventions. Any

assignment of Company Inventions (and all Intellectual Property Rights with respect thereto) hereunder includes an assignment of all Moral Rights. To the extent such Moral Rights cannot be assigned to Company and to the extent the following is allowed by the laws in any country where Moral Rights exist, I hereby unconditionally and irrevocably waive the enforcement of such Moral Rights, and all claims and causes of action of any kind against Company or related to Company's customers, with respect to such rights. I further acknowledge and agree that neither my successors-in-interest nor legal heirs retain any Moral Rights in any Company Inventions (and any Intellectual Property Rights with respect thereto).

2.4 Unassigned or Nonassignable Inventions. I recognize that this Agreement will not be deemed to require assignment of any Invention that I developed entirely on my own time without using the Company's equipment, supplies, facilities, trade secrets, or Confidential Information, except for those Inventions that either (i) relate to the Company's actual or anticipated business, research or development, or (ii) result from or are connected with work performed by me for the Company. In addition, this Agreement does not apply to any Invention which qualifies fully for protection from assignment to the Company under any specifically applicable state law, regulation, rule or public policy ("***Specific Inventions Law***").

2.5 Obligation to Keep Company Informed. During the period of my employment, I will promptly and fully disclose to Company in writing all Inventions authored, conceived, or reduced to practice by me, either alone or jointly with others. At the time of each such disclosure, I will advise Company in writing of any Inventions that I believe fully qualify for protection under the provisions of the Specific Inventions Law; and I will at that time provide to Company in writing all evidence necessary to substantiate that belief. Company will keep in confidence and will not use for any purpose or disclose to third parties without my consent any confidential information disclosed in writing to Company pursuant to this Agreement relating to Inventions that qualify fully for protection under the Specific Inventions Law. I will preserve the confidentiality of any Invention that does not fully qualify for protection under the Specific Inventions Law.

2.6 Government or Third Party. I agree that, as directed by Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

2.7 Ownership of Work Product.

(a) I acknowledge that all original works of authorship which are made by me (solely or jointly with others) within the scope of my employment and which are protectable by Copyright are "works made for hire," pursuant to United States Copyright Act (17 U.S.C., Section 101).

(b) I agree that Company will exclusively own all work product that is made by me (solely or jointly with others) within the scope of my employment, and I hereby irrevocably and unconditionally assign to Company all right, title, and interest worldwide in and to such work product. I understand and agree that I have no right to publish on, submit for publishing, or use for any publication any work product protected by this Section, except as necessary to perform services for Company.

2.8 Enforcement of Intellectual Property Rights and Assistance. I will assist Company in every proper way to obtain, and from time to time enforce, United States and foreign Intellectual Property Rights and Moral Rights relating to Company Inventions in any and all countries. To that end I will execute, verify and deliver such documents and perform such other acts (including appearances as a witness) as Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining and enforcing such Intellectual Property Rights and the assignment thereof. In addition, I will execute, verify and deliver assignments of such Intellectual Property Rights to Company or its designee, including the United States or any third party designated by Company. My obligation to assist Company with respect to Intellectual Property Rights relating to such Company Inventions in any and all countries will continue beyond the termination of my employment, but Company will compensate me at a reasonable rate after my termination for the time actually spent by me at Company's request on such assistance. In the event Company is unable for any reason, after reasonable effort, to secure my signature on any document needed in connection with the actions specified in this

paragraph, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act for and on my behalf to execute, verify and file any such documents and to do all other lawfully permitted acts to further the purposes of the preceding paragraph with the same legal force and effect as if executed by me. I hereby waive and quitclaim to Company any and all claims, of any nature whatsoever, which I now or may hereafter have for infringement of any Intellectual Property Rights assigned under this Agreement to Company.

2.9 Incorporation of Software Code. I agree that I will not incorporate into any Company software or otherwise deliver to Company any software code licensed under the GNU General Public License or Lesser General Public License or any other license that, by its terms, requires or conditions the use or distribution of such code on the disclosure, licensing, or distribution of any source code owned or licensed by Company **except** in strict compliance with Company's policies regarding the use of such software.

3.Records. I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by Company) of all Confidential Information developed by me and all Company Inventions made by me during the period of my employment at Company, which records will be available to and remain the sole property of Company at all times.

4.Duty of Loyalty During Employment. I agree that during the period of my employment by Company, I will not, without Company's express written consent, directly or indirectly engage in any employment or business activity which is directly or indirectly competitive with, or would otherwise conflict with, my employment by Company.

5.No Solicitation of Employees, Consultants, Contractors, or Customers or Potential Customers. Except as modified by Section 10.3 below, I agree that during the period of my employment and for the one year period after the date my employment ends for any reason, including but not limited to voluntary termination by me or involuntary termination by Company, I will not, as an officer, director, employee, consultant, owner, partner, or in any other capacity, either directly or through others, except on behalf of Company:

5.1 solicit, induce, encourage, or participate in soliciting, inducing or encouraging any person known to me to be an employee, consultant, or independent contractor of Company to terminate his or her relationship with Company, even if I did not initiate the discussion or seek out the contact;

5.2 solicit, induce, encourage, or participate in soliciting, inducing, or encouraging any person known to me to be an employee, consultant, or independent contractor of Company to terminate his or her relationship with Company to render services to me or any other person or entity that researches, develops, markets, sells, performs or provides or is preparing to develop, market, sell, perform or provide Conflicting Services (as defined below);

5.3 hire, employ, or engage in a business venture with as partners or owners or other joint capacity, or attempt to hire, employ, or engage in a business venture as partners or owners or other joint capacity, with any person then employed by Company or who has left the employment of Company within the preceding three months to research, develop, market, sell, perform or provide Conflicting Services;

5.4 solicit, induce or attempt to induce any Customer or Potential Customer (as defined below), to terminate, diminish, or materially alter in a manner harmful to Company its relationship with Company;

5.5 solicit or assist in the solicitation of any Customer or Potential Customer to induce or attempt to induce such Customer or Potential Customer to purchase or contract for any Conflicting Services; or

5.6 perform, provide or attempt to perform or provide any Conflicting Services for a Customer or Potential Customer.

The parties agree that for purposes of this Agreement, a "***Customer or Potential Customer***" is any person or entity who or which, at any time during the one year period prior to my contact with such person or entity as described in Sections 5.4, 5.5 or 5.6 above if such contact occurs during my employment or, if such contact occurs following the termination of my employment, during the one year period prior to the date my employment with Company ends: (i) contracted for, was billed

for, or received from Company any product, service or process with which I worked directly or indirectly during my employment by Company or about which I acquired Confidential Information; or (ii) was in contact with me or in contact with any other employee, owner, or agent of Company, of which contact I was or should have been aware, concerning the sale or purchase of, or contract for, any product, service or process with which I worked directly or indirectly during my employment with Company or about which I acquired Confidential Information; or (iii) was solicited by Company in an effort in which I was involved or of which I was aware.

6.Non-Compete Provision.

6.1 Except as modified by Section 10.3 below, unless I am classified as nonexempt under the Fair Labor Standards Act, 29 U.S.C. 201-219, I agree that during the period of my employment and for the one year period after the termination of my employment relationship with the Company due to voluntary termination by me or involuntary termination by the Company for Cause (defined below), I will not, whether paid or not: (i) serve as a partner, principal, licensor, licensee, employee, consultant, officer, director, manager, agent, affiliate, representative, advisor, promoter, associate, investor, or otherwise for, (ii) directly or indirectly, own, purchase, organize or take preparatory steps for the organization of, or (iii) build, design, finance, acquire, lease, operate, manage, control, invest in, work or consult for or otherwise join, participate in or affiliate myself with, any business whose business, products or operations are in any respect involved in Conflicting Services (defined below) anywhere in the Restricted Territory (defined below). Should I obtain other employment during my employment with the Company or within 12 months immediately following the termination of my relationship with the Company, I agree to provide written notification to the Company as to the name and address of my new employer, the position that I expect to hold, and a general description of my duties and responsibilities, at least three business days prior to starting such employment.

6.2 The parties further agree that for purposes of this Agreement, "***Conflicting Services***" means any business in which the Company is engaged, or in which the Company has plans to be engaged, or any service that the Company provides or has plans to provide.

6.3 I agree that for purposes of this Agreement, "***Restricted Territory***" means the geographic areas in which I provided services for the Company or had a material presence or influence, during any time within the last two years prior to the termination of my relationship with the Company.

6.4 I agree that for purposes of this Agreement, "***Cause***" shall mean a termination of my employment by the Company due to my misconduct or failure to meet the Company's performance expectations.

6.5 The Company may elect to enforce the provisions of this Section 6 or waive them at its sole discretion. If the Company elects to enforce the provisions of this Section, such election may be accomplished by the Company providing me with written notice of its election to enforce: (A) on or before the last day of my employment with the Company pursuant to an involuntary termination by the Company for Cause, or (B) within 2 weeks after the Company's receipt of written notice from me of my resignation from employment. If the Company elects to enforce the provisions of this Section 6 then the Company must elect to either: (i) accelerate the vesting of my Company stock options by 12 months ("***Mutually Agreed Upon Consideration***"), or, (ii) pay me continuing salary payments for one year following termination of my employment at a rate equal to no less than 50% of the highest annualized base salary paid to me by the Company within the two years prior to the termination of my relationship with the Company ("***Garden Leave Payments***"). Notwithstanding anything to the contrary above, the Company may enforce the covenants in this Section 6 without providing the Garden Leave Payments, if applicable, if it determines in good faith that I breached this Section 6 or unlawfully misappropriated the Company's physical or electronic property. For avoidance of doubt, the Company's failure to timely elect to enforce the provisions of this Section 6 shall be construed as its waiver of the provisions of this Section 6. For further avoidance of doubt, if the Company does not elect to enforce, I am classified as nonexempt under the Fair Labor Standards Act, 29 U.S.C. 201-219, or the Company is otherwise prohibited by law or a court from

enforcing, the provisions of this Section 6, I will not be subject to the restrictions in this Section 6 nor will I be entitled to any Mutually Agreed Upon Consideration or Garden Leave Payments.

6.6 I acknowledge that I have received $500 from the Company in exchange for my agreement to the restrictions in this Section 6.

7.Reasonableness of Restrictions.

7.1 I agree that I have read this entire Agreement and understand it. I acknowledge that I have the right to consult with counsel prior to signing this Agreement. I further acknowledge that I will derive significant value from the Company's agreement to provide me with Company Confidential Information to enable me to optimize the performance of my duties to the Company. I further acknowledge that my fulfillment of the obligations contained in this Agreement, including, but not limited to, my obligation neither to disclose nor to use Company Confidential Information other than for the Company's exclusive benefit and my obligations not to compete and not to solicit are necessary to protect Company Confidential Information and, consequently, to preserve the value and goodwill of the Company. I agree that this Agreement does not prevent me from earning a living or pursuing my career. I agree that the restrictions contained in this Agreement are reasonable, proper, and necessitated by Company's legitimate business interests. I represent and agree that I am entering into this Agreement freely and with knowledge of its contents with the intent to be bound by the Agreement and the restrictions contained in it.

7.2 In the event that a court finds this Agreement, or any of its restrictions, to be ambiguous, unenforceable, or invalid, I and Company agree that the court will read the Agreement as a whole and interpret the restriction(s) at issue to be enforceable and valid to the maximum extent allowed by law.

7.3 If the court declines to enforce this Agreement in the manner provided in subsection 7.2, Company and I agree that this Agreement will be automatically modified to provide Company with the maximum protection of its business interests allowed by law and I agree to be bound by this Agreement as modified.

8.No Conflicting Agreement or Obligation. I represent that my performance of all the terms of this Agreement and as an employee of Company does not and will not breach any agreement to keep in confidence information acquired by me in confidence or in trust prior to my employment by Company. I have not entered into, and I agree I will not enter into, any agreement either written or oral in conflict with this Agreement.

9.Return of Company Property. When I leave the employ of Company, I will deliver to Company any and all drawings, notes, memoranda, specifications, devices, formulas and documents, together with all copies thereof, and any other material containing or disclosing any Company Inventions, Third Party Information or Confidential Information of Company. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide Company access to my system as reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company, including disks and other storage media, filing cabinets or other work areas, is subject to inspection by Company's personnel at any time with or without notice. Prior to leaving, I will cooperate with Company in attending an exit interview and completing and signing Company's termination statement if required to do so by Company.

10.Legal and Equitable Remedies.

10.1 I agree that it may be impossible to assess the damages caused by my violation of this Agreement or any of its terms. I agree that any threatened or actual violation of this Agreement or any of its terms will constitute immediate and irreparable injury to Company, and Company will have the right to enforce this Agreement and any of its provisions

by injunction, specific performance or other equitable relief, without bond and without prejudice to any other rights and remedies that Company may have for a breach or threatened breach of this Agreement.

10.2 I agree that if Company is successful in whole or in part in any legal or equitable action against me under this Agreement, Company will be entitled to payment of all costs, including reasonable attorney's fees, from me.

10.3 In the event Company determines that I have breached a fiduciary duty owed to it or misappropriated the Company's physical or electronic property, I agree that the restrictions of Sections 5 and 6 will remain in effect for a period of 24 months after the termination of my relationship with the Company.

11.Notices. Any notices required or permitted under this Agreement will be given to Company at its headquarters location at the time notice is given, labeled "Attention Chief Executive Officer," and to me at my address as listed on Company payroll, or at such other address as Company or I may designate by written notice to the other. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt.

12.Publication of This Agreement to Subsequent Employer or Business Associates of Employee.

12.1 If I am offered employment or the opportunity to enter into any business venture as owner, partner, consultant or other capacity while the restrictions described in Sections 5 and 6 of this Agreement are in effect I agree to inform my potential employer, partner, co-owner and/or others involved in managing the business with which I have an opportunity to be associated of my obligations under this Agreement and also agree to provide such person or persons with a copy of this Agreement.

12.2 I agree to inform Company of all employment and business ventures which I enter into while the restrictions described in Sections 5 and 6 of this Agreement are in effect and I also authorize Company to provide copies of this Agreement to my employer, partner, co-owner and/or others involved in managing the business with which I am employed or associated and to make such persons aware of my obligations under this Agreement.

13.General Provisions.

13.1 Governing Law; Consent to Personal Jurisdiction. This Agreement will be governed by and construed according to the laws of the Commonwealth of Massachusetts as such laws are applied to agreements entered into and to be performed entirely within Massachusetts between residents of Massachusetts. I hereby expressly consent to the personal jurisdiction and venue of the state and federal courts located in Massachusetts for any lawsuit filed there against me by Company arising from or related to this Agreement.

13.2 Severability. In case any one or more of the provisions, subsections, or sentences contained in this Agreement will, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect the other provisions of this Agreement, and this Agreement will be construed as if such invalid, illegal or unenforceable provision had never been contained in this Agreement. If moreover, any one or more of the provisions contained in this Agreement will for any reason be held to be excessively broad as to duration, geographical scope, activity or subject, it will be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it will then appear.

13.3 Successors and Assigns. This Agreement is for my benefit and the benefit of Company, its successors, assigns, parent corporations, subsidiaries, affiliates, and purchasers, and will be binding upon my heirs, executors, administrators and other legal representatives.

13.4 Survival. This Agreement will survive the termination of my employment, regardless of the reason, and the assignment of this Agreement by Company to any successor in interest or other assignee.

13.5 Employment At-Will. I agree and understand that nothing in this Agreement will change my at-will employment status or confer any right with respect to continuation of employment by Company, nor will it interfere in any way with my right or Company's right to terminate my employment at any time, with or without cause or advance notice.

13.6 Waiver. No waiver by Company of any breach of this Agreement will be a waiver of any preceding or succeeding breach. No waiver by Company of any right under this Agreement will be construed as a waiver of any other right. Company will not be required to give notice to enforce strict adherence to all terms of this Agreement.

13.7 Export. I agree not to export, reexport, or transfer, directly or indirectly, any U.S. technical data acquired from Company or any products utilizing such data, in violation of the United States export laws or regulations.

13.8 Counterparts. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

13.9 Advice of Counsel. **I ACKNOWLEDGE THAT, IN EXECUTING THIS AGREEMENT, I HAVE HAD THE OPPORTUNITY TO SEEK THE ADVICE OF INDEPENDENT LEGAL COUNSEL, AND I HAVE READ AND UNDERSTOOD ALL OF THE TERMS AND PROVISIONS OF THIS AGREEMENT. THIS AGREEMENT WILL NOT BE CONSTRUED AGAINST ANY PARTY BY REASON OF THE DRAFTING OR PREPARATION OF THIS AGREEMENT.**

13.10 Entire Agreement. The obligations pursuant to Sections 1 and 2 (except Subsection 2.4 and Subsection 2.7(a)) of this Agreement will apply to any time during which I was previously engaged, or am in the future engaged, by Company as a consultant if no other agreement governs nondisclosure and assignment of inventions during such period. This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter of this Agreement and supersedes and merges all prior discussions between us. No modification of or amendment to this Agreement will be effective unless in writing and signed by the party to be charged. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

[signatures to follow on next page]

This Agreement will be effective as of the date signed by the Employee below, with the exception of Section 6, which will be effective on May 10, 2022 (ten (10) business days after the date on which the Company first presented this Agreement to Employee).

EMPLOYEE:

I have read this agreement carefully and understand its terms. I have completely filled out Exhibit A to this Agreement.

/s/ Richard Wanstall
(Signature)

Richard Wanstall
Name

5/10/2022
Date

[EMAIL ADDRESS]
Email

COMPANY:

Accepted and agreed

Oncorus, Inc.

By: /s/ Ted Ashburn

Name: Theodore (Ted) Ashburn, M.D., PhD.
Title: President and Chief Executive Officer

Email: [EMAIL ADDRESS]

EXHIBIT A

EXCLUDED INVENTIONS

TO: Oncorus, Inc.

FROM: Richard Wanstall

DATE: 5/10/2022

1. Excluded Inventions Disclosure. Except as listed in Section 2 below, the following is a complete list of all Excluded Inventions:

No Excluded Inventions.

See below:

Additional sheets attached.

2. Due to a prior confidentiality agreement, I cannot complete the disclosure under Section 1 above with respect to the Excluded Inventions generally listed below, the intellectual property rights and duty of confidentiality with respect to which I owe to the following party(ies):

	Excluded Invention	Party(ies)	Relationship
1.			
2.			
3.			

Additional sheets attached.

Exhibit 31.1

CERTIFICATION 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

I, Theodore (Ted) Ashburn, M.D., Ph.D., certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: August 4, 2022

By: /s/ Theodore (Ted) Ashburn, M.D., Ph.D.
Theodore (Ted) Ashburn, M.D., Ph.D.
President, Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION 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

I, Richard Wanstall, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: August 4, 2022

By: /s/ Richard Wanstall
Richard Wanstall
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

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

In connection with the Quarterly Report of Oncorus, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(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 result of operations of the Company.

Date: August 4, 2022

By: /s/ Theodore (Ted) Ashburn, M.D., Ph.D.
Theodore (Ted) Ashburn, M.D., Ph.D.
President, Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 32.2

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

In connection with the Quarterly Report of Oncorus, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(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 result of operations of the Company.

Date: August 4, 2022

By: /s/ Richard Wanstall
Richard Wanstall
Chief Financial Officer
(Principal Financial Officer)