UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-Q

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

for the quarterly period ended June 30, 2021

OR

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

COMMISSION FILE NUMBER: 001-37590

CERECOR INC.

(Exact name of registrant as specified in its charter)

Delaware (State of incorporation)	**45-0705648** (I.R.S. Employer Identification No.)
540 Gaither Road, Suite 400 **Rockville, Maryland 20850** (Address of principal executive offices)	**(410) 522-8707** (Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, $0.001 par value	CERC	Nasdaq Capital Market

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

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

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

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

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

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

As of July 30, 2021, the registrant had96,008,951 shares of common stock outstanding.

CERECOR INC.

FORM 10-Q

For the Quarter Ended June 30, 2021

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

CERECOR INC. and SUBSIDIARIES

Condensed Consolidated Balance Sheets
(In thousands, except share and per share data)

	June 30, 2021 (unaudited)	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 40,435	$ 18,919
Accounts receivable, net	4,120	2,177
Other receivables	998	2,208
Inventory, net	20	3
Prepaid expenses and other current assets	1,750	2,660
Restricted cash, current portion	41	38
Total current assets	47,364	26,005
Property and equipment, net	1,431	1,607
Intangible assets, net	732	1,585
Goodwill	14,409	14,409
Restricted cash, net of current portion	149	149
Total assets	$ 64,085	$ 43,755
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 3,965	$ 2,574
Accrued expenses and other current liabilities	17,611	11,310
Current liabilities of discontinued operations	98	1,341
Total current liabilities	21,674	15,225
Notes payable	17,143	—
Royalty obligation	2,000	2,000
Deferred tax liability, net	122	90
Other long-term liabilities	1,558	1,878
Total liabilities	42,497	19,193
Stockholders' equity:		
Common stock—$0.001 par value; 200,000,000 shares authorized at June 30, 2021 and December 31, 2020;96,008,951 and 75,004,127 shares issued and outstanding at June 30, 2021 and December 31, 2020, respectively	96	75
Preferred stock—$0.001 par value; 5,000,000 shares authorized at June 30, 2021 and December 31, 2020;0 and 1,257,143 shares issued and outstanding at June 30, 2021 and December 31, 2020, respectively	—	1
Additional paid-in capital	247,067	202,276
Accumulated deficit	(225,575)	(177,790)
Total stockholders' equity	21,588	24,562
Total liabilities and stockholders' equity	$ 64,085	$ 43,755

See accompanying notes to the unaudited condensed consolidated financial statements.

CERECOR INC. and SUBSIDIARIES

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Revenues:				
Product revenue, net	$ 2,730	$ 1,338	$ 3,204	$ 4,092
License revenue	625	—	625	—
Total revenues, net	3,355	1,338	3,829	4,092
Operating expenses:				
Cost of product sales	83	78	159	144
Research and development	12,569	5,917	37,774	10,685
Acquired in-process research and development	—	—	—	25,549
General and administrative	6,618	6,101	11,530	8,777
Sales and marketing	786	653	1,221	1,330
Amortization expense	428	404	853	834
Total operating expenses	20,484	13,153	51,537	47,319
	(17,129)	(11,815)	(47,708)	(43,227)
Other (expense) income:				
Change in fair value of Investment in Aytu	—	(1,872)	—	5,208
Other income (expense), net	(5)	398	(5)	410
Interest (expense) income, net	(239)	9	(222)	18
Total other (expense) income, net from continuing operations	(244)	(1,465)	(227)	5,636
Loss from continuing operations before taxes	(17,373)	(13,280)	(47,935)	(37,591)
Income tax benefit	(199)	(454)	(188)	(2,611)
Loss from continuing operations	$ (17,174)	$ (12,826)	$ (47,747)	$ (34,980)
Income (loss) from discontinued operations, net of tax	69	(455)	(38)	582
Net loss	$ (17,105)	$ (13,281)	$ (47,785)	$ (34,398)
Net (loss) income per share of common stock, basic and diluted:				
Continuing operations	$ (0.18)	$ (0.18)	$ (0.50)	$ (0.53)
Discontinued operations	—	(0.01)	—	0.01
Net loss per share of common stock, basic and diluted	$ (0.18)	$ (0.19)	$ (0.50)	$ (0.52)
Net (loss) income per share of preferred stock, basic and diluted:				
Continuing operations	$ (0.88)	$ (0.93)	$ (2.49)	$ (2.66)
Discontinued operations	—	(0.03)	—	0.04
Net loss per share of preferred stock, basic and diluted	$ (0.88)	$ (0.96)	$ (2.49)	$ (2.62)

See accompanying notes to the unaudited condensed consolidated financial statements.

CERECOR INC. and SUBSIDIARIES

Condensed Consolidated Statements of Changes in Stockholders' Equity (Unaudited)
(In thousands, except share amounts)

	Common stock		Preferred Stock		Additional paid-in	Accumulated	Total stockholders'
	Shares	Amount	Shares	Amount	capital	deficit	equity
Three Months Ended June 30, 2021							
Balance, March 31, 2021	89,104,816	$ 89	1,257,143	$ 1	$ 241,535	$ (208,470)	$ 33,155
Conversion of preferred stock to common stock	6,285,715	6	(1,257,143)	(1)	(5)	—	—
Restricted stock units vested during period	77,917	—	—	—	—	—	—
Shares purchased through employee stock purchase plan	88,686	—	—	—	207	—	207
Issuance of equity classified warrants related to venture debt financing agreement	—	—	—	—	861	—	861
Exercise of stock options	451,817	1	—	—	1,395	—	1,396
Stock-based compensation	—	—	—	—	3,074	—	3,074
Net loss	—	—	—	—	—	$ (17,105)	(17,105)
Balance, June 30, 2021	96,008,951	$ 96	—	$ —	$ 247,067	$ (225,575)	$ 21,588

	Common stock		Preferred Stock		Additional paid-in	Accumulated	Total stockholders'
	Shares	Amount	Shares	Amount	capital	deficit	equity
Six Months Ended June 30, 2021							
Balance, December 31, 2020	75,004,127	$ 75	1,257,143	$ 1	$ 202,276	$ (177,790)	$ 24,562
Issuance of shares of common stock and pre-funded warrants in underwritten public offering, net	13,971,889	14	—	—	37,639	—	37,653
Conversion of preferred stock to common stock	6,285,715	6	(1,257,143)	(1)	(5)	—	—
Restricted stock units vested during period	77,917	—	—	—	—	—	—
Shares purchased through employee stock purchase plan	88,686	—	—	—	207	—	207
Issuance of equity classified warrants related to venture debt financing agreement	—	—	—	—	861	—	861
Exercise of stock options	580,617	1	—	—	1,567	—	1,568
Stock-based compensation	—	—	—	—	4,522	—	4,522
Net loss	—	—	—	—	—	(47,785)	(47,785)
Balance, June 30, 2021	96,008,951	$ 96	—	$ —	$ 247,067	$ (225,575)	$ 21,588

	Common stock		Preferred Stock		Additional paid-in	Accumulated	Total stockholders'
	Shares	Amount	Shares	Amount	capital	deficit	equity
Three Months Ended June 30, 2020							
Balance, March 31, 2020	59,560,252	$ 59	1,257,143	$ 1	$ 160,936	$ (135,408)	$ 25,588
Issuance of shares of common stock in underwritten public offering, net of offering costs	15,180,000	15	—	—	35,413	—	35,428
Exercise of stock options	25,071	—	—	—	18	—	18
Restricted Stock Units vested during period	111,667	—	—	—	—	—	—
Restricted Stock Units withheld for taxes	(35,279)	—	—	—	(94)	—	(94)
Shares purchased through employee stock purchase plan	58,336	—	—	—	133	—	133
Stock-based compensation	—	—	—	—	2,786	—	2,786
Net loss	—	—	—	—	—	(13,281)	(13,281)
Balance, June 30, 2020	74,900,047	$ 74	1,257,143	$ 1	$ 199,192	$ (148,689)	$ 50,578

	Common stock		Preferred Stock		Additional paid-in	Accumulated	Total stockholders'
	Shares	Amount	Shares	Amount	capital	deficit	equity
Six Months Ended June 30, 2020							
Balance, December 31, 2019	44,384,222	$ 44	2,857,143	$ 3	$ 135,239	$ (114,291)	$ 20,995
Conversion of preferred stock to common stock	8,000,000	8	(1,600,000)	(2)	(6)	—	—
Issuance of shares related to Aevi Merger	3,893,361	4	—	—	15,492	—	15,496
Issuance of shares pursuant to registered direct offering, net of offering costs	1,306,282	1	—	—	5,135	—	5,136
Issuance of shares pursuant to common stock private placement, net of offering costs	1,951,219	2	—	—	3,886	—	3,888
Issuance of shares of common stock in underwritten public offering, net of offering costs	15,180,000	15	—	—	35,413	—	35,428
Exercise of stock options	50,239	—	—	—	92	—	92
Restricted stock units vested during period	111,667	—	—	—	—	—	—
Restricted stock units withheld for taxes	(35,279)	—	—	—	(94)	—	(94)
Shares purchased through employee stock purchase plan	58,336	—	—	—	133	—	133
Stock-based compensation	—	—	—	—	3,902	—	3,902
Net loss	—	—	—	—	—	(34,398)	(34,398)
Balance, June 30, 2020	74,900,047	$ 74	1,257,143	$ 1	$ 199,192	$ (148,689)	$ 50,578

See accompanying notes to the unaudited condensed consolidated financial statements.

CERECOR INC. and SUBSIDIARIES

Condensed Consolidated Statements of Cash Flows (Unaudited)

(Amounts in thousands)

	Six Months Ended June 30,	
	2021	**2020**
Operating activities		
Net loss	$ (47,785)	$ (34,398)
Adjustments to reconcile net loss used in operating activities:		
Depreciation and amortization	907	879
Stock-based compensation	4,522	3,902
Accretion of debt discount	104	—
Acquired in-process research and development, including transaction costs	—	25,549
Deferred taxes	31	(424)
Change in fair value of Investment in Aytu	—	(5,208)
Change in fair value of warrant liability and unit purchase option liability	—	(14)
Change in value of Guarantee	—	(1,755)
Changes in assets and liabilities:		
Accounts receivable, net	(1,943)	(532)
Other receivables	1,210	(1,852)
Inventory, net	(17)	9
Prepaid expenses and other assets	910	(24)
Accounts payable (excluding unpaid debt issuance costs)	(324)	83
Income taxes payable	—	288
Accrued expenses and other liabilities	4,916	(815)
Lease liability, net	(34)	18
Net cash used in operating activities	(37,503)	(14,294)
Investing activities		
Proceeds from sale of Investment in Aytu, net	—	12,837
Net cash paid in merger with Aevi	—	(1,251)
Purchase of property and equipment	(21)	—
Net cash used in investing activities	(21)	11,586
Financing activities		
Proceeds from issuance of common stock and pre-funded warrants in underwritten public offering, net	37,653	—
Proceeds from Notes and warrants, net of debt issuance costs paid	19,615	—
Proceeds from underwritten public offering, net	—	35,428
Proceeds from registered direct offering, net	—	5,136
Proceeds from sale of shares pursuant to common stock private placement, net	—	3,888
Proceeds from exercise of stock options	1,568	92
Proceeds from issuance of common stock under employee stock purchase plan	207	133
Restricted stock units withheld for taxes	—	(94)
Net cash provided by financing activities	59,043	44,583
Increase in cash, cash equivalents and restricted cash	21,519	41,875
Cash, cash equivalents, and restricted cash at beginning of period	19,106	3,729
Cash, cash equivalents, and restricted cash at end of period	$ 40,625	$ 45,604
Supplemental disclosures of cash flow information		
Cash paid for taxes	$ —	$ 316
Supplemental disclosures of non-cash activities		
Unpaid debt issuance costs	$ 1,715	$ —
Issuance of common stock in Aevi Merger	$ —	$ 15,496
Leased asset obtained in exchange for new operating lease liability	$ —	$ 376

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

	June 30,	
	2021	2020
Cash and cash equivalents	$ 40,435	$ 45,391
Restricted cash, current	41	33
Restricted cash, non-current	149	180
Total cash, cash equivalents and restricted cash	$ 40,625	45,604

See accompanying notes to the unaudited condensed consolidated financial statements.

CERECOR INC. and SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

1. Business

Cerecor Inc. (the "Company" or "Cerecor") is a biopharmaceutical company focused on becoming a leader in the development and commercialization of treatments for immunologic, immuno-oncologic and rare genetic disorders. The Company is advancing its clinical-stage pipeline of innovative therapies that address unmet patient needs within rare and orphan diseases.

The Company's rare disease pipeline includes CERC-801, CERC-802 and CERC-803 ("CERC-800 compounds"), which are in development for congenital disorders of glycosylation and CERC-006, an oral mTORc1/c2 inhibitor in development for the treatment of complex lymphatic malformations. The Company is also developing two monoclonal antibodies, CERC-002 and CERC-007. CERC-002, targets the cytokine LIGHT (TNFSF14) and is in clinical development for treatment of inflammatory bowel disease and COVID-19 acute respiratory distress syndrome. CERC-007 targets the cytokine IL-18 and is in clinical development for the treatment of Still's disease (adult onset Still's disease and systemic juvenile idiopathic arthritis) and multiple myeloma. CERC-006, 801, 802 and 803 have all received Orphan Drug Designation and Rare Pediatric Disease Designation, which makes all four eligible for a priority review voucher ("PRV") upon approval from the U.S. Food and Drug Administration ("FDA").

The Company has one commercialized product, Millipred®, a non-core asset, which is an oral prednisolone indicated across a wide variety of inflammatory conditions.

Cerecor was incorporated and commenced operation in 2011 and completed its initial public offering in October 2015.

Liquidity

As of June 30, 2021, Cerecor had $40.4 million in cash and cash equivalents. In June 2021, the Company entered into a $35.0 million venture debt financing agreement (the "Loan Agreement") with Horizon Technology Finance Corporation ("Horizon") and Powerscourt Investments XXV, LP ("Powerscourt, together with Horizon, the "Lenders"). In accordance with the Loan Agreement, $20.0 million of the $35.0 million loan was funded on the closing date (the "Initial Note"), with the remaining $15.0 million fundable upon the Company achieving certain predetermined milestones. The Company received net proceeds of $19.6 million in the second quarter of 2021 and will pay approximately $1.7 million of debt issuance costs in the third quarter of 2021, for total expected net proceeds of $17.9 million (related to the Initial Note funded in the second quarter). The Loan Agreement contains certain covenants and certain other specified events that could result in an event of default, which if not cured or waived, could results in the acceleration of all or a substantial portion of the notes. As of June 30, 2021, the Company did not breach any covenants or specified event that could result in an event of default.

In the third quarter of 2021, the Company received $10.0 million in gross proceeds (the "Second Note") under the Loan Agreement. The Second Note was made available in connection with the Company's successful positive initial results from a Phase1b proof-of-concept study evaluating CERC-002 in adult patients with moderate-to-severe Crohn's disease.

In January 2021, the Company closed an underwritten public offering of13,971,889 shares of its common stock and1,676,923 pre-funded warrants for net proceeds of approximately $37.7 million.

In order to meet its cash flow needs, the Company applies a disciplined decision-making methodology as it evaluates the optimal allocation of the Company's resources between investing in the Company's existing pipeline assets and acquisitions or in-licensing of new assets. For the six months ended June 30, 2021, Cerecor generated a net loss of $47.8 million and negative cash flows from operations of $37.5 million. As of June 30, 2021, Cerecor had an accumulated deficit of $225.6 million.

The accompanying condensed consolidated financial statements have been prepared assuming the Company will continue as a going concern; however, losses are expected to continue as the Company continues to invest in its research and development pipeline assets. The Company will require additional financing to fund its operations and to continue to execute its business strategy at least one year after the date the condensed consolidated financial statements included herein were issued. These conditions raise substantial doubt about the Company's ability to continue as a going concern.

To mitigate these conditions and to meet the Company's capital requirements, management plans to use its current cash on hand along with some combination of the following: (i) dilutive and/or non-dilutive financings, (ii) federal and/or private grants, (iii) other out-licensing or strategic alliances/collaborations of its current pipeline assets, and (iv) out-licensing or sale of its non-core assets. If the Company raises additional funds through collaborations, strategic alliances or licensing arrangements with third parties, the Company might have to relinquish valuable rights to its technologies, future revenue streams, research programs or product candidates. Subject

to limited exceptions, our venture debt financing agreement prohibits us from incurring certain additional indebtedness, making certain asset dispositions, and entering into certain mergers, acquisitions or other business combination transactions without prior consent of the Lender. If the Company requires but is unable to obtain additional funding, the Company may be forced to make reductions in spending, delay, suspend, reduce or eliminate some or all of its planned research and development programs, or liquidate assets where possible. Due to the uncertainty regarding future financing and other potential options to raise additional funds, management has concluded that substantial doubt exists with respect to the Company's ability to continue as a going concern within one year after the date that the financial statements in this Quarterly Report were issued.

Over the long term, the Company's ultimate ability to achieve and maintain profitability will depend on, among other things, the development, regulatory approval, and commercialization of its pipeline assets, and the potential receipt and sale of any PRVs it receives.

2. Basis of Presentation and Significant Accounting Policies

Basis of Presentation

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

In the opinion of management, the accompanying unaudited condensed consolidated financial statements include all adjustments, consisting of normal recurring adjustments, which are necessary to present fairly the Company's financial position, results of operations, and cash flows. The condensed consolidated balance sheet at December 31, 2020 has been derived from audited financial statements at that date. The interim results of operations are not necessarily indicative of the results that may occur for the full fiscal year. Certain information and footnote disclosure normally included in the financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to instructions, rules, and regulations prescribed by the United States Securities and Exchange Commission ("SEC").

The Company believes that the disclosures provided herein are adequate to make the information presented not misleading when these unaudited condensed consolidated financial statements are read in conjunction with the December 31, 2020 audited consolidated financial statements.

Unless otherwise indicated, all amounts in the following tables are in thousands except share and per share amounts.

Significant Accounting Policies

During the six months ended June 30, 2021, there were no significant changes to the Company's summary of significant accounting policies contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2020, as filed with the SEC on March 8, 2021.

3. Revenue

The Company generates substantially all of its revenue from sales of Millipred®, an oral prednisolone indicated across a wide variety of inflammatory conditions, which is considered a prescription drug. The Company sells its prescription drug in the United States primarily through wholesale distributors and specialty contracted pharmacies. Wholesale distributors account for substantially all of the Company's net product revenues and trade receivables. The Company also earns revenue from sales of its prescription drug directly to retail pharmacies. For the three months ended June 30, 2021, the Company's three largest customers accounted for approximately 62%, 17%, and 20% of the Company's total net product revenues. For the six months ended June 30, 2021, the Company's three largest customers accounted for approximately 64%, 16%, and 19% of the Company's total net product revenues.

The Company has a license and supply agreement for the Millipred® product with a wholly owned subsidiary of Teva Pharmaceutical Industries Ltd. ("Teva"), which expires on September 30, 2023. Beginning July 1, 2021, Cerecor is required to pay Teva fifty percent of the net profit of the Millipred® product following each calendar quarter, subject to a $0.5 million quarterly minimum payment.

Revenue from sales of prescription drugs was $2.7 million and $1.3 million for the three months ended June 30, 2021 and 2020, respectively, and $3.2 million and $4.1 million for the six months ended June 30, 2021 and 2020, respectively. During the first quarter of 2021, the Company's inventory on hand became short-dated (which the Company considers inventory within six months of

expiration) due to manufacturing delays and therefore the Company recorded a full sales return allowance on sales of short-dated inventory given the high likelihood of return. The Company received the delayed inventory lot in April 2021 and began selling this lot immediately.

License revenue was $0.6 million for the three and six months ended June 30, 2021 related to the out-license of two non-core pipeline assets. In May 2021, the Company out-licensed all of its rights in respect of its non-core neurology pipeline asset, CERC-301, to Alto Neuroscience, Inc. ("Alto"). The Company received a mid-six digit upfront license payment and can earn development, regulatory and sales-based milestone payments as well as modest royalties based on Alto's activities under the out-license. In June 2021, the Company assigned all of its rights under its license covering its non-core neurology pipeline asset, CERC-406, to ES Therapeutics, LLC ("ES"). ES is a wholly-owned subsidiary of Armistice Capital Master Fund Ltd. (an affiliate of Armistice Capital, LLC and collectively "Armistice"), which is a significant stockholder of the Company and whose chief investment officer, Steven Boyd, serves on the Company's Board of Directors. The transaction with ES was approved in accordance with the Company's related party transaction policy. The Company received a low-six digit upfront license payment and can earn development, regulatory, and sales-based milestone payments based on ES's activities under the assigned license.

4. Aytu Divestiture

Overview of Sale of Pediatric Portfolio and Related Commercial Infrastructure to Aytu BioScience

On November 1, 2019, the Company closed on an asset purchase agreement to sell the Company's rights, title and interest in assets relating to certain commercialized products (the "Pediatric Portfolio") and the corresponding commercial infrastructure to Aytu BioScience, Inc. ("Aytu"). Aytu paid consideration of $ 4.5 million in cash and approximately 9.8 million shares of Aytu convertible preferred stock, and assumed certain of the Company's liabilities, including the Company's payment obligations to Deerfield CSF, LLC ("Deerfield") and certain other liabilities primarily related to contingent consideration and sales returns. Steve Boyd, Chief Investment Officer of Armistice Capital, LLC, a significant stockholder of the Company, serves on each company's board of directors.

Cerecor retained all rights to Millipred®, an oral prednisolone indicated across a wide variety of inflammatory conditions. Millipred is a non-core asset. Pursuant to a transition services agreement entered into between Aytu and Cerecor, Aytu managed Millipred ® commercial operations for 18 months (post November 1, 2019). In May 2021, the Company entered into an amended transition services agreement pursuant to which Aytu continued to manage Millipred®'s commercial operations until June 30, 2021. The Company is currently finalizing its trade and distribution channel to allow it to control third party distribution in the third quarter of 2021. As of the filing date of this Quarterly Report on 10-Q, Aytu continues to distribute Millipred®.

Upon the sale of the Pediatric Portfolio to Aytu, the Pediatric Portfolio met all conditions to be classified as discontinued operations. Therefore, the accompanying condensed consolidated financial statements for the three and six months ended June 30, 2021 and 2020 and as of December 31, 2020 reflect the operations, net of taxes, and related assets and liabilities of the Pediatric Portfolio as discontinued operations. Refer to the "Discontinued Operations" section below for more information, including Cerecor's continuing involvement.

Deerfield Guarantee

As of the closing date of the Aytu Divestiture on November 1, 2019, Aytu assumed the Company's debt obligation to Deerfield and the contingent consideration liability related to future royalties on Avadel Pharmaceuticals PLC's ("Avadel") pediatric products. In conjunction with the closing of this transaction, the Company entered into a guarantee in favor of Deerfield, which guarantees the payment of the assumed liabilities to Deerfield, which included the debt obligation and includes the contingent consideration related to future royalties on Avadel's pediatric products (collectively referred to as the "Guarantee").

Aytu publicly reported that it had paid the $15.0 million balloon payment to Deerfield before it came due in June 2020 and the fixed monthly payments to Deerfield ended in January 2021, thus satisfying the debt obligation. As of November 1, 2019, Aytu was responsible for the remaining contingent consideration related to future royalties on Avadel's pediatric products of $ 9.3 million. Aytu is required to pay an amount equal to at least $0.1 million per month. Cerecor's Guarantee will end upon the earlier of (i) February 5, 2026, or (ii) upon $12.5 million in aggregate deferred payments has been paid to Deerfield. Cerecor is required to make a payment under the Guarantee upon demand by Deerfield if all or any part of the fixed payments and/or deferred payments are not paid by Aytu when due or upon breach of a covenant. The remaining minimum commitments payable as most recently publicly reported by Aytu was $ 7.3 million as of June 30, 2020, which represents Cerecor's estimated maximum potential future payments under the Guarantee.

The fair value of the Guarantee, which relates to the Company's obligation to make future payments if Aytu defaults, was determined at the time of the Aytu Divestiture as the difference between (i) the estimated fair value of the assumed payments using Cerecor's

estimated cost of debt and (ii) the estimated fair value of the assumed payments using Aytu's estimated cost of debt. At each subsequent reporting period, the value of the Guarantee is determined based on the expected credit loss of the Guarantee with changes recorded in (loss) income from discontinued operations, net of tax within the consolidated statements of operations and comprehensive loss. The Company concluded that the expected credit loss of the Guarantee was de minimis as of June 30, 2021 based on considerations such as recent financings, cash position, operating cash flows and trends and Aytu's ability to meet its financial commitments.

Discontinued Operations

The following tables summarizes the liabilities of the discontinued operations as of June 30, 2021 and December 31, 2020 (in thousands):

	June 30, 2021	December 31, 2020
Liabilities		
Current liabilities:		
Accrued expenses and other current liabilities	$ 98	$ 1,342
Total current liabilities of discontinued operations	$ 98	$ 1,342

Aytu assumed sales returns of the Pediatric Portfolio made after November 1, 2019 related to sales prior to November 1, 2019 only to the extent such post-Closing sales returns exceed $2.0 million and are less than $2.8 million (in other words, Aytu will only assume $0.8 million of such returns). Therefore, Cerecor is liable for future sales returns of the Pediatric Portfolio sold prior to November 1, 2019 in excess of the $0.8 million assumed by Aytu. The Company estimated future returns as of June 30, 2021 on sales of the Pediatric Portfolio made prior to the transaction close date, which was recognized within accrued expenses and other current liabilities from discontinued operations (and shown in the table above).

Changes in the Company's estimate of sales returns related to the Pediatric Portfolio is included within discontinued operations on the statement of operations and comprehensive loss and is shown within product revenue, net in the table summarizing the results of discontinued operations below. In future periods, as additional information becomes available, the Company expects to recognize expense (or a benefit) related to actual sales returns of the Pediatric Portfolio in excess (or less than) the returns reserve recorded, which will be recognized within discontinued operations. The Company expects this involvement to continue until sales returns are no longer accepted on sales of the Pediatric Portfolio made prior to November 1, 2019. Returns of these products may be accepted through the second quarter of 2022 (in line with the products' return policies).

The following table summarizes the results of discontinued operations for the three and six months ended June 30, 2021 and 2020 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Product revenue, net	$ 69	$ (455)	$ 63	$ (1,173)
Operating expenses:				
Sales and marketing	—	—	101	—
Total operating expenses	—	—	101	—
Other income:				
Change in value of Guarantee	—	—	—	1,755
Total other income	—	—	—	1,755
Income (loss) from discontinued operations, net of tax	$ 69	$ (455)	$ (38)	$ 582

There were no non-cash operating items from discontinued operations for the six months ended June 30, 2021 and no non-cash investing items from the discontinued operations for the six months ended June 31, 2021 and 2020. The significant non-cash operating item from the discontinued operations for the six months ended June 30, 2020 is contained below (in thousands).

	Six Months Ended June 30,	
	2021	2020
Change in value of Guarantee	—	$ (1,755)

5. Net Loss Per Share

The Company computes earnings per share ("EPS") using the two-class method. The two-class method of computing EPS is an earnings allocation formula that determines EPS for common stock and any participating securities according to dividends declared and participation rights in undistributed earnings.

The Company had two classes of stock outstanding during the three and six months ended June 30, 2021; common stock and preferred stock. The preferred stock outstanding during the period had the same rights and preferences as the Company's common stock, other than being non-voting, and is convertible into share of common stock on a 1-for-5 ratio. In April 2021, Armistice, which is a significant stockholder of the Company and whose chief investment officer, Steven Boyd, serves on the Board of the Company, converted the remaining 1,257,143 shares of convertible preferred stock into6,285,715 shares of Cerecor's common stock. Refer to Note 11 for more information. Under the two-class method, the convertible preferred stock was considered a separate class of stock until the time it was converted to common shares for EPS purposes and therefore basic and diluted EPS is provided below for both common stock and preferred stock for the periods presented.

EPS for common stock and EPS for preferred stock is computed by dividing the sum of distributed earnings and undistributed earnings for each class of stock by the weighted average number of shares outstanding for each class of stock for the period. In applying the two-class method, undistributed earnings are allocated to common stock and preferred stock based on the weighted average shares outstanding during the period, which assumes the convertible preferred stock has been converted to common stock. The weighted average number of common shares outstanding as of June 30, 2021 includes the weighted average effect of the pre-funded warrants issued in connection with the January 2021 underwritten public offering, the exercise of which requires nominal consideration for the delivery of the shares of common stock (refer to Note 11 for more information).

Diluted net (loss) income per share includes the potential dilutive effect of common stock equivalents as if such securities were converted or exercised during the period, when the effect is dilutive. Common stock equivalents include: (i) outstanding stock options and restricted stock units, which are included under the "treasury stock method" when dilutive; and (ii) common stock to be issued upon the exercise of outstanding warrants, which are included under the "treasury stock method" when dilutive. Because the impact of these items is generally anti-dilutive during periods of net loss, there is no difference between basic and diluted loss per common share for periods with net losses. In periods of net loss, losses are allocated to the participating security only if the security has not only the right to participate in earnings, but also a contractual obligation to share in the Company's losses.

The following tables set forth the computation of basic and diluted net (loss) income per share of common stock and preferred stock for the three and six months ended June 30, 2021 and 2020 (in thousands, except share and per share amounts):

	Three Months Ended June 30, 2021			
	Common stock		Preferred stock	
	Continuing Operations	Discontinued Operations	Continuing Operations	Discontinued Operations
Numerator:				
Allocation of undistributed net loss	$ (16,991)	$ 68	$ (183)	$ 1
Denominator:				
Weighted average shares	96,179,581	96,179,581	207,221	207,221
Basic and diluted net loss per share	$ (0.18)	$ —	$ (0.88)	$ —

	Six Months Ended June 30, 2021			
	Common stock		Preferred stock	
	Continuing Operations	Discontinued Operations	Continuing Operations	Discontinued Operations
Numerator:				
Allocation of undistributed net loss	$ (45,934)	$ (37)	$ (1,813)	$ (1)
Denominator:				
Weighted average shares	92,399,073	92,399,073	729,282	729,282
Basic and diluted net loss per share	$ (0.50)	$ —	$ (2.49)	$ —

	Three Months Ended June 30, 2020			
	Common stock		Preferred stock	
	Continuing Operations	Discontinued Operations	Continuing Operations	Discontinued Operations
Numerator:				
Allocation of undistributed net loss	$ (11,659)	$ (414)	$ (1,167)	$ (41)
Denominator:				
Weighted average shares	62,806,926	62,806,926	1,257,143	1,257,143
Basic and diluted net loss per share	$ (0.18)	$ (0.01)	$ (0.93)	$ (0.03)

	Six Months Ended June 30, 2020			
	Common stock		Preferred stock	
	Continuing Operations	Discontinued Operations	Continuing Operations	Discontinued Operations
Numerator:				
Allocation of undistributed net loss	$ (31,099)	$ 517	$ (3,881)	$ 65
Denominator:				
Weighted average shares	58,370,843	58,370,843	1,457,143	1,457,143
Basic and diluted net loss per share	$ (0.53)	$ 0.01	$ (2.66)	$ 0.04

The following outstanding securities have been excluded from the computation of diluted weighted shares outstanding for the three and six months ended June 30, 2021 and 2020, as they could have been anti-dilutive:

	Three and Six Months Ended June 30,	
	2021	2020
Stock options	12,645,410	9,363,265
Warrants on common stock[1]	4,406,224	4,024,708
Restricted Stock Units	77,916	155,833
Underwriters' unit purchase option	—	40,000

[1] The above table excludes 1,676,923 pre-funded warrants for the three and six months ended June 30, 2021. See "Q1 2021 Financing" in Note 11 for more information.

6. Asset Acquisition

Aevi Merger

In the first quarter of 2020, the Company consummated its merger with Aevi Genomic Medicine Inc. ("Aevi"), in which Cerecor acquired the rights to CERC-002, CERC-006 and CERC-007 (the "Merger" or the "Aevi Merger").

The Merger consideration included (i) stock valued at approximately $15.5 million, resulting in the issuance of approximately 3.9 million shares of Cerecor common stock to Aevi stockholders, (ii) forgiveness of $4.1 million the Company had loaned Aevi prior to the Merger closing, (iii) contingent value rights for up to an additional $6.5 million in subsequent payments based on certain development milestones (discussed further in Note 14), and (iv) transaction costs of $1.5 million.

The Company recorded this transaction as an asset purchase as opposed to a business combination because management concluded that substantially all the value received was related to one group of similar identifiable assets, which was the in-process research and development ("IPR&D") for two early phase therapies. The Company considered these pipeline assets similar due to similarities in the risks of development, stage of development, regulatory pathway, patient populations and economics of commercialization. The fair value of $25.5 million (consisting primarily of $24.0 million IPR&D, $0.3 million of cash and $0.9 million of assembled workforce) was immediately recognized as acquired in-process research and development expense in the Company's consolidated statement of operations and comprehensive loss because the IPR&D asset has no alternate use due to the stage of development. The assembled workforce asset was recorded to intangible assets and will be amortized over an estimated useful life of two years.

7. Fair Value Measurements

ASC No. 820, *Fair Value Measurements and Disclosures* ("ASC 820"), defines fair value as the price that would be received to sell an asset, or paid to transfer a liability, in the principal or most advantageous market in an orderly transaction between market participants on the measurement date. The fair value standard also establishes a three-level hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability on the measurement date. The three levels are defined as follows:

- Level 1—inputs to the valuation methodology are quoted prices (unadjusted) for an identical asset or liability in an active market.
- Level 2—inputs to the valuation methodology include quoted prices for a similar asset or liability in an active market or model-derived valuations in which all significant inputs are observable for substantially the full term of the asset or liability.
- Level 3—inputs to the valuation methodology are unobservable and significant to the fair value measurement of the asset or liability.

The following table presents, for each of the fair value hierarchy levels required under ASC 820, the Company's assets and liabilities that are measured at fair value on a recurring basis (in thousands):

	June 30, 2021 Fair Value Measurements Using		
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets			
Investments in money market funds*	$ 38,973	$ —	$ —

	December 31, 2020 Fair Value Measurements Using		
	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets			
Investments in money market funds*	$ 17,503	$ —	$ —

*Investments in money market funds are reflected in cash and cash equivalents on the accompanying condensed consolidated balance sheets.

As of June 30, 2021 and December 31, 2020, the Company's financial instruments included cash and cash equivalents, restricted cash, accounts receivable, other receivables, prepaid and other current assets, accounts payable, and accrued expenses and other current liabilities. The carrying amounts reported in the accompanying condensed consolidated financial statements approximate their respective fair values because of the short-term nature of these accounts.

No changes in valuation techniques or inputs occurred during the six months ended June 30, 2021 and 2020.No transfers of assets between Level 1 and Level 2 of the fair value measurement hierarchy occurred during the six months ended June 30, 2021 and 2020.

8. Leases

The Company currently occupies two leased properties, both of which serve as administrative office space. The Company determined that both leases are operating leases based on the lease classification test performed at lease commencement.

The annual base rent for the Company's office located in Rockville, Maryland is $161,671, subject to annual 2.5% increases over the term of the lease. The applicable lease provided for a rent abatement for a period of 12 months following the Company's date of occupancy. The lease has an initial term of 10 years from the date the Company makes its first annual fixed rent payment, which occurred in January 2020. The Company has the option to extend the lease two times, each for a period of five years, and may terminate the lease as of the sixth anniversary of the first annual fixed rent payment, upon the payment of a termination fee. As of the lease commencement date, it was not reasonably certain that the Company will exercise the renewal periods or early terminate the lease and therefore the end date of the lease for accounting purposes is January 31, 2030.

The Company entered into a sublease for additional administrative office space in Chesterbrook, Pennsylvania in May 2020 (the "Chesterbrook Lease"). The annual base rent under the Chesterbrook Lease is $280,185. The lease expires in November 2021.

The weighted average remaining term of the operating leases at June 30, 2021 was7.9 years.

Supplemental balance sheet information related to the leased property is as follows (in thousands):

	As of	
	June 30, 2021	December 31, 2020
Property and equipment, net	$ 773	$ 917
Accrued expenses and other current liabilities	$ 288	$ 426
Other long-term liabilities	998	1,038
Total operating lease liabilities	$ 1,286	$ 1,464

The operating lease right-of-use ("ROU") assets are included in property and equipment and the lease liabilities are included in accrued expenses and other current liabilities and other long-term liabilities in our condensed consolidated balance sheets. The Company utilized a weighted average discount rate of 7.5% to determine the present value of the lease payments.

The components of lease expense for the three and six months ended June 30, 2021 and 2020 were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Operating lease cost*	$ 95	$ 87	$ 190	$ 142

*Includes short-term leases, which are immaterial.

The following table shows a maturity analysis of the operating lease liabilities as of June 30, 2021 (in thousands):

	Undiscounted Cash Flows
July 1, 2021 through December 31, 2021	$ 202
2022	174
2023	178
2024	183
2025	187
2026	192
Thereafter	621
Total lease payments	$ 1,737
Less implied interest	(451)
Total	$ 1,286

9. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities as of June 30, 2021 and December 31, 2020 consisted of the following (in thousands):

	As of	
	June 30, 2021	December 31, 2020
Research and development	$ 9,838	$ 4,939
Compensation and benefits	2,566	3,119
General and administrative	2,217	771
Sales and marketing	246	31
Commercial operations	2,451	1,913
Lease liability, current	288	426
Other	5	111
Total accrued expenses and other current liabilities	$ 17,611	$ 11,310

10. Notes Payable

Overview

On June 4, 2021, the Company entered into a $35.0 million Loan Agreement with Horizon and Powerscourt. On the closing date, the Company received $20.0 million, with the remaining $15.0 million fundable upon the Company achieving certain predetermined milestones, one of which was achieved in July 2021 (refer to more information below).

Each advance under the Loan Agreement will mature 42 months from the first day of the month following the funding of the advance. Each advance accrues interest at a per annum rate of interest equal to 6.25% plus the prime rate, as reported in the Wall Street Journal (subject to a floor of3.25%). The Loan Agreement provided for interest-only payments for each advance for the first 18 months. The interest-only period may be extended to24 months if the Company satisfies the Interest Only Extension Milestone (as defined in the Loan Agreement), which the Company met in the third quarter of 2021. Thereafter, amortization payments will be payable in monthly installments of principal and interest through each advance's maturity date. Upon ten business days' prior written notice, the Company may prepay all of the outstanding advances by paying the entire principal balance and all accrued and unpaid interest, subject to prepayment charges of up to 3% of the then outstanding principal balance. Upon the earlier of (i) payment in full of the principal balance, (ii) an event of default, or (iii) the maturity date, the Company will pay an additional final payment of 3% of the principal loan amount to the Lenders.

Each advance of the loan is secured by a lien on substantially all of the assets of the Company, other than Intellectual Property and Excluded Collateral (in each case as defined in the Loan Agreement), and contains customary covenants and representations, including a financial reporting covenant and limitations on dividends, indebtedness, collateral, investments, distributions, transfers, mergers or acquisitions taxes, corporate changes, deposit accounts, and subsidiaries.

The events of default under the Loan Agreement include but are not limited to, failing to make a payment, breach of covenant, or occurrence of a material adverse change. If an event of default occurs, the Lenders are entitled to accelerate the loan amounts due, or

take other enforcement actions. As of June 30, 2021, the Company did not breach any covenants or specified event that could result in an event of default.

Initial Note

The Initial Note of $20.0 million will mature on January 1, 2025 (the "Initial Note Maturity Date"). As of June 30, 2021, the Company was required to make interest-only payments of the Initial Note through January 1, 2023 with monthly amortization payments of principal and interest thereafter through the Initial Note Maturity Date. Subsequent to the second quarter of 2021, the Company satisfied the Interest Only Extension Milestone; refer to further information below.

On June 4, 2021, pursuant to the Loan Agreement, the Company issued warrants to the Lenders to purchase 403,844 shares of the Company's common stock with an exercise price of $2.60 (the "Warrants"). The Warrants are exercisable for ten years from the date of issuance. The Lenders may exercise the Warrants either by (a) cash or check or (b) through a net issuance conversion. The Warrants, which met equity classification, were recognized as a component of permanent stockholders' equity within additional paid-in-capital and were recorded at the issuance date using a relative fair value allocation method. The Company valued the Warrants at issuance, which resulted in a discount on the debt, and allocated the proceeds from the loan proportionately to the notes payable and to the Warrants, of which $0.9 million was allocated to the Warrants.

For the three and six months ended June 30, 2021, the Company incurred $2.1 million in debt issuance costs, including legal fees in connection with the Loan Agreement, fees paid directly to the lender, and other direct costs, of which $1.7 million will be paid in the third quarter of 2021. All fees, warrants, and costs paid to the Lenders and all direct costs incurred by the Company are recognized as a debt discount and are amortized to interest expense using the effective interest method over the term of the loan. The effective rate of the Initial Note, including the amortization of the debt discount and issuance costs, and accretion of the final payment, was 16.3% as of June 30, 2021.

Balance sheet information related to the note payable (which only includes the Initial Note as of June 30, 2021) is as follows (in thousands):

	As of		
	June 30, 2021	December 31, 2020	Maturity
Notes payable, gross[1]	$ 20,600	$ —	January 2025
Less: Unamortized debt discount and issuance costs	3,457	—	
Carrying value of notes payable	$ 17,143	$ —	

[1] Balance includes $0.6 million final payment fee

As of June 30, 2021, the estimated future principal payments due on the Initial Note (prior to meeting the Interest Only Extension Milestone, which occurred in the third quarter of 2021) were as follows (in thousands):

	As of June 30, 2021
2021	$ —
2022	—
2023	10,000
2024	10,600
Total principal payments[1]	$ 20,600

[1] Balance includes $0.6 million final payment fee

Funding of Second Note Subsequent to June 30, 2021

In the third quarter of 2021, the Company received $10.0 million in gross proceeds under the Loan Agreement. The Second Note was made available in connection with the Company's successful positive initial results from a Phase1b proof-of-concept study evaluating CERC-002 in adult patients with moderate-to-severe Crohn's disease. The remaining $5.0 million may be funded upon achieving certain predetermined milestones.

The funding of the Second Note satisfied the Interest Only Extension Milestone for both the Initial Note and the Second Note. Therefore, the Second Note includes interest-only payments through August 1, 2023 and monthly principal and interest payments beginning thereafter through its maturity date on February 1, 2025. As it relates to the Initial Note, the Company's interest-only

payment period is now extended through July 1, 2023 and the monthly principal and interest payments begin thereafter through its maturity date on January 1, 2025.

The Company will evaluate the accounting impact of the Second Note and extension of the interest only period of the Initial Note in the third quarter of 2021.

11. Capital Structure

Pursuant to the Company's amended and restated certificate of incorporation, the Company is authorized to issue two classes of stock, common stock and preferred stock. At June 30, 2021, the total number of shares of capital stock the Company was authorized to issue was 205,000,000 of which 200,000,000 was common stock and 5,000,000 was preferred stock. All shares of common and preferred stock have a par value of $0.001 per share.

Common Stock

At-the-Market Offering Program

In July 2021, the Company entered into an "at-the-market" sales agreement with Cantor Fitzgerald & Co. and RBC Capital Markets, LLC (together, the "Agents"), pursuant to which the Company may sell from time to time, shares of its common stock having an aggregate offering price of up to $50 million through the Agents (the "ATM Program"). As of the filing date of this Quarterly Report on Form 10-Q, the Company has not yet sold any shares of our common stock under the ATM Program.

Q2 2021 Debt Financing Agreement

As part of the Loan Agreement entered into in the second quarter of 2021, on June 4, 2021, the Company issued warrants to Horizon and Powerscourt to purchase 403,844 shares of the Company's common stock with an exercise price of $2.60. The warrants are exercisable for ten years from the date of issuance. Refer to Note 10 for additional information.

Q1 2021 Financing

In January 2021, the Company closed an underwritten public offering of 13,971,889 shares of its common stock and 1,676,923 pre-funded warrants for net proceeds of $37.7 million. Armistice, which is a significant stockholder of the Company and whose chief investment officer, Steven Boyd, currently serves on the Board of the Company, participated in the offering by purchasing 2,500,000 shares of common stock, on the same terms as all other investors. Certain affiliates of Nantahala Capital Management LLC (collectively, "Nantahala"), which beneficially owned greater than 5% of the Company's outstanding common stock at the time of the offering and, therefore, were considered a related party pursuant to the Company's written related person transaction policy, purchased 1,400,000 shares of common stock, on the same terms as all other investors.

Nantahala also purchased the pre-funded warrants to purchase up to an aggregate of 1,676,923 shares of common stock at a purchase price of $2.599, which represents the per share public offering price for the common stock less the $0.001 per share exercise price for each pre-funded warrant.

The pre-funded warrants are exercisable at any time after their original issuance at the option of each holder, in such holder's discretion, by (i) payment in full in immediately available funds for the number of shares of common stock purchased upon such exercise or (ii) a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the pre-funded warrant. A holder will not be entitled to exercise any portion of any pre-funded warrant if the holder's ownership of the Company's common stock would exceed 9.99% following such exercise.

In the event of certain fundamental transactions, the holders of the pre-funded warrants will be entitled to receive upon exercise of the pre-funded warrants the kind of amounts of securities, cash or other property that the holders would have received had they exercised the pre-funded warrants immediately prior to such fundamental transaction without regard to any limitations on exercise contained in the pre-funded warrants.

The pre-funded warrants were classified as a component of permanent stockholders' equity within additional paid-in capital and were recorded at the issuance date using a relative fair value allocation method. The pre-funded warrants are equity classified because they (i) are freestanding financial instruments that are legally detachable and separately exercisable from the equity instruments, (ii) are immediately exercisable, (iii) do not embody an obligation for the Company to repurchase its shares, (iv) permit the holders to receive a fixed number of shares of common stock upon exercise, (v) are indexed to the Company's common stock and (vi) meet the equity classification criteria. In addition, such pre-funded warrants do not provide any guarantee of value or return. The Company valued the

pre-funded warrants at issuance, concluding that their sales price approximated their fair value, and allocated net proceeds from the sale proportionately to the common stock and pre-funded warrants, of which $4.4 million was allocated to the pre-funded warrants and recorded as a component of additional paid-in capital.

2020 Financings

On June 11, 2020, the Company closed an underwritten public offering of15,180,000 shares of its common stock for net proceeds of approximately $85.4 million. Armistice participated in the offering by purchasing 2,000,000 shares of common stock, on the same terms as all other investors. Additionally, certain of the Company's officers participated in the offering by purchasing an aggregate of 110,000 shares of common stock, on the same terms as all other investors.

On March 17, 2020, the Company entered into a securities purchase agreement with Armistice pursuant to which the Company sold1,951,219 shares of the Company's common stock for net proceeds of approximately $3.9 million.

On February 6, 2020, the Company closed a registered direct offering with certain institutional investors for the sale by the Company of1,306,282 shares of the Company's common stock for net proceeds of approximately $5.1 million. Armistice participated in the offering by purchasing1,256,282 shares of common stock from the Company, on the same terms as all other investors.

Aevi Merger

On February 3, 2020, under the terms of the Aevi Merger noted above in Note 6, the Company issued approximately3.9 million shares of common stock.

Common Stock Warrants

At June 30, 2021, the following common stock warrants were outstanding:

Number of common shares underlying warrants	Exercise price per share	Expiration date
2,380	$ 8.68	May 2022
4,000,000	$ 12.50	June 2024
1,676,923	$ 0.001	—
403,844	$ 2.60	June 2031
6,083,147		

Convertible Preferred Stock

On December 26, 2018, the Company filed a Certificate of Designation of Preferences of Series B Non-Voting Convertible Preferred Stock ("Series B Convertible Preferred Stock" or "convertible preferred stock") of Cerecor Inc. (the "Certificate of Designation of the Series B Preferred Stock") classifying and designating the rights, preferences and privileges of the Series B Convertible Preferred Stock. The Certificate of Designation of the Series B Convertible Preferred Stock authorized 2,857,143 shares of convertible preferred stock. The Series B Convertible Preferred Stock converted to shares of common stock on a 1-for-5 ratio and has the same rights, preferences, and privileges as common stock other than it held no voting rights. During the first quarter of 2020, the holder of the Series B Preferred Stock, Armistice, converted 1,600,000 shares of the convertible preferred stock into 8,000,000 shares of Cerecor's common stock. In April 2021, Armistice converted the remaining1,257,143 shares of Series B Convertible Preferred Stock into 6,285,715 shares of Cerecor's common stock. As of June 30, 2021, the Company hadno preferred stock outstanding.

12. Stock-Based Compensation

2016 Equity Incentive Plan

On April 5, 2016, the Company's board of directors adopted the 2016 Equity Incentive Plan (the "2016 Plan") as the successor to the 2015 Omnibus Plan (the "2015 Plan"). The 2016 Plan was approved by the Company's stockholders and became effective on May 18, 2016 (the "2016 Plan Effective Date"). Upon the 2016 Plan Effective Date, the 2016 Plan reserved and authorized up to 600,000 additional shares of common stock for issuance, as well as464,476 unallocated shares remaining available for grant of new awards under the 2015 Plan. An Amended and Restated 2016 Equity Incentive Plan (the "2016 Amended Plan") was approved by the Company's stockholders in May 2018, which increased the share reserve by an additional 1.4 million shares. A Second Amended and

Restated 2016 Equity Incentive Plan (the "2016 Second Amended Plan") was approved by the Company's stockholders in August 2019, which increased the share reserve by an additional 850,000 shares. A Third Amended and Restated Equity Incentive Plan (the "2016 Third Amended Plan") was approved by the Company's stockholders in June 2020 which increased the share reserve by an additional 2,014,400 shares. During the term of the 2016 Third Amended Plan, the share reserve will automatically increase on the first trading day in January of each calendar year by an amount equal to 4% of the total number of outstanding shares of common stock of the Company on the last trading day in December of the prior calendar year. As of June 30, 2021, there were 2,576,435 shares available for future issuance under the 2016 Third Amended Plan.

Option grants expire after ten years. Employee options typically vest over three or four years. Employees typically receive a new hire option grant, as well as an annual grant in the first or second quarter of each year. Options granted to directors typically vest either immediately or over a period of one or three years. Directors may elect to receive stock options in lieu of board compensation, which vest immediately. For stock options granted to employees and non-employee directors, the estimated grant date fair market value of the Company's stock-based awards is amortized ratably over the individuals' service periods, which is the period in which the awards vest. Stock-based compensation expense includes expense related to stock options, restricted stock units and employee stock purchase plan shares. The amount of stock-based compensation expense recognized for the three and six months ended June 30, 2021 and 2020 was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Research and development	$ 467	$ 391	$ 765	$ 772
General and administrative	2,503	2,308	3,548	2,988
Sales and marketing	104	87	209	142
Total stock-based compensation	$ 3,074	$ 2,786	$ 4,522	$ 3,902

In June 2021, the Company's former Chairman of the Board resigned from the Board. The Company and the former Chairman subsequently entered into an agreement for him to serve as a strategic advisor to the Board and the Company, including serving on the Company's Scientific Advisory Board, for a period of at least one year. As consideration for these services, the Company modified his outstanding stock option awards to allow them to continue to vest during the term during which he serves as a strategic advisor. Additionally, any option award previously granted was amended to extend the exercisability period. As a result of the modification, the Company recognized $1.4 million of compensation cost, $1.0 million of which related to options with market-based vesting conditions (which were fully vested prior to the modification) and $0.4 million of which related to options with service-based vesting conditions. This expense was recognized in general and administrative expenses for the three and six months ended June 30, 2021. At June 30, 2021, there was $0.3 million of unrecognized compensation cost related to the modification of service-based options that will be recognized over a weighted-average period of 1.0 years.

Stock options with service-based vesting conditions

The Company has granted awards that contain service-based vesting conditions. The compensation cost for these options is recognized on a straight-line basis over the vesting periods. A summary of option activity for the six months ended June 30, 2021 is as follows:

	Options Outstanding			
	Number of shares	Weighted average exercise price per share	Weighted average grant date fair value per share	Weighted average remaining contractual term (in years)
Balance at December 31, 2020	8,830,674	$ 3.95	$ 2.36	7.7
Granted	4,048,563	$ 3.33	$ 2.19	
Exercised	(580,617)	$ 2.70	$ 1.74	
Forfeited	(313,841)	$ 3.82	$ 2.41	
Expired	(339,369)	$ 4.55	$ 2.70	
Balance at June 30, 2021	11,645,410	$ 3.78	$ 2.32	8.5
Exercisable at June 30, 2021	3,939,679	$ 4.29	$ 2.44	7.5

In March 2021, the Company granted its newly appointed Chief Financial Officer options with service-based vesting conditions to purchase 0.5 million shares of common stock as an inducement option grant, pursuant to NASDAQ Listing Rule 5635(c)(4). In

January 2021, the Company granted 2.7 million options with service-based vesting conditions to its employees as part of its annual stock option award.

In March 2020, our Chief Executive Officer entered into an amended employment agreement in which his salary in cash was reduced to $5,568 (the "Reduction"), which represents the minimum exempt annual salary. In consideration for the Reduction, on a quarterly basis, the Company grants stock options, which vest immediately, for the purchase of a number of shares of the Company's common stock with a total value (based on the Black-Scholes valuation methodology) based on a pro rata total annual value of the foregone salary.

The aggregate intrinsic value of stock options is calculated as the difference between the exercise price of the stock options and the fair value of the Company's common stock for those stock options that had exercise prices lower than the fair value of the Company's common stock. As of June 30, 2021, the aggregate intrinsic value of options outstanding was $2.2 million. The aggregate intrinsic value of options currently exercisable as of June 30, 2021 was $1.1 million. There were 1,953,214 options that vested during the six months ended June 30, 2021 with a weighted average exercise price of $3.66 per share. The total grant date fair value of shares which vested during the six months ended June 30, 2021 was $4.4 million.

The Company recognized stock-based compensation expense of $2.0 million and $3.3 million related to stock options with service-based vesting conditions for the three and six months ended June 30, 2021, respectively. At June 30, 2021, there was $ 14.8 million of total unrecognized compensation cost related to unvested service-based vesting condition awards. The unrecognized compensation cost is expected to be recognized over a weighted-average period of 2.9 years.

Stock-based compensation assumptions

The following table shows the assumptions used to compute stock-based compensation expense for stock options with service-based vesting conditions granted under the Black-Scholes valuation model for the six months ended June 30, 2021:

Service-based options	
Expected annual dividend yield	—%
Expected stock price volatility	73.0% - 86.5%
Expected term of option (in years)	0.76 - 6.25
Risk-free interest rate	0.07% - 1.23%

Stock options with market-based vesting conditions

The following table summarizes the Company's market-based option activity for the six months ended June 30, 2021 (in thousands except, for share amounts):

	Options Outstanding			
	Number of shares	Weighted average exercise price per share	Weighted average remaining contractual term (in years)	Aggregate intrinsic value (1)
Balance at December 31, 2020	1,000,000	$ 3.29	9.5	$ 65
Granted	—	$ —		
Balance at June 30, 2021	1,000,000	$ 3.29	3.0	$ 380
Exercisable at June 30, 2021	1,000,000			$ 380

(1) The aggregate intrinsic value in the above table represents the total pre-tax amount that a participant would receive if the option had been exercised on the last day of the respective fiscal period. Options with a market value less than its exercise value are not included in the intrinsic value amount.

Restricted Stock Units

The Company measures the fair value of the restricted stock units using the stock price on the date of the grant. The restricted shares typically vest annually over a four-year period beginning on the first anniversary of the award. The following table summarizes the Company's restricted stock unit ("RSU") activity for the six months ended June 30, 2021:

	RSUs Outstanding	
	Number of shares	Weighted average grant date fair value
Unvested RSUs at December 31, 2020	155,833	$ 4.91
Vested	(77,917)	
Unvested RSUs at June 30, 2021	77,916	$ 4.91

Employee Stock Purchase Plan

On April 5, 2016, the Company's board of directors approved the 2016 Employee Stock Purchase Plan (the "ESPP"). The ESPP was approved by the Company's stockholders and became effective on May 18, 2016 (the "ESPP Effective Date").

Under the ESPP, eligible employees can purchase common stock through accumulated payroll deductions at such times as are established by the administrator. The ESPP is administered by the compensation committee of the Company's board of directors. Under the ESPP, eligible employees may purchase stock at 85% of the lower of the fair market value of a share of the Company's common stock (i) on the first day of an offering period or (ii) on the purchase date. Eligible employees may contribute up to 15% of their earnings during the offering period. The Company's board of directors may establish a maximum number of shares of the Company's common stock that may be purchased by any participant, or all participants in the aggregate, during each offering or offering period. Under the ESPP, a participant may not accrue rights to purchase more than $25,000 of the fair market value of the Company's common stock for each calendar year in which such right is outstanding.

Upon the ESPP Effective Date, the Company reserved and authorized up to 500,000 shares of common stock for issuance under the ESPP. On January 1 of each calendar year, the aggregate number of shares that may be issued under the ESPP shall automatically increases by a number equal to the lesser of (i) 1% of the total number of shares of the Company's capital stock outstanding on December 31 of the preceding calendar year, and (ii) 500,000 shares of the Company's common stock, or (iii) a number of shares of the Company's common stock as determined by the Company's board of directors or compensation committee. The number of shares were increased by 500,000 on January 1, 2021. As of June 30, 2021, 1,836,622 shares remained available for issuance.

In accordance with the guidance in ASC 718-50, *Employee Share Purchase Plans*, the ability to purchase shares of the Company's common stock at the lower of the offering date price or the purchase date price represents an option and, therefore, the ESPP is a compensatory plan under this guidance. Accordingly, stock-based compensation expense is determined based on the option's grant-date fair value and is recognized over the requisite service period of the option. The Company used the Black-Scholes valuation model and recognized stock-based compensation expense of $55 thousand and $89 thousand for the three and six months ended June 30, 2021, respectively.

13. Income Taxes

The Company recognized an income tax benefit of $0.2 million for the three and six months ended June 30, 2021 and an income tax benefit of $0.5 million and $2.6 million for the three and six months ended June 30, 2020, respectively. The tax benefit recognized for the six months ended June 30, 2020 was a result of a tax law change signed into law as part of the Coronavirus Aid, Relief and Economic Security Act ("CARES Act"), which allowed the Company to carry back certain losses for taxes paid in fiscal year 2017 and thus resulted in a refund claim. The 2021 income tax benefit was a result of the updated estimate of interest receivable and abatement of penalties on the refund claim, as the final refund payment was received from the Internal Revenue Service in the second quarter of 2021.

14. Commitments and Contingencies

Litigation

Litigation - General

The Company may become party to various contractual disputes, litigation, and potential claims arising in the ordinary course of business. The Company currently does not believe that the resolution of such matters will have a material adverse effect on its financial position or results of operations except as otherwise disclosed in this report.

Karbinal Royalty Make-Whole Provision

In 2018, in connection with the acquisition of Avadel's pediatric products, the Company entered into a supply and distribution agreement (the "Karbinal Agreement") with TRIS Pharma Inc. ("TRIS"). As part of the Karbinal Agreement, the Company had an annual minimum sales commitment, which is based on a commercial year that spans from August 1 through July 31, of 70,000 units through 2025. The Company was required to pay TRIS a royalty make whole payment ("Make-Whole Payments") of $30 for each unit under the 70,000 units annual minimum sales commitment through 2025.

As a part of the Aytu Divestiture, which closed on November 1, 2019, the Company assigned all payment obligations, including the Make-Whole Payments, under the Karbinal Agreement (collectively, the "TRIS Obligations") to Aytu. However, under the original license agreement, the Company could ultimately be liable for the TRIS Obligations to the extent Aytu fails to make the required payments. The future Make-Whole Payments to be made by Aytu are unknown as the amount owed to TRIS is dependent on the number of units sold.

Possible Future Milestone Payments for In-Licensed Compounds

General

The Company is a party to license and development agreements with various third parties, which contain future payment obligations such as royalties and milestone payments (discussed further below). The Company recognizes a liability (and related expense) for each milestone if and when such milestone is probable and can be reasonably estimated. As typical in the biotechnology industry, each milestone has its own unique risks that the Company evaluates when determining the probability of achieving each milestone and the probability of success evolves over time as the programs progress and additional information is obtained. The Company considers numerous factors when evaluating whether a given milestone is probable including (but not limited to) the regulatory pathway, development plan, ability to dedicate sufficient funding to reach a given milestone and the probability of success.

CERC-002 KKC License Agreement

On March 25, 2021, the Company entered into a license agreement with Kyowa Kirin Co., Ltd. ("KKC") for exclusive worldwide rights to develop, manufacture and commercialize CERC-002, KKC's first-in-class fully human anti-LIGHT (TNFSF14) monoclonal antibody for all indications (the "KKC License Agreement"). The KKC License Agreement replaced the Amended and Restated Clinical Development and Option Agreement between the Company and KKC dated May 28, 2020.

Under the KKC License Agreement, the Company paid KKC an upfront license fee equal to $10.0 million. The Company is also required to pay KKC up to $112.5 million based on the achievement of specified development and regulatory milestones. Upon commercialization, the Company is required to pay KKC sales-based milestones aggregating up to $75 million tied to the achievement of annual net sales targets.

Additionally, the Company is required to pay KKC royalties during a country-by-country royalty term equal to a mid-teen percentage of annual net sales. The Company is required to pay KKC a double digit percentage (less than 30%) of the payments that the Company receives from sublicensing of its rights under the KKC License Agreement, subject to certain exclusions. Cerecor is responsible for the development and commercialization of CERC-002 in all indications worldwide (other than the option in the KKC License Agreement that, upon exercise by KKC, allows KKC to develop, manufacture and commercialize CERC-002 in Japan).

The Company recognized the upfront license fee of $10.0 million within research and development expenses for the six months ended June 30, 2021 and made the payment in April 2021. There has been no cumulative expense recognized as of June 30, 2021 related to the milestones under this license agreement. The Company will continue to monitor the milestones at each reporting period.

CERC-006 Astellas License Agreement

The Company has an exclusive license agreement with OSI Pharmaceuticals, LLC, an indirect wholly owned subsidiary of Astellas Pharma, Inc. ("Astellas"), for the worldwide development and commercialization of the novel, second generation mTORC1/2 inhibitor (which we refer to as CERC-006). Under the terms of the license agreement, there was an upfront license fee of $0.5 million. The Company is required to pay Astellas up to $5.5 million based on the achievement of specified development and regulatory milestones. The Company is also required to pay Astellas a tiered mid-to-high single digit percentage of the payments that Cerecor receives from sublicensing of its rights under the Astellas license agreement, subject to certain exclusions. Upon commercialization, the Company is required to pay Astellas royalties during a country-by-country royalty term equal to a tiered mid-to-high single digit percentage of annual net sales. Cerecor is fully responsible for the development and commercialization of the program.

For the six months ended June 30, 2021, the Company recognized a $0.5 million development milestone payment within research and development expenses. There has been $0.5 million of cumulative expense recognized as of June 30, 2021 related to the milestones under this license agreement. The Company will continue to monitor the remaining milestones at each reporting period.

CERC-007 AstraZeneca License Agreement

The Company has an exclusive global license with Medimmune Limited, a subsidiary of AstraZeneca plc ("AstraZeneca"), to develop and commercialize a fully human, anti-IL-18 monoclonal antibody (which we refer to as CERC-007). Under the terms of the license agreement, there was an upfront license fee of $6.0 million in cash and equity. The Company is required to pay AstraZeneca up to $71.5 million based on the achievement of certain development and regulatory milestones. Upon commercialization, the Company is required to pay AstraZeneca sales-based milestone payments aggregating up to $90.0 million tied to the achievement of annual net sales targets. Additionally, the Company is also required to pay AstraZeneca royalties during a country-by-country royalty term equal to a tiered low double digit percentage of annual net sales. Cerecor is fully responsible for the development and commercialization of the program.

No expense related to this license agreement was recognized in the six months ended June 30, 2021. There has been $1.5 million of cumulative expense recognized as of June 30, 2021 related to the milestones under this license agreement. The Company will continue to monitor the remaining milestones at each reporting period.

CERC-008 Sanford Burnham Prebys License Agreement

On June 22, 2021, the Company entered into an Exclusive Patent License Agreement with Sanford Burnham Prebys Medical Discovery Institute (the "Sanford Burnham Prebys License Agreement") under which the Company obtained an exclusive license to a portfolio of issued patents and patent applications covering an immune checkpoint program (which we refer to as CERC-008).

Under the terms of the agreement, the Company incurred an upfront license fee of $0.4 million, as well as patent costs of $0.5 million. The Company is required to pay Sanford Burnham Prebys up to $24.2 million based on achievement of specified development and regulatory milestones. Upon commercialization, the Company is required to pay Sanford Burnham Prebys sales-based milestone payments aggregating up to $50.0 million tied to annual net sales targets. Additionally, the Company is required to pay Sanford Burnham Prebys royalties during a country-by-country royalty term equal to a low-to-mid single digit percentage of annual net sales. The Company is also required to pay Sanford Burnham Prebys a tiered low-double digit percentage of the payments that Cerecor receives from sublicensing of its rights under the Sanford Burnham Prebys license agreement, subject to certain exclusions. Cerecor is fully responsible for the development and commercialization of the program.

The Company recognized the upfront license fee of $0.4 million within research and development expenses and the $0.5 million of patent expense within general and administrative expenses for the three and six months ended June 30, 2021. There has been no cumulative expense recognized as of June 30, 2021 related to the milestones under this license agreement. The Company will continue to monitor the milestones at each reporting period.

Possible Future Milestone Proceeds for Out-Licensed Compounds

CERC-301 Out-License

On May 28, 2021, the Company out-licensed its rights in respect of its non-core asset, CERC-301, to Alto. The Company initially in-licensed the compound from an affiliate of Merck & Co., Inc. ("Merck") in 2013.

Under the out-license agreement, the Company received a mid-six digit upfront payment from Alto. The Company is also eligible to receive up to $18.6 million based on the achievement of specified development, regulatory and commercial sale milestones. Additionally, the Company is entitled to a less than single digit percentage royalty based on annual net sales. Alto is fully responsible for the development and commercialization of the program.

Cerecor recognized the upfront fee as license revenue for the three and six months ended June 30, 2021. The Company has not recognized any milestones as of June 30, 2021.

CERC-406 License Assignment

On June 9, 2021, the Company assigned its rights, title, interest, and obligations under an in-license covering its non-core asset, CERC-406, to ES, a wholly-owned subsidiary of Armistice, which is a significant stockholder of the Company and whose chief investment officer, Steven Boyd, currently serves on the Board of the Company. The transaction with ES was approved in accordance with Cerecor's related party transaction policy.

Under the assignment agreement, the Company received a low-six digit upfront payment from ES. The Company is also eligible to receive up to $6.0 million based on the achievement of specified development and regulatory milestones. Upon commercialization, the Company is eligible to receive sales-based milestone payments aggregating up to $20.0 million tied to annual net sales targets. ES is fully responsible for the development and commercialization of the program.

Cerecor recognized the upfront fee as license revenue for the three and six months ended June 30, 2021. The Company has not recognized any milestones as of June 30, 2021.

CERC-501 Sale to Janssen

In August 2017, the Company sold its worldwide rights to CERC-501 to Janssen Pharmaceuticals, Inc. ("Janssen") in exchange for initial gross proceeds of $25.0 million. The Company is also eligible to receive up to $20.0 million based on the achievement of specified development and regulatory milestones. Janssen is fully responsible for the development and commercialization of the program.

The Company has not recognized any milestones as of June 30, 2021.

CERC-611 License Assignment

In August 2019, the Company assigned its rights, title, interest, and obligations under an in-license covering its non-core asset, CERC-611, to ES, a wholly-owned subsidiary of Armistice, which is a significant stockholder of the Company and whose chief investment officer, Steven Boyd, currently serves on the Board of the Company.

Upon commercialization, the Company is eligible to receive sales-based milestone payments aggregating up to $20.0 million tied to annual net sales targets. ES is fully responsible for the development and commercialization of the program.

The Company has not recognized any milestones as of June 30, 2021.

Related Party and Acquisition Related Contingent Liabilities

CERC-006 Royalty Agreement with Certain Related Parties

Prior to Cerecor entering into the Aevi Merger, in July 2019, Aevi entered into a royalty agreement with Mike Cola, Cerecor's current Chief Executive Officer, Joseph J. Grano, Jr., Kathleen Jane Grano, Joseph C. Grano, The Grano Children's Trust, Joseph C. Grano, trustee and LeoGroup Private Investment Access, LLC on behalf of Garry A. Neil, Cerecor's current Chief Scientific Officer (collectively, the "Investors") in exchange for a one-time aggregate payment of $ 2.0 million (the "Royalty Agreement"). Collectively, the Investors will be entitled to an aggregate amount equal to a low-single digit percentage of the aggregate net sales of Astellas' second generation mTORC1/2 inhibitor, CERC-006. At any time beginning three years after the date of the first public launch of CERC-006, Cerecor may exercise, at its sole discretion, a buyout option that terminates any further obligations under the Royalty Agreement in exchange for a payment to Investors of an aggregate of 75% of the net present value of the royalty payments. A majority of the independent members of the board of directors and the audit committee of Aevi approved the Royalty Agreement.

Cerecor assumed this Royalty Agreement upon closing of the Aevi Merger and it is recorded as a royalty obligation within the Company's accompanying condensed consolidated balance sheet as of June 30, 2021. Because there is a significant related party relationship between the Company and the Investors, the Company treated its obligation to make royalty payments under the Royalty Agreement as an implicit obligation to repay the funds advanced by the Investors. As the Company makes royalty payments in accordance with the Royalty Agreement, it will reduce the liability balance. At the time that such royalty payments become probable and estimable, and if such amounts exceed the liability balance, the Company will impute interest accordingly on a prospective basis based on such estimates, which will result in a corresponding increase in the liability balance.

Aevi Merger Possible Future Milestone Payments

A portion of the consideration for the Aevi Merger includes two future contingent development milestones worth up to an additional $6.5 million. The first milestone is the enrollment of a patient in a Phase 2 study related to CERC-002 for use in pediatric onset Crohn's disease, CERC-006 (any indication) or CERC-007 (any indication) prior to February 3, 2022. If this milestone is met, the Company is required to make a milestone payment of $2.0 million. The second milestone is the receipt of a NDA approval for either CERC-006 or CERC-007 from the FDA on or prior to February 3, 2025. If this milestone is met, the Company is required to make a milestone payment of $4.5 million. All milestones are payable in either shares of the Company's common stock or cash, at the election of the Company.

The contingent consideration related to the development milestones will be recognized if and when such milestones are probable and can be reasonably estimated. As of the consummation of the Merger on February 3, 2020 and as of June 30, 2021, no contingent consideration related to the development milestone has been recognized. The Company will continue to monitor the development milestones at each reporting period.

Ichorion Asset Acquisition Possible Future Milestone Payments

In September 2018, the Company acquired Ichorion Therapeutics, Inc. including acquiring three compounds for inherited metabolic disorders known as CDGs (CERC-801, CERC-802 and CERC-803) and one other preclinical compound. Consideration for the transaction included shares of Cerecor common stock and three future contingent development milestones for the acquired compounds worth up to an additional $15.0 million. The first milestone is the first product being approved for marketing by the FDA on or prior to December 31, 2021. If this milestone is met, the Company is required to make a milestone payment of $6.0 million. The second milestone is the second product being approved for marketing by the FDA on or prior to December 31, 2021. If this milestone is met, the Company is required to make a milestone payment of $5.0 million. The third milestone is a protide molecule being approved by the FDA on or prior to December 31, 2023. If this milestone is met, the Company is required to make a milestone payment of $4.0 million. All milestones are payable in either shares of the Company's common stock or cash, at the election of the Company.

The contingent consideration related to the development milestones will be recognized if and when such milestones are probable and can be reasonably estimated. As of June 30, 2021, no contingent consideration related to the development milestone has been recognized. The Company will continue to monitor the development milestones at each reporting period.

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

This Quarterly Report on Form 10-Q and the information incorporated herein by reference contain forward-looking statements that involve a number of risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. Forward-looking statements can be identified by the use of forward-looking words such as "believes," "expects," "may," "might," "will," "plans," "intends," "estimates," "could," "should," "would," "continue," "seeks," "aims," "projects," "predicts," "pro forma," "anticipates," "potential" or other similar words (including their use in the negative), or by discussions of future matters such as the development of product candidates or products, technology enhancements, possible changes in legislation, and other statements that are not historical. Although our forward-looking statements reflect the good faith judgment of our management, these statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks and uncertainties, and actual results and outcomes may differ materially from results and outcomes discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those below and elsewhere in this Quarterly Report on Form 10-Q, particularly in Part II – Item 1A, "Risk Factors," as well as in our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC, on March 8, 2021, and in our other filings with the SEC. Statements made herein are as of the date of the filing of this Quarterly Report on Form 10-Q with the SEC and should not be relied upon as of any subsequent date. Unless otherwise required by applicable law, we do not undertake, and we specifically disclaim any obligation to update any forward-looking statements to reflect occurrences, developments, unanticipated events or circumstances after the date of such statement.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited financial statements and related notes that appear in Item 1 of this Quarterly Report on Form 10-Q and with our audited financial statements and related notes for the year ended December 31, 2020 appearing in our Annual Report on Form 10-K filed with the SEC on March 8, 2021.

Overview

Cerecor Inc. (the "Company" or "Cerecor") is a biopharmaceutical company focused on becoming a leader in the development and commercialization of treatments for immunologic, immuno-oncologic and rare genetic disorders. The Company is advancing its clinical-stage pipeline of innovative therapies that address unmet patient needs within rare and orphan diseases.

The Company's rare disease pipeline includes CERC-801, CERC-802 and CERC-803 ("CERC-800 compounds"), which are in development for congenital disorders of glycosylation and CERC-006, an oral mTORc1/c2 inhibitor in development for the treatment of complex lymphatic malformations. The Company is also developing two monoclonal antibodies, CERC-002 and CERC-007. CERC-002, targets the cytokine LIGHT (TNFSF14) and is in clinical development for treatment of inflammatory bowel disease and COVID-19 acute respiratory distress syndrome ("ARDS"). CERC-007 targets the cytokine IL-18 and is in clinical development for the treatment of Still's disease (adult onset Still's disease ("AOSD") and systemic juvenile idiopathic arthritis) and multiple myeloma ("MM"). CERC-006, 801, 802 and 803 have all received Orphan Drug Designation and Rare Pediatric Disease Designation, which makes all four eligible for a priority review voucher ("PRV") upon approval from the U.S. Food and Drug Administration ("FDA").

The Company has one commercialized product, Millipred®, a non-core asset, which is an oral prednisolone indicated across a wide variety of inflammatory conditions.

Management's primary evaluation of the success of the Company is the ability to progress its pipeline assets forward towards commercialization or opportunistically out-licensing rights to indications or geographies. This success depends not only on the operational execution of the programs, but also the ability to secure sufficient funding to support the programs. We believe the ability to achieve the anticipated milestones (as presented in the Research and Development Updates milestone chart below), represents our most immediate evaluation points.

We have made significant progress in 2021 toward our key goal of advancing the pipeline as highlighted by the CERC-002 Crohn's Phase 1b first cohort data release, CERC-002 COVID-19 ARDS Phase 2 proof-of-concept data release and subsequent receipt of fast-track designation ("FTD"), completion of the first cohort of the CERC-007 Multiple Myeloma Phase 1b trial, obtaining FTD for CERC-803 and enrollment of the first patient in the CERC-007 AOSD Phase 1b open-label proof-of-concept trial. We also believe our licensing activity during the first half of 2021, including in-licenses of immunology and immuno-oncology assets (including the expanded license agreement for CERC-002 and the license agreement for CERC-008) and out-licenses of non-core assets, enhances our focus on the development of innovative therapies in areas of high unmet need within the fields of immunology, immuno-oncology, and rare genetic disorders. Finally, we executed a combination of debt and equity financings in 2021 for total net proceeds of approximately $65 million as of the filing date of this Quarterly Report on Form 10-Q, which strengthens and extends our financial resources to advance our clinical pipeline towards these key development milestones.

Recent Developments

In June 2021, the Company entered into a $35.0 million venture debt financing agreement (the "Loan Agreement") with Horizon Technology Finance Corporation ("Horizon") and Powerscourt Investments XXV, LP ("Powerscourt, together with Horizon, the "Lenders"). On the closing date, the Company received $20.0 million, with the remaining $15.0 million fundable upon the Company achieving certain predetermined milestones. In the third quarter of 2021, the Company received $10.0 million in gross proceeds under the Loan Agreement. This advance was made available in connection with the Company's successful positive initial results from a Phase1b proof-of-concept study evaluating CERC-002 in adult patients with moderate-to-severe Crohn's disease. The remaining $5.0 million may be funded upon achieving certain predetermined milestones.

In June 2021, Dr. Sol Barer notified the Board of Directors of the Company that he resigned from the Board, effective June 15, 2021. Dr. Barer's resignation was not related to any disagreement with the Company on any matter relating to the Company's operations, policies or practices. Dr. Barer will serve as a strategic advisor to the Board and the Company for a period of at least one year, during which he will serve on the Company's Scientific Advisory Board. Following Dr. Barer's resignation, the Board appointed Michael Cola, who is also the Company's Chief Executive Officer, as Chairman of the Board and Dr. Suzanne Bruhn as the Lead Independent Director of the Board.

In July 2021, the Company entered into an "at-the-market" sales agreement with Cantor Fitzgerald & Co. and RBC Capital Markets, LLC (together, the "Agents"), pursuant to which the Company may sell from time to time, shares of its common stock having an aggregate offering price of up to $50 million through the Agents (the "ATM Program"). As of the filing date of this Quarterly Report on Form 10-Q, the Company has not yet sold any shares of our common stock under the ATM Program.

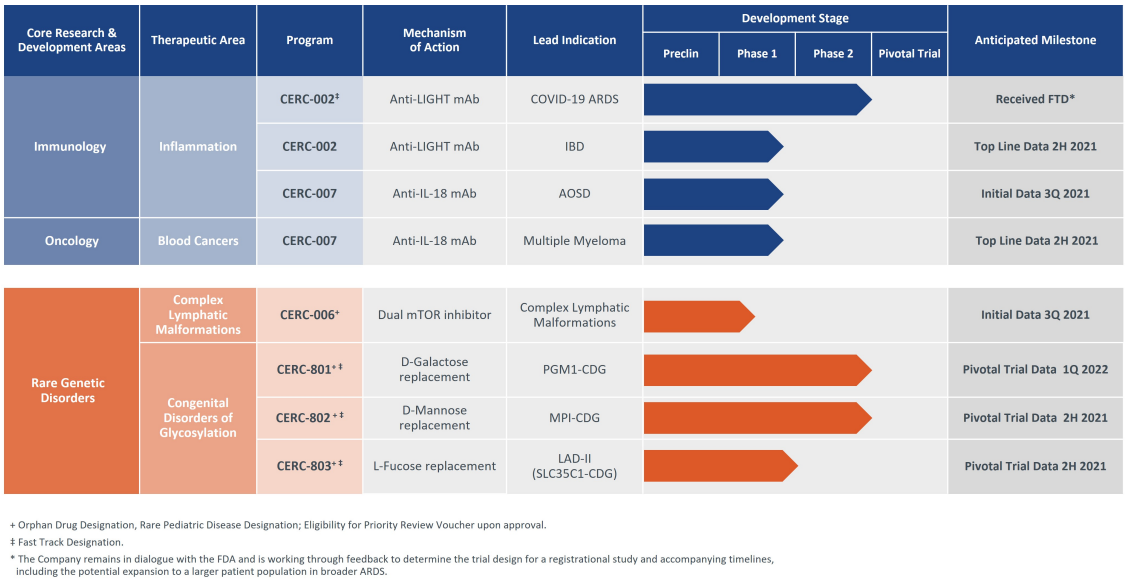
Research and Development Updates

On June 22, 2021, the Company entered into an exclusive patent license agreement with Sanford Burnham Prebys Medical Discovery Institute under which the Company obtained an exclusive license to a portfolio of issued patents and patent applications covering an immune checkpoint program, which the Company refers to as CERC-008. The license further enhances the Company's development pipeline of novel biologics that address immunology and immuno-oncology targets.

During the second quarter of 2021, the Company out-licensed and assigned, respectively, its rights to its non-core neurology pipeline assets (compounds used in CERC-301 and the COMTi platform, including CERC-406) to Alto Neuroscience, Inc. ("Alto") and ES Therapeutics, LLC ("ES"), respectively. The Company intends to focus on developing innovative therapies in areas of high unmet need within the fields of immunology, immuno-oncology, and rare genetic disorders. As part of the transactions, the Company received initial upfront payments, and is eligible to receive additional payments upon achievement of specified development, regulatory and sales-based milestones. The Company is also entitled to royalty payments based on net sales of CERC-301.

In July 2021, the Company announced positive initial results from a Phase 1b proof-of-concept study evaluating CERC-002 in adult patients with moderate-to-severe Crohn's disease who had previously failed three or more lines of biologics therapies, including anti-TNF treatments. The results showed a mean reduction in LIGHT levels of approximately 80% compared to baseline signifying a dramatic and rapid reduction of LIGHT levels correlating to the pharmacodynamic effect of CERC-002 (1.0 mg/kg), as well as clinically meaning endoscopic improvement in 75% (3/4) of subjects, as determined by colonoscopy (SES-CD score). CERC-002 was tolerated with no drug related severe adverse events. These initial results support expansion to patients with moderate to severe ulcerative colitis refractory to anti-TNF alpha therapies. Based on the results of the first cohort (n=4) of data, the Company will continue dose exploration by proceeding to the next planned cohort without trial modification. The second cohort (3.0 mg/kg dose) is fully enrolled and complete data results are anticipated in the second half of 2021.

The following chart summarizes key information about our clinical-stage pipeline and anticipated research & development milestones:



+ Orphan Drug Designation, Rare Pediatric Disease Designation; Eligibility for Priority Review Voucher upon approval.

‡ Fast Track Designation.

* The Company remains in dialogue with the FDA and is working through feedback to determine the trial design for a registrational study and accompanying timelines, including the potential expansion to a larger patient population in broader ARDS.

Our Strategy

Our strategy for increasing stockholder value includes:

- Advancing our pipeline of compounds through development and to regulatory approval;
- Acquiring or licensing rights to targeted, complementary differentiated preclinical and clinical stage compounds;
- Developing the go-to-market strategy to quickly and effectively market, launch, and distribute each of our compounds that receive regulatory approval; and
- Opportunistically out-licensing rights to indications or geographies.

Results of Operations

Comparison of the Three Months Ended June 30, 2021 and 2020

Product Revenue, net

Net product revenue was $2.7 million for the three months ended June 30, 2021, as compared to $1.3 million for the three months ended June 30, 2020. During the first quarter of 2021, the Company's inventory on hand became short-dated (which the Company considers inventory within six months of expiration) due to manufacturing delays and therefore the Company recorded a full sales return allowance on sales of short-dated inventory given the high likelihood of return. The Company received the delayed inventory lot in April 2021 and began selling this lot immediately. As a result, net revenue increased for the three months ended June 30, 2021 as compared to the prior year period due to the increased demand to backfill the short-dated inventory.

In addition, Aytu BioScience, Inc. ("Aytu"), who the Company sold its rights, title and interest in assets relating to certain commercialized products in 2019, managed Millipred® commercial operations through June 30, 2021 pursuant to transition service agreements. We are currently finalizing our trade and distribution channel to allow us to control third party distribution in the third quarter of 2021. As of the filing date of this Quarterly Report on 10-Q, Aytu continues to distribute Millipred®.

The Company expects net revenues to continue to return to levels consistent with prior periods over the remainder of 2021.

License Revenue

License revenue was $0.6 million for the three months ended June 30, 2021, which relates to upfront fee received as a result of the out-license and assignment, respectively, of the Company's rights to its non-core neurology pipeline assets, CERC-301 and

CERC-406 to Alto and ES, respectively. ES is a wholly-owned subsidiary of Armistice Capital Master Fund Ltd., (an affiliate of Armistice Capital, LLC and collectively "Armistice"), which is a significant stockholder of the Company and whose chief investment officer, Steven Boyd, currently serves on the Board of the Company. The transaction with ES was approved in accordance with Cerecor's related party transaction policy.

Cerecor is eligible to receive additional payments upon achievement of specified development, regulatory and sales-based milestones for both CERC-301 and CERC-406 and is also entitled to royalty payments based on net sales of CERC-301.

Cost of Product Sales

Cost of product sales was $0.1 million for the three months ended June 30, 2021, which was consistent with the cost of product sales for the three months ended June 30, 2020. We are currently finalizing our trade and distribution channel to allow us to control third party distribution of Millipred® in the third quarter of 2021. As of the filing date of this Quarterly Report on 10-Q, Aytu continues to distribute Millipred®.

The Company has a license and supply agreement for the Millipred® product with a wholly owned subsidiary of Teva Pharmaceutical Industries Ltd. ("Teva"), which expires on September 30, 2023. Beginning July 1, 2021, Cerecor is required to pay Teva fifty percent of the net profit of the Millipred® product following each calendar quarter, subject to a $0.5 million quarterly minimum payment. Beginning in the third quarter of 2021, we expect cost of product sales to increase as compared to historic periods.

Research and Development Expenses

The following table summarizes our research and development expenses for the three months ended June 30, 2021 and 2020 (in thousands):

	Three Months Ended June 30,	
	2021	2020
Preclinical expenses	$ 2,110	$ 1,637
Clinical expenses	2,460	1,325
CMC expenses	4,905	1,327
License and milestone expenses	400	—
Internal expenses:		
Salaries, benefits and related costs	2,160	1,201
Stock-based compensation expense	467	391
Other	67	36
	$ 12,569	$ 5,917

Research and development expenses increased $6.7 million for the three months ended June 30, 2021 compared to the same period in 2020. The Company's merger with Aevi Genomic Medicine Inc. ("Aevi") (the "Aevi Merger" or the "Merger") in February 2020 was a transformative event as it significantly broadened our pipeline by adding the rights to three new assets, as well as bringing in critical leadership to guide the Company and development of the expanded pipeline. Given the timing of the Merger, the first half of 2020 was spent integrating and initiating the additional programs. Therefore, the main driver of the increase is attributable to the maturing expanded pipeline, particularly as it relates to CMC and clinical expenses.

Notably, Chemistry, Manufacturing, and Controls ("CMC") expenses increased $3.6 million due to additional spending on manufacturing to support development of the progressing pipeline and to ensure the Company has adequate drug on-hand for upcoming trials. Clinical expenses increased $1.1 million primarily due to increased clinical trial spend as we approach the completion of the initial cohorts of ongoing trials. Preclinical expenses increased $0.5 million due to increased non-clinical toxicity studies and biomarker studies to support clinical development. Finally, we recognized a $0.4 million upfront license fee related to an asset in-licensed during the period.

Salaries, benefits and related costs increased by $1.0 million mainly due to an increase in headcount to grow our research and development activities as we continue to invest in our expanded pipeline.

We expect research and development expense to continue to outpace historic periods, as the Company advances its maturing pipeline in anticipation of multiple clinical data readouts over the next twelve months.

General and Administrative Expenses

The following table summarizes our general and administrative expenses for the three months ended June 30, 2021 and 2020 (in thousands):

	Three Months Ended June 30,	
	2021	2020
Salaries, benefits and related costs	$ 1,118	$ 1,756
Legal, consulting and other professional expenses	2,685	1,804
Stock-based compensation expense	2,503	2,286
Other	312	255
	$ 6,618	$ 6,101

General and administrative expenses were $6.6 million for the three months ended June 30, 2021, which represents a $0.5 million increase from the prior year period. The increase was largely driven by a $0.9 million increase in legal, consulting and other professional expenses, of which $0.5 million was related to patent expenses of an in-licensed asset and the remainder primarily due to expenses incurred to execute the licensing agreements executed during the period. This increase was partially offset by a $0.6 million decrease in salaries, benefits and related costs for the quarter due to a severance accrual in the prior year related to the resignation of an executive during the second quarter of 2020, which did not repeat for the three months ended June 30, 2021.

During the three months ended June 30, 2021 and June 30, 2020, there were stock-based compensation modifications recorded related modifications of awards previously granted to former executives and board members which drove minimal change period over period.

We expect general and administrative expenses to continue to increase compared to historic periods as a result of the increased infrastructure to support the Company's expanded research and development efforts.

Sales and Marketing Expenses

The following table summarizes our sales and marketing expenses for the three months ended June 30, 2021 and 2020 (in thousands):

	Three Months Ended June 30,	
	2021	2020
Salaries, benefits and related costs	$ 182	$ 183
Stock-based compensation expense	104	87
Advertising and marketing expense	432	366
Other	68	17
	$ 786	$ 653

Sales and marketing expenses consist of expenses related to initiatives to support the go-to-market strategy of our pipeline assets. Sales and marketing expenses were relatively consistent for the three months ended June 30, 2021 and 2020.

Amortization Expense

The following table summarizes our amortization expense for the three months ended June 30, 2021 and 2020 (in thousands):

	Three Months Ended June 30,	
	2021	2020
Amortization of intangible assets	$ 428	$ 404

Amortization expense relates to the amortization of the assembled workforces and other intangible assets acquired as part of previous acquisitions and mergers and was largely consistent for the three months ended June 30, 2021 and 2020.

Other (Expense) Income, Net

The following table summarizes our other (expense) income, net for the three months ended June 30, 2021 and 2020 (in thousands):

	Three Months Ended June 30,	
	2021	2020
Change in fair value of Investment in Aytu (as defined below)	$ —	$ (1,872)
Other (expense) income, net	(5)	398
Interest (expense) income, net	(239)	9
	$ (244)	$ (1,465)

Other expense, net decreased $1.2 million for the three months ended June 30, 2021, as compared to the prior year. For the three months ended June 30, 2020, other expense, net was mainly comprised of a $1.9 million loss on the change in the fair value of an investment of the Company. As consideration of the Company's divestiture of certain commercialized products to Aytu in 2019, the Company received 9.8 million shares of Aytu preferred stock (the "Investment in Aytu"), which was remeasured at its current fair value each reporting period. In the second quarter of 2020, the Company sold the common stock underlying the investment for net proceeds of $12.8 million, which represented a loss of $1.9 million from its fair value on March 31, 2020.

Additionally, the Company recognized interest expense of $0.2 million for the three months ended June 30, 2021 related to the venture debt agreement entered into in June 2021.

Income Tax Benefit

The following table summarizes our income tax expense (benefit) for the three months ended June 30, 2021 and 2020 (in thousands):

	Three Months Ended June 30,	
	2021	2020
Income tax benefit	$ (199)	$ (454)

The Company recognized an income tax benefit of $0.2 million for the three months ended June 30, 2021 compared to an income tax benefit of $0.5 million for the three months ended June 30, 2020. The tax benefit recognized for the three months ended June 30, 2020 was a result of a tax law change and the ability of the Company to carry back certain losses for taxes related to the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") and related state provisions. The income tax benefit in the current period was a result of the updated estimate of interest receivable and abatement of penalties on the refund claim, as the final refund payment was received from the Internal Revenue Service in the second quarter of 2021.

Comparison of the Six Months Ended June 30, 2021 and 2020

Product Revenue, net

Net product revenue was $3.2 million for the six months ended June 30, 2021, as compared to $4.1 million for the six months ended June 30, 2020. During the first quarter of 2021, the Company's inventory on hand became short-dated (which the Company considers inventory within six months of expiration) due to manufacturing delays and therefore the Company recorded a full sales return allowance on sales of short-dated inventory given the high likelihood of return. The Company received the delayed inventory lot in April 2021 and began selling this lot immediately. As a result of the full sales return allowance recognized in the first quarter of 2021, net revenue decreased for the six months ended June 30, 2021 as compared to the prior year period.

In addition, Aytu managed Millipred® commercial operations through June 30, 2021 pursuant to transition service agreements. We are currently finalizing our trade and distribution channel to allow us to control third party distribution in the third quarter of 2021. As of the filing date of this Quarterly Report on 10-Q, Aytu continues to distribute Millipred®.

The Company expects net revenues to continue to return to levels consistent with prior periods over the remainder of 2021.

License Revenue, net

License revenue was $0.6 million for the six months ended June 30, 2021, which relates to upfront fee received as a result of the out-license and assignment, respectively, of the Company's rights to its non-core neurology pipeline assets, CERC-301 and

CERC-406 to Alto and ES, respectively. ES is a wholly-owned subsidiary of Armistice, which is a significant stockholder of the Company and whose chief investment officer, Steven Boyd, currently serves on the Board of the Company. The transaction with ES was approved in accordance with Cerecor's related party transaction policy.

Cerecor is eligible to receive additional payments upon achievement of specified development, regulatory and sales-based milestones for both CERC-301 and CERC-406 and is also entitled to royalty payments based on net sales of CERC-301.

Cost of Product Sales

Cost of product sales was $0.2 million for the six months ended June 30, 2021, which was consistent with the cost of product sales for the six months ended June 30, 2020. We are currently finalizing our trade and distribution channel to allow us to control third party distribution of Millipred® in the third quarter of 2021. As of the filing date of this Quarterly Report on 10-Q, Aytu continues to distribute Millipred®.

The Company has a license and supply agreement for the Millipred® product with a wholly owned subsidiary of Teva, which expires on September 30, 2023. Beginning July 1, 2021, Cerecor is required to pay Teva fifty percent of the net profit of the Millipred® product following each calendar quarter, subject to a $0.5 million quarterly minimum payment. Beginning in the third quarter of 2021, we expect cost of product sales to increase as compared to historic periods.

Research and Development Expenses

The following table summarizes our research and development expenses for the six months ended June 30, 2021 and 2020 (in thousands):

	Six Months Ended June 30,	
	2021	2020
Preclinical expenses	$ 4,344	$ 2,915
Clinical expenses	7,900	1,896
CMC expenses	9,639	2,521
License and milestone expenses	10,900	—
Internal expenses:		
Salaries, benefits and related costs	4,097	2,514
Stock-based compensation expense	765	772
Other	129	67
	$ 37,774	$ 10,685

Research and development expenses increased $27.1 million for the six months ended June 30, 2021 compared to the same period in 2020. The Aevi Merger, which closed in February 2020, was a transformative event as it significantly broadened our pipeline by adding the rights to three new assets, as well as bringing in critical leadership to guide the Company and development of the expanded pipeline. Given the timing of the Merger, the first half of 2020 was spent integrating and initiating the additional programs. Therefore, the main driver of the increase is attributable to the maturing expanded pipeline, particularly as it relates to CMC and clinical expenses

In addition, we recognized a $10.0 million upfront license fee related to the expanded indication license agreement for CERC-002 entered into with Kyowa Kirin Co. ("KKC") in March 2021 and also recognized a $0.4 million upfront license fee related to an asset in-licensed during the period. Additionally, we recognized a $0.5 million development milestone payment to Astellas Pharma, Inc. for CERC-006 (which was subsequently paid in July 2021).

CMC expenses increased $7.1 million due to additional spending on manufacturing to support development of the progressing pipeline and to ensure the Company has adequate drug on-hand for anticipated trials. Clinical expenses increased $6.0 million primarily due to costs incurred to advance the pipeline as we approach multiple clinical data read outs across our pipeline. Salaries, benefits and related costs increased by $1.6 million mainly due to an increase in headcount to grow our research and development activities as we continue to invest in our expanded pipeline.

We expect research and development expense to continue to outpace historic periods, as the Company advances its maturing pipeline in anticipation of multiple clinical data readouts over the next twelve months.

Acquired In-Process Research and Development Expenses

In the first quarter of 2020, the Company consummated its merger with Aevi, resulting in us acquiring $25.5 million of in-process research and development ("IPR&D"). The fair value of the IPR&D was immediately recognized as acquired in-process research and development expense given such asset has no other alternate use due to the stage of development. There was no acquired IPR&D for the six months ended June 30, 2021.

General and Administrative Expenses

The following table summarizes our general and administrative expenses for the six months ended June 30, 2021 and 2020 (in thousands):

	Six Months Ended June 30,	
	2021	2020
Salaries, benefits and related costs	$ 2,038	$ 2,768
Legal, consulting and other professional expenses	5,277	2,588
Stock-based compensation expense	3,548	2,988
Other	667	433
	$ 11,530	$ 8,777

General and administrative expenses were $11.5 million for the six months ended June 30, 2021, which represents a $2.8 million increase from the prior year period. The increase was largely driven by a $2.7 million increase in legal, consulting and other professional expenses. The largest driver was higher legal costs in the current period, including costs to execute the KKC expanded indication license agreement and the other licensing agreements executed in the current year. Additionally, director and officer insurance expense increased in the current year.

Stock-based compensation expense increased $0.6 million for the six months ended June 30, 2021. The increase was largely driven by $1.4 million of expense related to the modifications of a former board members stock options during the second quarter of 2021, partially offset by increased expense in the prior year due to equity award grants and modifications to certain former executives and board members due to leadership changes in the first half of 2020.

These increases were partially offset by a $0.7 million decrease in salaries, benefits and related costs for the quarter due to a severance accrual in the prior year related to the resignation of an executive during the second quarter of 2020, which did not repeat for the six months ended June 30, 2021.

We expect general and administrative expenses to continue to increase compared to historic periods as a result of the increased infrastructure to support the Company's expanded research and development efforts.

Sales and Marketing Expenses

The following table summarizes our sales and marketing expenses for the six months ended June 30, 2021 and 2020 (in thousands):

	Six Months Ended June 30,	
	2021	2020
Salaries, benefits and related costs	$ 371	$ 317
Stock-based compensation expense	209	142
Advertising and marketing expense	562	848
Other	79	23
	$ 1,221	$ 1,330

Sales and marketing expenses consist of expenses related to initiatives to support the go-to-market strategy of our pipeline assets. For the six months ended June 30, 2020, we incurred costs related to market research projects for multiple programs and indications that did not repeat in the current year, driving a $0.3 million decrease. This decrease was largely offset by slightly higher salaries, benefits and related costs and stock-based compensation expense incurred in the current year, leading to an overall decrease of $0.1 million.

Amortization Expense

The following table summarizes our amortization expense for the six months ended June 30, 2021 and 2020 (in thousands):

	Six Months Ended June 30,	
	2021	2020
Amortization of intangible assets	$ 853	$ 834

Amortization expense relates to the amortization of the assembled workforces and other intangible assets acquired as part of previous acquisitions and mergers and was largely consistent for the six months ended June 30, 2021 and 2020.

Other (Expense) Income, Net

The following table summarizes our other (expense) income, net for the six months ended June 30, 2021 and 2020 (in thousands):

	Six Months Ended June 30,	
	2021	2020
Change in fair value of Investment in Aytu (as defined below)	$ —	$ 5,208
Other (expense) income	(5)	410
Interest (expense) income, net	(222)	18
	$ (227)	$ 5,636

Other (expense), net was $0.2 million for the six months ended June 30, 2021 compared to other income, net of $5.6 million for the six months ended June 30, 2020. For the six months ended June 30, 2020, other income, net was mainly comprised of a $5.2 million gain on the change in fair value of the Company's previous Investment in Aytu. Each reporting period, the Company's Investment in Aytu was remeasured at its fair value. In the second quarter of 2020, the Company sold the common stock underlying its Investment in Aytu for net proceeds of $12.8 million, which represented a gain of $5.2 million from its fair value on December 31, 2019.

Additionally, the Company recognized interest expense of $0.2 million for the six months ended June 30, 2021 related to the venture debt agreement entered into in June 2021.

Income Tax Benefit

The following table summarizes our income tax expense (benefit) for the six months ended June 30, 2021 and 2020 (in thousands):

	Six Months Ended June 30,	
	2021	2020
Income tax benefit	$ (188)	$ (2,611)

The Company recognized an income income tax benefit of $0.2 million for the six months ended June 30, 2021 compared to an income tax benefit of $2.6 million for the six months ended June 30, 2020. The tax benefit recognized for the six months ended June 30, 2020 was a result of a tax law change signed into law as part of the CARES Act, which allowed the Company to carry back certain losses for taxes paid in fiscal year 2017 and thus resulted in a refund claim. The income tax benefit in the current period was a result of the updated estimate of interest receivable and abatement of penalties on the refund claim, as the final refund payment was received from the Internal Revenue Service in the second quarter of 2021.

Liquidity and Capital Resources

As of June 30, 2021, Cerecor had $40.4 million in cash and cash equivalents. In June 2021, the Company entered into a $35.0 million venture debt financing agreement (the "Loan Agreement") with Horizon Technology Finance Corporation ("Horizon") and Powerscourt Investments XXV, LP ("Powerscourt, together with Horizon, the "Lenders"). In accordance with the Loan Agreement, $20.0 million of the $35.0 million loan was funded on the closing date (the "Initial Note"), with the remaining $15.0 million fundable upon the Company achieving certain predetermined milestones. The Company received net proceeds of $19.6 million in the second quarter of 2021 and will pay approximately $1.7 million of debt issuance costs in the third quarter of 2021 for total expected net proceeds of $17.9 million (related to the Initial Note funded in the second quarter). The Loan Agreement contains certain covenants and certain other specified events that could result in an event of default, which if not cured

or waived, could results in the acceleration of all or a substantial portion of the notes. As of June 30, 2021, the Company did not breach any covenants or specified event that could result in an event of default.

In the third quarter of 2021, the Company received $10.0 million in gross proceeds (the "Second Note") under the Loan Agreement. The Second Note was made available in connection with the Company's successful positive initial results from a Phase1b proof-of-concept study evaluating CERC-002 in adult patients with moderate-to-severe Crohn's disease.

In January 2021, the Company closed an underwritten public offering of 13,971,889 shares of its common stock and 1,676,923 pre-funded warrants for net proceeds of approximately $37.7 million.

In order to meet its cash flow needs, the Company applies a disciplined decision-making methodology as it evaluates the optimal allocation of the Company's resources between investing in the Company's existing pipeline assets and acquisitions or in-licensing of new assets. For the six months ended June 30, 2021, Cerecor generated a net loss of $47.8 million and negative cash flows from operations of $37.5 million. As of June 30, 2021, Cerecor had an accumulated deficit of $225.6 million.

The accompanying condensed consolidated financial statements have been prepared assuming the Company will continue as a going concern; however, losses are expected to continue as the Company continues to invest in its research and development pipeline assets. The Company will require additional financing to fund its operations and to continue to execute its business strategy at least one year after the date the condensed consolidated financial statements included herein were issued. These conditions raise substantial doubt about the Company's ability to continue as a going concern.

To mitigate these conditions and to meet the Company's capital requirements, management plans to use its current cash on hand along with some combination of the following: (i) dilutive and/or non-dilutive financings, (ii) federal and/or private grants, (iii) other out-licensing or strategic alliances/collaborations of its current pipeline assets, and (iv) out-licensing or sale of its non-core assets. If the Company raises additional funds through collaborations, strategic alliances or licensing arrangements with third parties, the Company might have to relinquish valuable rights to its technologies, future revenue streams, research programs or product candidates. Subject to limited exceptions, our venture debt financing agreement prohibits us from incurring certain additional indebtedness, making certain asset dispositions, and entering into certain mergers, acquisitions or other business combination transactions without prior consent of the Lender. If the Company requires but is unable to obtain additional funding, the Company may be forced to make reductions in spending, delay, suspend, reduce or eliminate some or all of its planned research and development programs, or liquidate assets where possible. Due to the uncertainty regarding future financing and other potential options to raise additional funds, management has concluded that substantial doubt exists with respect to the Company's ability to continue as a going concern within one year after the date that the financial statements in this Quarterly Report were issued.

Over the long term, the Company's ultimate ability to achieve and maintain profitability will depend on, among other things, the development, regulatory approval, and commercialization of its pipeline assets, and the potential receipt and sale of any PRVs it receives.

Uses of Liquidity

The Company uses cash to primarily fund the ongoing development of our research and development pipeline assets and costs associated with its organizational infrastructure.

Cash Flows

The following table summarizes our cash flows for the six months ended June 30, 2021 and 2020 (in thousands):

	Six Months Ended June 30,	
	2021	**2020**
Net cash (used in) provided by:		
Operating activities	$ (37,503)	$ (14,294)
Investing activities	(21)	11,586
Financing activities	59,043	44,583
Net increase in cash and cash equivalents	$ 21,519	$ 41,875

Net cash used in operating activities

Net cash used in operating activities was $37.5 million for the six months ended June 30, 2021 and consisted primarily of a net loss of $47.8 million, which was primarily driven by research and development activities as the Company continued to fund its pipeline of development assets. The six months ended June 30, 2021 included a full period of development of the expanded pipeline from the Aevi Merger compared to a partial period in the prior year (in which the focus was integration as opposed to pipeline development). Changes in net liabilities increased by $4.6 million, mainly driven by a $4.9 million increase in accrued expenses which is primarily related to accrued research and development expense. Furthermore, other receivables decreased by $1.2 million. These were partially offset by increased accounts receivable of $1.9 million.

Net cash used in operating activities was $14.3 million for the six months ended June 30, 2020 and consisted primarily of a net loss of $34.4 million and non-cash adjustments to reconcile net loss to net cash used in operating activities including a $5.2 million realized gain related to the change in fair value of the Investment in Aytu and a $1.8 million gain related to the change in the value of the Guarantee associated with the Aytu Divestiture. This decrease was offset by the following non-cash adjustments: non-cash acquired IPR&D expense of $25.5 million and non-cash stock-based compensation of $3.9 million. Additionally, changes in net assets, increased by a net $2.8 million, mainly driven by a $1.9 million increase in other receivables. Other receivables increased mainly due to a $2.2 million income tax receivable.

Net cash used in investing activities

Net cash used in investing activities was minimal for the six months ended June 30, 2021 and consisted primarily of the purchase of property and equipment.

Net cash used in investing activities was $11.6 million for the six months ended June 30, 2020 and consisted primarily of net proceeds of $12.8 million from the sale of the common stock during the second quarter of 2020 underlying the Company's previous Investment in Aytu, slightly offset by transaction costs incurred as part of the Aevi Merger.

Net cash provided by financing activities

Net cash provided by financing activities was $59.0 million for the six months ended June 30, 2021 and consisted primarily of net proceeds of $37.7 million from an underwritten public offering of 13,971,889 shares of common stock and 1,676,923 pre-funded warrants. Armistice, which is a significant stockholder of the Company and whose chief investment officer, Steven Boyd, currently serves on the Board of the Company, participated in the offering by purchasing 2,500,000 shares of common stock, on the same terms as all other investors. Certain affiliates of Nantahala Capital Management LLC (collectively, "Nantahala"), which beneficially owned greater than 5% of the Company's outstanding common stock at the time of the offering and, therefore, were considered a related party pursuant to the Company's written related person transaction policy, purchased 1,400,000 shares of common stock, on the same terms as all other investors. Nantahala also purchased the pre-funded warrants to purchase up to an aggregate of 1,676,923 shares of common stock at a purchase price of $2.599, which represents the per share public offering price for the common stock less the $0.001 per share exercise price for each pre-funded warrant. Additionally, net cash provided by financing activities includes net proceeds of $19.6 million received in the second quarter of 2021 as part of the Loan Agreement entered into in June 2021. The Company will pay approximately $1.7 million of debt issuance costs in the third quarter of 2021 for total expected net proceeds of $17.9 million (related to the Initial Note funded in the second quarter).

Net cash provided by financing activities was $44.6 million for the six months ended June 30, 2020 and consisted primarily of net proceeds of $35.4 million from an underwritten public offering of common stock for 15,180,000 shares of common stock of the Company. The Company also received $5.1 million from a registered direct offering with certain institutional investors, which included Armistice, that closed in February 2020 for the sale of 1,306,282 shares of common stock of Company and net proceeds of $3.9 million from a private placement of equity securities with Armistice during March 2020.

Critical Accounting Policies, Estimates, and Assumptions

This Management's Discussion and Analysis of Financial Condition and Results of Operations is based on our unaudited condensed consolidated financial statements included in this Quarterly Report, which have been prepared in accordance with GAAP. In preparing the financial statements in conformity with GAAP, the Company makes estimates and assumptions that have an impact on assets, liabilities, revenue and expenses reported. These estimates can also affect supplemental information disclosed by us, including information about contingencies, risk, and financial condition. In our unaudited condensed consolidated financial statements, estimates are used for, but not limited to, revenue recognition, cost of product sales, stock-based compensation, fair value measurements, cash flows used in management's going concern assessment, income taxes, goodwill, and other intangible assets and clinical trial accruals. The Company believes, given current facts and circumstances, that our estimates and assumptions are reasonable, adhere to GAAP and are consistently applied. Inherent in the nature of an estimate or assumption is the fact that actual results may differ from estimates, and estimates may vary as new facts and circumstances arise. Our most critical accounting

estimates and assumptions are included in our Annual Report on Form 10-K for the year ended December 31, 2020 filed with the SEC on March 8, 2021. There have been no material changes to our critical accounting policies during the six months ended June 30, 2021.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as defined by applicable SEC rules and regulations.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk

As a smaller reporting company, we are not required to provide the information required by this Item.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) and Rule 15d-15(b) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, our management, including our principal executive officer and our principal financial officer, conducted an evaluation as of the end of the period covered by this Quarterly Report on Form 10-Q of the effectiveness of the design and operation of our disclosure controls and procedures. In designing and evaluating our disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of the end of the period covered by this Quarterly Report on Form 10-Q.

Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during the period covered by this Quarterly Report on Form 10-Q that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings.

None.

Item 1A. Risk Factors.

In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed in Part I, "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2020, filed with the SEC on March 8, 2021, and our Current Report on Form 8-K filed with the SEC on July 2, 2021 which could materially affect our business, financial condition, or future results. Our risk factors as of the date of this Quarterly Report on Form 10-Q have not changed materially from those described in the Form 10-K and 8-K referenced above with the exception of the supplemental risk factor outlined below. The risks described in the Form 10-K and 8-K referenced above are not the only risks facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition, or future results of operations and the trading price of our common stock.

Item 6. Exhibits.

Exhibit Number	Description of Exhibit
4.1	Warrant to Purchase Common Stock (Loan A) issued June 4, 2021 by Cerecor, Inc. to Horizon Technology Finance Corporation (incorporated by reference to Exhibit 4.1 to the Form 8-K filed on June 4, 2021).
4.2	Warrant to Purchase Common Stock (Loan B) issued June 4, 2021 by Cerecor, Inc. to Horizon Technology Finance Corporation (incorporated by reference to Exhibit 4.2 to the Form 8-K filed on June 4, 2021).
4.3	Warrant to Purchase Common Stock (Loan C) issued June 4, 2021 by Cerecor, Inc. to Horizon Technology Finance Corporation (incorporated by reference to Exhibit 4.3 to the Form 8-K filed on June 4, 2021).
4.4	Warrant to Purchase Common Stock (Loan D) issued June 4, 2021 by Cerecor, Inc. to Powerscourt Investments XXV, LP (incorporated by reference to Exhibit 4.4 to the Form 8-K filed on June 4, 2021).
4.5	Warrant to Purchase Common Stock (Loan E) issued June 4, 2021 by Cerecor, Inc. to Horizon Technology Finance Corporation (incorporated by reference to Exhibit 4.5 to the Form 8-K filed on June 4, 2021).
4.6	Warrant to Purchase Common Stock (Loan F) issued June 4, 2021 by Cerecor, Inc. to Horizon Technology Finance Corporation (incorporated by reference to Exhibit 4.6 to the Form 8-K filed on June 4, 2021).
4.7	Warrant to Purchase Common Stock (Loan G) issued June 4, 2021 by Cerecor, Inc. to Horizon Technology Finance Corporation (incorporated by reference to Exhibit 4.7 to the Form 8-K filed on June 4, 2021).
4.8	Warrant to Purchase Common Stock (Loan H) issued June 4, 2021 by Cerecor, Inc. to Horizon Technology Finance Corporation (incorporated by reference to Exhibit 4.8 to the Form 8-K filed on June 4, 2021).
10.1*+	Exclusive Patent License Agreement, dated June 22, 2021, by and between Sanford Burnham Prebys Medical Discovery Institute and Cerecor Inc.
10.2*+	Loan Agreement, dated June 4, 2021, by and between Horizon Technology Finance Corporation, Powerscourt Investments XXV, LP and Cerecor Inc.
10.3*+	Amendment No.1 to Option and License Agreement, dated July 16, 2021, by and between Medimmune Limited and Aevi Genomic Medicine, LLC
31.1+	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2+	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1+†	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

101	Interactive data files pursuant to Rule 405 of Regulation S-T: (i) Condensed Consolidated Balance Sheets as of June 30, 2021 and December 31, 2020; (ii) Condensed Consolidated Statements of Operations (Unaudited) for the Three and Six Months Ended June 30, 2021 and 2020; (iii) Condensed Consolidated Statements of Cash Flows (Unaudited) for the Six Months Ended June 30, 2021 and 2020; (iv) Condensed Consolidated Statements of Changes in Stockholders' Equity (Unaudited) for the Three and Six Months Ended June 30, 2021 and 2020; and (v) Notes to Unaudited Financial Statements.
104	Cover Page Interactive Data File, formatted in XBRL (included in Exhibit 101).

* Certain portions of this exhibit have been omitted pursuant to Item 601(b)(10) of Regulation S-K.

+ Filed herewith.

† This certification is being furnished solely to accompany this Quarterly Report pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the registrant, 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 and Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Cerecor Inc.

Date: August 2, 2021

/s/ Schond L. Greenway

Schond L. Greenway

Chief Financial Officer

(on behalf of the registrant and as the registrant's principal financial officer)

Exhibit 10.1

Execution Copy

CERTAIN INFORMATION IDENTIFIED WITH THE MARK "(***)" HAS BEEN EXCLUDED FROM THIS EXHIBIT BECAUSE SUCH INFORMATION IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

EXCLUSIVE PATENT LICENSE AGREEMENT

BY AND BETWEEN

SANFORD BURNHAM PREBYS MEDICAL DISCOVERY INSTITUTE

AND

CERECOR INC.

TABLE OF CONTENTS

EXCLUSIVE PATENT LICENSE AGREEMENT

This Exclusive Patent License Agreement (this "***Agreement***") is dated as of June 22, 2021 (the "***Effective Date***"), by and between Sanford Burnham Prebys Medical Discovery Institute, a California not for profit, public benefit corporation ("***SBP***"), and Cerecor Inc., a Delaware corporation ("***Cerecor***"). SBP and Cerecor may be referred to in this Agreement as a "***Party***" or, collectively, as the "***Parties***."

RECITALS

WHEREAS, SBP co-owns and exclusively controls the (***) Patent Rights (as defined in Section 1.27) via a License Agreement between SBP and (***) Inc., a Delaware corporation with an address at (***), effective as of December 10, 2018, as amended by Amendment No. 1 to License Agreement dated March 25, 2021 (the "***(***) License Agreement***");

WHEREAS, SBP solely owns and exclusively controls the SBP Patent Rights (as defined in Section 1.26);

WHEREAS, Cerecor desires to receive an exclusive license under the Licensed Patent Rights (as defined in Section 1.14) to develop, make, have made, use, offer for sale, sell and import products covered by one or more of the Licensed Patent Rights, all on the terms and conditions of this Agreement; and

WHEREAS, SBP desires to license to Cerecor the Licensed Patent Rights in a manner that will benefit the public and best facilitate the distribution of useful products and the utilization of new technology, consistent with SBP's missions and goals, all on the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the various promises and undertakings set forth in this Agreement, the Parties agree as follows:

ARTICLE 1
DEFINITIONS

Unless otherwise specifically provided in this Agreement, the following terms shall have the following meanings:

1.1. "***Accounting Standards***" means, with respect to a Party, as applicable, (a) United States generally accepted accounting principles as promulgated by the Financial Accounting Standards Board or (b) international financial reporting standards as promulgated by the International Accounting Standards Board, in each case consistently applied.

1.2. "***Affiliate***" means, with respect to a Person, any other Person that controls, is controlled by or is under common control with such Person, but only for so long as such control exists. For the purposes of this Section 1.2, the word "control" (including, with correlative meaning, the terms "controlled by" or "under the common control with") means the actual power, either directly or indirectly through one or more intermediaries, to direct the management and policies

of such Person, whether by the ownership of more than fifty percent (50%) of the voting stock or interests of such Person, or by contract or otherwise.

1.3. "***Biosimilar***" means, with respect to a reference brand biologic product and a particular jurisdiction, a biologic product: (a) that is highly similar to such reference brand biologic product notwithstanding minor differences in clinically inactive components; (b) that has no clinically meaningful differences from such reference brand biologic product in terms of safety, purity and potency; and (c) for which a Biosimilar Application is approved by the relevant Governmental Body of such jurisdiction. Notwithstanding anything to the contrary in this Agreement, a "Biosimilar" does not include any biologic product sold under a BLA or approved Biosimilar Application of Cerecor or its Affiliates or Sublicensees or manufactured or produced by or on behalf of Cerecor or its Affiliates or Sublicensees.

1.4. "***Biosimilar Application***" means an application for approval to market and sell a product claimed to be biosimilar to or interchangeable with any Product, or otherwise relying on the approval of such Product, in each case in accordance with Laws in the jurisdiction in which the product is sought to be marketed and sold.

1.5. "***BLA***" means a Biologics License Application, as defined in the United States Public Health Service Act, as amended, and the regulations promulgated thereunder, as filed with the FDA, or any comparable application filed with a Governmental Body of a country, group of countries or territory other than the United States, to obtain approval to market a Product in such country, group of countries or territory.

1.6. "***Commercially Reasonable Efforts***" means the carrying out of activities in a sustained and diligent manner and using efforts and resources that are comparable to the efforts and resources commonly used by a company with similar resources as Cerecor for similar market potential at a similar stage of development or product life, based on conditions then prevailing and taking account of competition, technological relevance or obsolescence, changes in regulatory status and Law and changes in reimbursement rates, policies and procedures.

1.7. "***Confidential Information***" means, with respect to a Party (a) non-public information relating to the intellectual property, research, business, operations or products of such Party or any of its Affiliates, including any know-how, that was or is disclosed by such Party to the other Party prior to or during the Term, or that otherwise becomes known to the other Party by virtue of this Agreement and (b) the terms of this Agreement.

1.8. "***FDA***" means the United States Food and Drug Administration and any successor or replacement agency.

1.9. "***First Commercial Sale***" means, on a country-by-country basis, the first commercial transfer or disposition for value of Product in such country to a Third Party by Cerecor, or any of its Affiliates or Sublicensees.

1.10. "***Governmental Approval***" means, with respect to the Product in a country or region, all approvals, licenses, registrations and authorizations of the relevant Governmental Body, if applicable, required for the commercialization of such Product in such country.

1.11. "***Governmental Body***" means any: (a) nation, principality, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, provincial, state, local, municipal, foreign or other government; (c) governmental or quasi-governmental authority of any nature (including any governmental division, subdivision, department, agency, bureau, branch, office, commission, council, board, instrumentality, officer, official, representative, organization, unit, body or entity and any court or other tribunal); (d) multi-national or supranational organization or body; or (e) individual, entity, or body exercising, or entitled to exercise, any executive, legislative, judicial, administrative, regulatory, police, military or taxing authority or power of any nature.

1.12. "***IND***" means Investigational New Drug Application, as defined by the FDA, or its foreign equivalent.

1.13. "***Law***" or "***Laws***" means all applicable laws, statutes, rules, regulations, ordinances and other pronouncements having the binding effect of law of any Governmental Body.

1.14. "***Licensed Patent Rights***" means the SBP Patent Rights and the (***) Patent Rights.

1.15. "***Litigation Expenses***" means the reasonable out-of-pocket costs, expenses, and fees (including reasonable attorneys' fees), which a Party incurs as a result of becoming a party to an infringement suit or other action pursuant to Section 5.3, including any and all of the foregoing incurred by such Party in conjunction with the prosecution, adjudication, defense, management and/or settlement of, or joinder to, such suit or other action and any related appeals, remands or other related proceedings.

1.16. "***Net Sales***" means the gross amount invoiced or otherwise billed by Cerecor or its Affiliates or Sublicensees (the "***Selling Party***") for Sales of Product to a Third Party purchaser from and after the Effective Date, less the following (collectively, "***Net Sales Deductions***"):

1.16.1 discounts given or accrued on the Product as applicable, including cash, trade and quantity discounts, price reduction or incentive programs (including sales coupons and co-payment programs), retroactive price adjustments with respect to Sales of the Product and charge-back payments;

1.16.2 credits, refunds, returns or allowances allowed, accrued, paid, received or given, including credits, allowances, discounts and rebates to, and chargebacks from the account of customers for nonconforming, damaged, rejected, outdated and returned, withdrawn or recalled Product or on account of retroactive price reductions affecting the Product;

1.16.3 rebates, reimbursements, administrative fees or similar allowances granted or accrued to managed health care organizations, group purchasing organizations or to federal, state

and local governments in the Territory or any other organization in connection with the Sales of Products;

1.16.4 freight, postage, shipping and insurance charges allowed, accrued or paid for delivery of the Product to the extent billed as a separate line item by the Selling Party to the Third Party purchaser; and

1.16.5 taxes, duties or other governmental charges imposed on the Sale of Product and actually paid or accrued by the Selling Party (as adjusted for rebates and refunds, but specifically excluding taxes based on net income of the Selling Party), to the extent billed as a separate line item by the Selling Party to the Third Party purchaser;

provided that all of the foregoing shall be calculated in accordance with the Accounting Standards consistently applied during the applicable calculation period by the Selling Party. To the extent that Net Sales Deductions are based on estimates, such estimates will be adjusted to actual on a periodic basis. Notwithstanding the foregoing, the supply of the Product for (i) samples, (ii) charitable donations or compassionate use, or (iii) any clinical study materials used in any clinical study shall not be included within the computation of Net Sales; provided that such supply is provided at or below Cerecor's cost.

For sake of clarity and avoidance of doubt, the transfer of the Product by a Selling Party to another Affiliate of such Selling Party or to a licensee or sublicensee of such Selling Party for resale shall not be considered a Sale; in such cases, Net Sales shall be determined based on the amount invoiced or otherwise billed by such Affiliate or licensee or sublicensee to an independent Third Party, less the Net Sales Deductions allowed under this Section.

In the event that the Product is commercialized in combination with one or more products which are themselves not a Product for a single price, the Net Sales for such Product shall be calculated by multiplying the sales price of such combination sale by the fraction A/(A+B) where "A" is the fair market value of the Product (as reasonably estimated by the Parties in good faith) and "B" is the fair market value of the other product(s) in the combination sale (as reasonably estimated by the Parties in good faith). In the event the Parties do not agree on the value of A or B, either Party shall have the right to submit such matter for dispute resolution pursuant to Section 10.8; provided that in the event such matter is submitted to arbitration in accordance therewith, such arbitration shall be conducted as "baseball" style arbitration.

1.17. "***Patent Rights***" means any of the following, whether existing now or in the future anywhere in the world: issued patent claims, including inventor's certificates, substitutions, extensions, confirmations, reissues, re-examination, renewal or any like governmental grant for protection of inventions (such as supplemental protection certificate), and any pending application for any of the foregoing.

1.18. "***Person***" means any natural person, corporation, firm, business trust, joint venture, association, organization, company, partnership or other business entity, or any Governmental Body.

1.19. "***Phase 1 Study***" means a human clinical trial of a Product by Cerecor or any of its Affiliates or Sublicensees with the endpoint of determining initial tolerance, safety or pharmacokinetic information in single dose, single ascending dose, multiple dose or multiple ascending dose regimens, as described in 21 C.F.R. § 312.21(a) (or its successor regulation) or the equivalent thereof in any jurisdiction outside the US.

1.20. "***Phase 2 Study***" means a human clinical trial of a Product by Cerecor or any of its Affiliates or Sublicensees, the principal purpose of which is a preliminary determination of safety and efficacy in the target patient population over a range of doses and dose regimens, as described in 21 C.F.R. § 312.21(b) (or its successor regulation) or the equivalent thereof in any jurisdiction outside the US.

1.21. "***Pivotal Trial***" means a clinical trial by Cerecor or any of its Affiliates or Sublicensees with endpoints and statistical power that if achieved are reasonably expected to allow Cerecor or any of its Affiliates or Sublicensees to file a BLA for the Product.

1.22. "***Product***" means any product (a) the making, use, offer for sale, sale, or import of which would, but for the rights granted under this Agreement, infringe a Valid Claim of any of the Licensed Patent Rights or (b) which includes a HVEM variant with at least one mutation at position 58, 68, 70, or 90.

1.23. "***Qualified Biopharmaceutical Company***" shall mean a company that (a) is engaged, as a primary business, in the development and/or commercialization of biologic and/or pharmaceutical products and (b) satisfies at least one of the following criteria during the relevant period described below ending prior to the effective date of the proposed assignment of this Agreement under Section 10.4 or termination of this Agreement in the case of a surviving Sublicensee for the purposes of Section 9.6.5, as applicable: (i) has cash on hand equal to or exceeding $25,000,000, as reflected in such company's financial statements as of the most recently completed calendar month; (ii) has a market capitalization, as reported by a stock exchange in the United States, Europe, People's Republic of China, Hong Kong or Japan, or by the NASDAQ equal to or exceeding $100,000,000 for a period of at least the most recent three (3) consecutive months; or (iii) whose revenues from the sales of its products on a consolidated basis for the most recently completed twelve calendar months was in excess of $50,000,000.

1.24. "***Royalty Term***" means, with respect to each Product and each country or other jurisdiction in the Territory, the period beginning on the Effective Date and ending on the expiration, invalidation or abandonment of the last of the Licensed Patent Rights that includes a Valid Claim.

1.25. "***Sale***" means any transaction for which consideration is received or expected by Cerecor, its Affiliates or Sublicensees for sale, use, lease, transfer or other disposition of the Product to or for the benefit of a Third Party. For clarity, sale, use, lease, transfer or other disposition of the Product by Cerecor or any of its Affiliates or Sublicensees to another of these entities for resale by such entity to a Third Party shall not be deemed a Sale unless such Product is not ultimately resold.

1.26. "***SBP Patent Rights***" means (a) the Patent Rights listed in Schedule 1.26, (b) any priority documents to which any of the Patent Rights described in clause (a) claim priority, (c) any continuations (including continuations-in-part solely to the extent of claims entirely supported in the specification and entitled to the priority date of the parent application), continued prosecution applications, substitutions, divisions, extensions and term restorations, registrations, confirmations, reexaminations, renewals or reissues of any of the items described in clauses (a) or (b) including those filed pursuant to Section 5.1, (d) any corresponding foreign Patent Rights to any of the foregoing items described in clauses (a), (b) or (c) and (e) any patents issuing any of the foregoing items described in clauses (a), (b), (c) or (d).

1.27. "***(***) Patent Rights***" means (a) the Patent Rights listed in Schedule 1.27, (b) any priority documents to which any of the Patent Rights described in clause (a) claim priority, (c) any continuations (including continuations-in-part solely to the extent of claims entirely supported in the specification and entitled to the priority date of the parent application), continued prosecution applications, substitutions, divisions, extensions and term restorations, registrations, confirmations, reexaminations, renewals or reissues of any of the items described in clauses (a) or (b) including those filed pursuant to Section 5.1, (d) any corresponding foreign Patent Rights to any of the foregoing items described in clauses (a), (b) or (c) and (e) any patents issuing any of the foregoing items described in clauses (a), (b), (c) or (d).

1.28. "***Sublicensee***" means a Person to whom a Sublicense is granted pursuant to the terms of Section 2.4.

1.29. "***Sublicense Documents***" means any and all agreements, amendments or written understandings entered into with a Sublicensee (including any of its Affiliates) that are directly or indirectly related to a Sublicense.

1.30. "***Sublicense Income***" means income received by Cerecor or its Affiliates in consideration for a Sublicense or other agreement providing the right to negotiate or obtain a Sublicense. Sublicense Income includes income received from a Sublicensee in the form of license issue fees, milestone payments and the like but specifically excludes (a) amounts received by Cerecor or any of its Affiliates as payment for the cost of manufacture or supply of any Product, (b) royalties on the sale or distribution of Product, including royalties paid as a percentage of Net Sales, (c) amounts received by Cerecor or any of its Affiliates in connection with achievement of a milestone, up to the amount of any milestone payment made to SBP under Section 4.2 that is triggered by the achievement of the same milestone (so that amounts received by Cerecor or any of its Affiliates that exceed the amount of the milestone payment under Section 4.2 shall be included in "***Sublicense Income***"), (d) amounts received from the sale of equity securities or debt of Cerecor or any of its Affiliates, (e) payments received for funding research and/or development services pursuant to a written research and/or development agreement between Cerecor (or one of its Affiliates) and Sublicensee and such payments or reimbursements are (i) at fair-market value for the research or development to be performed, (ii) the costs to be reimbursed or paid for are incurred after the effective date of an agreement with the Sublicensee, (iii) Cerecor or its Affiliates is obligated to perform such research and/or development under the agreement with the sublicensee and (iv) such payments are characterized as reimbursement or

payment for such costs, as the case may be, in accordance with the Accounting Standards and (f) reimbursements of documented out-of-pocket patent expenses incurred by Cerecor or any of its Affiliates on a pass-through basis for reimbursement of patent prosecution or patent maintenance expenses.

1.31. "***Tax***" means all taxes, duties, fees, premiums, assessments, imposts, levies, rates, withholdings, dues, government contributions and other charges of any kind whatsoever, whether direct or indirect, together with all interest, penalties, fines, additions to tax or other additional amounts, imposed by any Governmental Body.

1.32. "***Third Party***" means any Person other than SBP, Cerecor or any of their respective Affiliates.

1.33. "***Third Party Royalties***" means any royalties Cerecor or any of its Affiliates pays to one or more Third Parties pursuant to one or more licenses to Patent Rights so as to settle or avoid actual or potential infringement of such Patent Rights in the manufacture, use, offer for sale, sale or import of any Product.

1.34. "***United States***" or "***US***" means the United States of America, its territories and possessions.

1.35. "***USD***" or "**$**" means the lawful currency of the United States of America.

1.36. "***Valid Claim***" means a claim of (a) an issued and unexpired patent included in the Licensed Patent Rights which claim has not been revoked or held unenforceable or invalid by a decision of a court or governmental agency of competent jurisdiction from which no further appeal can be taken or has been taken within the time allowed for appeal, and has not been abandoned, disclaimed, or admitted to be invalid or unenforceable through reissue or disclaimer; or (b) a pending claim included in Licensed Patent Rights which has not been pending for more than seven (7) years from its filing date; provided that a claim of any pending patent application that is deemed not to be a Valid Claim as a result of the limitation in clause (b) shall thereafter be considered a Valid Claim if such claim subsequently issues in an issued patent.

1.37. **Other Terms**. The definition of each of the following terms is set forth in the section of the Agreement indicated below:

Defined Term	Section
Agreement	Preamble
Cerecor	Preamble
Development Plan	3.1
Diligence Event	3.3.1
Direct Payment Option	4.12.1
Effective Date	Preamble
Event Explanation	3.3.2
Event Plan	3.3.2
Financial Report	4.7
Infringement Notice	5.3.1
(***)	2.3.3
Milestone	4.3
Milestone Payment	4.3
Negotiation Period	9.6.7
Negotiation Request	9.6.7
Parties	Preamble
Party	Preamble
Patent Challenge	5.4.2
Patent Costs	5.2.1
Patent Counsel	5.1
Patent Termination Notice	5.2.3
Progress Report	3.4.1
Royalty	4.4.1
SBP	Preamble
SBP Indemnitees	8.1.1
SBP Sublicense Income	4.5
Sublicense	2.4.1
Term	9.1

ARTICLE 2
LICENSES AND OTHER RIGHTS

2.1. **Grant of License to Cerecor**. Subject to the terms and conditions of this Agreement, SBP hereby grants to Cerecor an exclusive (except as provided in Sections 2.3 and 7.2.6), non-transferable (except as provided in Section 10.4), worldwide, royalty-bearing right and license (with the right to sublicense as provided in, and subject to, the provisions of Section 2.4) under Licensed Patent Rights to make, have made (subject to Section 2.2), use, sell, offer for sale, import and otherwise commercially exploit Products during the Term (the "***License***").

2.2. **Affiliates and Contractors**. Cerecor may allow its Affiliates and contractors acting on behalf of Cerecor or any of its Affiliates (such as contract manufacturers, contract research

organizations and consultants) to exercise rights under this Agreement, and Cerecor may perform some or all of its obligations under this Agreement through Affiliates and such contractors. The agreements between or among Cerecor and its Affiliates and such contractors are not considered Sublicenses for purposes of Section 2.4. Cerecor shall cause its Affiliates and such contractors that are exercising such rights or performing such obligations to comply with Cerecor's obligations under this Agreement, and Cerecor shall be liable to SBP for any act or omission of an Affiliate or contractor of Cerecor that would be a breach of this Agreement if performed or omitted by Cerecor.

2.3. **Limitations on License**. Notwithstanding anything to the contrary in this Agreement:

2.3.1 SBP retains the right under Licensed Patent Rights (a) to conduct teaching, educational and non-commercial, non-clinical research and (b) to conduct non-clinical research collaborations with, and extend such rights to, the following Persons for the purposes of performing such non-clinical research collaborations: not-for-profit, governmental, educational or non-commercial Third Parties.

2.3.2 The rights granted by SBP to Cerecor under this Agreement are subject in all respects to the rights and interests of any Governmental Body including all applicable provisions of any license to the United States Government executed by SBP and any overriding obligations to the United States Government under 35 U.S.C. §§200-212, as amended, and applicable governmental implementing regulations, including that products that result from intellectual property funded by the United States Government that are sold in the United States be substantially manufactured in the United States.

2.3.3 (***) and its Affiliates (collectively, "***(***)***") and it sublicensees retain rights under the SBP Patent Rights identified on Schedule 1.26 as within SBP Patent Family Ref. Nos. (***) to exploit certain (***) molecules that are in the clinical stage as of the Effective Date or that commence human clinical testing on or before June 30, 2022.

2.4. **Grant of Sublicense by Cerecor**.

2.4.1 SBP grants to Cerecor the right to grant sublicenses, in whole or in part, under the License (each, a "***Sublicense***") subject to the terms and conditions of this Agreement and specifically this Section 2.4.

2.4.2 All Sublicenses will be issued in writing and shall include no less than the following terms and conditions:

(a) reservations of rights in favor of SBP that are equivalent to the reservations of rights set forth in Section 2.3;

(b) reasonable record keeping, audit and reporting obligations sufficient to enable Cerecor and SBP to reasonably verify the payments due to Cerecor and SBP under such Sublicense and to reasonably monitor such Sublicensee's progress in developing and/or

commercializing Product, provided that such obligations (including reporting and auditing requirements) shall be no less stringent that those provided in this Agreement for Cerecor;

(c) infringement and enforcement provisions that do not conflict with the restrictions and procedural requirements imposed on Cerecor and do not provide greater rights to Sublicensee with respect to the Licensed Patent Rights than as provided in Sections 5.3 and 5.4;

(d) covenants by Sublicensee that are equivalent to those made by Cerecor in Section 7.4;

(e) indemnification in favor of SBP and (***) that is equivalent to the indemnification of SBP Indemnitees by Cerecor under Section 8.1;

(f) a requirement of obtaining and maintaining insurance by Sublicensee that is equivalent to the insurance requirements of Cerecor under Section 8.2, including coverage under such insurance of SBP as provided in Section 8.2;

(g) a provision providing that SBP may assume the Sublicense pursuant to Section 9.6.5 if this Agreement is terminated;

(h) a restriction on use of SBP's and (***)'s names etc. consistent with Section 10.3;

(i) a restriction on press releases related to this Agreement and the License consistent with Section 5.7; and

(j) a requirement that SBP is a third party beneficiary of such Sublicense in respect of the provisions implementing subsections (a) through (h) of this Section 2.4.2, and (***) is third party beneficiary of such Sublicense in respect of the provisions implementing subsections (e), (f), (h) and (i) of this Section 2.4.2.

Should any Sublicense attempted to be granted fail to include all of the terms and conditions set forth in this Section 2.4.2, or is otherwise issued not in accordance with the terms and conditions set forth in this Section 2.4, Cerecor shall promptly attempt to rectify by entering into a new Sublicense Document meeting the necessary requirements. Any Sublicense that does not include all of the terms and conditions set forth in this Section 2.4.2 or which is not issued in accordance with the terms and conditions set forth in this Section 2.4 shall be considered null and void with no further notice from SBP unless and until corrected.

2.4.3 Within thirty (30) days after the execution of a Sublicense Document, Cerecor shall provide a complete and accurate copy of such Sublicense Document to SBP; provided that Cerecor may redact economic terms and terms that are not relevant to SBP's rights under this Agreement. Following receipt of such Sublicense Document, SBP shall promptly notify Cerecor of any alleged breach of Section 2.4.2.

2.4.4 Cerecor's granting of a Sublicense shall not relieve Cerecor of any of its obligations under this Agreement. Cerecor shall be liable to SBP for any act or omission of a

Sublicensee of Cerecor that would be a breach of this Agreement if performed or omitted by Cerecor, and Cerecor shall be deemed in breach of this Agreement as a result of such act or omission; provided that SBP's right to terminate this Agreement as a result of such deemed breach is limited to the right set forth in Section 9.3.2(d).

2.5. **No Implied License**. Each Party acknowledges that the rights and licenses granted in this Agreement are limited to the scope expressly granted. Accordingly, except for the rights expressly granted under this Agreement, no right, title, or interest of any nature whatsoever is granted whether by implication, estoppel, reliance, or otherwise, by either Party to the other Party. All rights with respect to any know-how, patent or other intellectual property right rights that are not specifically granted in this Agreement are reserved to the owner thereof.

ARTICLE 3
DILIGENCE

3.1. **Development**. Cerecor shall use Commercially Reasonable Efforts to develop a Product for Sale in the US, the European Union, Japan and the United Kingdom. Within six months of the Effective Date, Cerecor shall deliver to SBP an initial development plan for the Product setting forth a high-level plan that outlines the material development activities to be conducted with respect to the Product, including those development activities to be conducted over the next five (5) years in order to obtain Governmental Approvals necessary for commercialization of the Product and consistent with the estimated timelines set forth in Section 3.3 (the "***Development Plan***").

3.2. **Commercialization**. Following receipt of Governmental Approval of a Product in a given country, Cerecor shall use Commercially Reasonable Efforts to commercialize such Product in such country.

3.3. **Diligence Events**.

3.3.1 Cerecor will use Commercially Reasonable Efforts to achieve each of the events in the table below (each, a "***Diligence Event***") by the date set forth opposite such Diligence Event (each, an "***Achievement Date***").

Diligence Event	Achievement Date
(***)	(***)
(***)	(***)
(***)	(***)
(***)	(***)

3.3.2 If Cerecor believes that it will not achieve a Diligence Event by the corresponding Achievement Date, it may notify SBP in writing in advance of the relevant deadline. Cerecor shall include with such notice (a) a reasonably detailed explanation of the reason for such failure ("***Event Explanation***") and (b) a reasonably detailed written plan for achieving the Diligence Event and an updated Achievement Date therefor ("***Event Plan***").

3.3.3 If Cerecor provides SBP with an Event Explanation and Event Plan pursuant to Section 3.3.2, then:

(a) if both the Event Explanation and Event Plan are reasonably acceptable to SBP, the Event Plan shall be automatically amended to incorporate the extended Achievement Date and/or amended Diligence Event set forth in the Event Plan; or

(b) if either or both of the Event Explanation and Event Plan are not reasonably acceptable to SBP, then SBP shall provide notice to Cerecor explaining why the Event Explanation or Event Plan is not acceptable and Cerecor shall have sixty (60) days after receipt of such written notice from SBP to provide SBP with an updated Event Explanation and Event Plan that are reasonably acceptable to SBP. If Cerecor timely provides SBP with an updated Event Explanation and Event Plan that are reasonably acceptable to SBP, the Event Plan shall be automatically amended to incorporate the extended Achievement Date and/or amended Diligence Event set forth in the Event Plan.

3.3.4 If Cerecor fails to timely provide SBP with both an Event Explanation and Event Plan reasonably acceptable to SBP pursuant to Sections 3.3.2 and 3.3.3, then Cerecor shall have until the existing Achievement Date to achieve the applicable Diligence Event. If Cerecor fails to achieve a Diligence Event by the Achievement Date, as may be amended pursuant to Section 3.3.3 or, if Cerecor is no longer using Commercially Reasonable Efforts to do so, then SBP shall have the termination right as set forth in Section 9.3.1.

3.4. **Progress Reports**.

3.4.1 No later than March 31, 2022 and by March 31 of each calendar year thereafter until First Commercial Sale of the Product, Cerecor shall submit (via email to (***)) to SBP a progress report for the preceding calendar year (each, a "***Progress Report***") covering Cerecor's (and any of its Affiliates' and Sublicensees') activities related to the development of the Product and the obtaining of Governmental Approvals necessary for commercialization of the Product.

3.4.2 Each Progress Report must include a summary of material work completed, key scientific discoveries, summary of material work-in-progress, the status of the Governmental Approval process, market plans for introduction of Products, significant corporate transactions involving the Products, date and time period covered by such report, material development activities to be undertaken by Cerecor or its Affiliates or Sublicensees during the next calendar year, and any material changes required to the Development Plan, and the current schedule for achieving each of the unachieved Diligence Events. SBP shall then provide a confidential copy of said Progress Report to (***).

3.4.3 Cerecor shall report to SBP the date of First Commercial Sale of the Product in the US, the European Union, Japan and the United Kingdom within sixty (60) days of its occurrence.

ARTICLE 4
FINANCIAL PROVISIONS

4.1. **License Issuance Fee**. Cerecor shall pay to SBP a one-time license issuance fee of $400,000 within thirty (30) days following the Effective Date.

4.2. **Annual License Maintenance Fee**. Beginning on the first anniversary of the Effective Date and each anniversary thereafter until the First Commercial Sale of a Product in any country, Cerecor shall pay to SBP a license maintenance fee of $(***).

4.3. **Milestone Payments**. Cerecor shall also pay to SBP the milestone payments provided in the table below (each, a "***Milestone Payment***") upon the first achievement of the corresponding milestone in the table below for the Product (each, a "***Milestone***"). Cerecor shall promptly notify SBP in writing of the achievement of any such Milestone, and Cerecor shall pay SBP in full the corresponding Milestone Payment within sixty (60) days after such Milestone is achieved. For clarity, each Milestone Payment is payable once, and the aggregate Milestone Payments payable under this Section 4.3 is equal to $74,200,000. The Milestone Payments are non-refundable, and are not an advance against royalties due to SBP or any other amounts due to SBP. For the avoidance of doubt, each of the Milestone Payments are one-time payments upon the first achievement of a Milestone.

Milestone	Milestone Payment
(***)	$(***)
(***)	$(***)
(***)	$(***)
(***)	$(***)
(***)	$(***)
(***)	$(***)
(***)	$(***)
(***)	$(***)
(***)	$(***)

4.4. **Royalties**.

4.4.1 During the Royalty Term, Cerecor shall also pay to SBP the royalties set forth in the table below (subject to the adjustment set forth in Section 4.4.2) on all Net Sales of Product ("***Royalty***").

Aggregate Annual Net Sales of Product	Percent of Net Sales
Portion of the aggregate annual Net Sales less than or equal to $(***)	(***)%
Portion of the aggregate annual Net Sales greater than $(***) but less than or equal to $(***)	(***)%
Portion of the aggregate annual Net Sales greater than $(***)	(***)%

4.4.2 In the event that Cerecor or any of its Affiliates pays Third Party Royalties, then Cerecor may offset fifty percent (50%) of such Third Party Royalties against any royalty payments that become due under this Agreement; provided that in no event shall the royalty payments be reduced pursuant to this Section 4.4.2 by more than fifty percent (50%) in any calendar quarter.

4.4.3 Cerecor must pay Royalties owed to SBP on a calendar quarter basis within two months after the end of each calendar quarter (i.e., paid by Feb. 28, May 31, August 31 and Nov. 30 of each year).

4.5. **Sublicense Income**. Cerecor will pay to SBP a percentage of Sublicense Income (such amount, "***SBP Sublicense Income***") within two months after the end of each calendar quarter (i.e., paid by Feb. 28, May 31, August 31 and Nov. 30 of each year) as follows:

Timing of Receipt of Sublicense Income	Percentage of Sublicense Income
(***)	(***)%
(***)	(***)%
(***)	(***)%

4.6. **Mode of Payment and Currency**. All payments to SBP hereunder must be made in USD to:

ACH Credit: 121000358
Federal Reserve Wire: 026009593
SWIFT Code: BOFAUS3N
Account # (***)
Sanford Burnham Prebys Medical Discovery Institute
Bank of America NA
333 So. Hope St., 13th Floor
Mailcode: CA9-193-13-25
Los Angeles, CA 90071
RE: SBP Ref. No. 21-001 (Cerecor Inc.)

or pursuant to written instructions that SBP may provide to Cerecor from time to time. All Royalties and other payments payable shall be calculated first in the currency of the jurisdiction in which payment was made, and if not in the United States, then converted into USD. The

exchange rate for such conversion shall be the average of the rate quoted in The Wall Street Journal, Eastern Edition for the last business day of each month in the calendar quarter for such Royalty or other payment made.

4.7. **Royalty and SBP Sublicense Income Reports**. Within two months after the end of each calendar quarter (i.e. Feb. 28, May 31, August 31 and Nov. 30), Cerecor shall deliver to SBP a report (each, a "***Financial Report***") setting out all details necessary to calculate the Royalty and SBP Sublicense Income due under this Article 4 for such calendar quarter, including:

4.7.1 Number of each Product Sold by Cerecor, its Affiliates and Sublicensees in each country and the corresponding name of each such Product;

4.7.2 Gross sales and Net Sales of each Product made by Cerecor, its Affiliates and Sublicensees;

4.7.3 Royalties;

4.7.4 Sublicense Income and the calculation of SBP Sublicense Income; and

4.7.5 The method and currency exchange rates (if any) used to calculate the Royalties and SBP Sublicense Income.

4.8. **Late Payments**. Any failure by Cerecor to make a payment within thirty (30) days after the date when due shall obligate Cerecor to pay to SBP interest on the overdue amount from the due date and ending on the actual payment date at a rate per annum equal to the United States Prime Rate as published by The Wall Street Journal, Eastern Edition, plus an additional two percent (2.0%), or the highest rate allowed by Law, whichever is lower. The interest rate shall be adjusted with changes to the reference rate published by The Wall Street Journal, Eastern Edition, and interest shall be calculated daily.

4.9. **Accounting**. Cerecor shall calculate all amounts, and perform other accounting procedures required, under this Agreement and applicable to it in accordance with the Accounting Standards.

4.10. **Books and Records**. Cerecor will keep accurate books and records of the Product developed, manufactured, used or sold and all Sublicenses, collaboration agreements and joint venture agreements entered into by Cerecor that involved Licensed Patent Rights. Cerecor will preserve these books and records for at least six (6) years from the date of the Financial Report to which they pertain.

4.11. **Audits**. SBP, at its own cost, through an independent auditor reasonably acceptable to Cerecor (and who has executed an appropriate confidentiality agreement reasonably acceptable to Cerecor that requires the auditor to keep any information learned by it confidential except as needed to report its audit conclusions to SBP), may inspect and audit the relevant records of Cerecor pertaining to the calculation of any Royalties and SBP Sublicense Income due to SBP under this Agreement. Cerecor shall provide such auditors with access to the records during

reasonable business hours. Such access need not be given to any such set of records more often than once each year or more than once as to any requested period. SBP shall provide Cerecor with written notice of its election to inspect and audit the records related to the royalty due hereunder not less than thirty (30) days prior to the proposed date of review of Cerecor's records by SBP's auditors. Should the auditor find any underpayment of Royalties or SBP Sublicense Income by Cerecor, Cerecor shall promptly pay SBP the amount of such underpayment, and shall reimburse SBP for the cost of the audit, should such underpayment be the lessor of (a) $250,000 or (b) five percent (5%) of the aggregate Royalties and SBP Sublicense Income due during all of the time periods audited. If the auditor finds overpayment by Cerecor, then Cerecor shall have the right to deduct the overpayment from any future royalties due to SBP by Cerecor or, if no such future payments are payable, then SBP shall refund the overpayment to Cerecor within sixty (60) days after SBP receives the audit report. Cerecor may designate competitively sensitive information which such auditor may see and review but which it may not disclose to SBP; provided, however, that such designation shall not restrict the auditor's investigation or conclusions.

4.12. **Direct Payment to (***)**.

4.12.1 At Cerecor's option exercisable on written notice to SBP from time to time, Cerecor may elect to pay directly to (***) (a) the Net Partnering Fees (as defined in the (***) License Agreement) due to (***) in respect of the amounts payable by Cerecor to SBP under this Agreement and/or (b) the amounts due to (***) under Section 8.2.2 of the (***) License Agreement (the "***Direct Payment Option***"). After electing the Direct Payment Option, Cerecor may then elect to cease direct payment of Net Partnering Fees and/or the amounts due to (***) under Section 8.2.2 of the (***) License Agreement by giving SBP at least thirty (30) days prior written notice of the payment(s) that it will no longer make directly to (***). For the avoidance of doubt, Cerecor may elect the Direct Payment Option as many times as its desires even if Cerecor one or more times previously elected the Direct Payment Option but then elected to cease direct payment to (***).

4.12.2 If and for so long as Cerecor is making direct payments to (***):

(a) Cerecor shall (i) make the payments it has chosen to pay directly to (***) no later than the applicable due date, (ii) provide to (***) any reports required under the (***) License Agreement in respect of the calculation of such payments, (iii) promptly provide to SBP evidence of such payments and copies of the reports provided to (***) and (iv) pay (***) the interest due under Section 5.2 of the (***) License Agreement on any late payments (if any); and

(b) when calculating the net amount payable to SBP under this Agreement, all amounts paid by Cerecor directly to (***) under this Section 4.12 (other than interest due under Section 5.2 of the (***) License Agreement) shall be credited against the gross amounts that would have been payable to SBP under this Agreement if such direct payments had not been made.

ARTICLE 5
INTELLECTUAL PROPERTY

5.1. **Patent Filing Prosecution and Maintenance**. Licensed Patent Rights will be held in the name of SBP but diligently prosecuted by counsel to Cerecor ("***Patent Counsel***") to seek reasonably adequate protection for Products. Provided that Cerecor is current on all obligations

to SBP, Cerecor shall control all actions and decisions with respect to the filing, prosecution and maintenance of such Licensed Patent Rights; provided that Cerecor will consider any reasonable comments or suggestions by SBP with respect to the filing, prosecution and maintenance of such Licensed Patent Rights. Cerecor will instruct Patent Counsel to copy SBP on all correspondence related to such Licensed Patent Rights (including all copies of patent applications, office actions, draft responses to office actions, as-filed copies of responses to office actions, requests for terminal disclaimer, and requests for reissue or reexamination of any patent or patent application) and to interact with Cerecor in regards to the preparation, filing, prosecution and maintenance of such Licensed Patent Rights. Cerecor will instruct Patent Counsel to provide SBP with draft applications and responses so that SBP has reasonable time to consider the draft and provide strategy input. Cerecor has the right to take any action to preserve rights whether or not SBP has commented and will not allow any such Licensed Patent Rights to lapse or become abandoned without providing at least thirty (30) days prior written notice to SBP, except for filing of continuations, divisionals, or the like that substitute for the lapsed application. In the event Cerecor wishes to abandon prosecution of any Licensed Patent Rights (including but not limited to, not responding to an outstanding office action, failing to file a continuation application after allowance, or not paying a maintenance fee or annuity in any country), Cerecor shall allow SBP to take over such prosecution if Cerecor so indicates, which prosecution shall remain in the name of SBP. Control of a given SBP Patent Right (including the right to control all actions and decisions with respect to the filing, prosecution and maintenance) will revert to SBP upon termination of this Agreement or upon any decision by Cerecor to terminate or abandon such SBP Patent Right in accordance with Section 5.2.2 or otherwise.

5.2. **Patent Costs**.

5.2.1 Within thirty (30) days of the Effective Date and each of the next two anniversaries of such date, Cerecor will reimburse SBP for one third of the SBPs out-of-pocket costs incurred prior to the Effective Date for the filing, prosecution and maintenance of Licensed Patent Rights, including all accrued attorneys' fees, expenses, official and filing fees ("***Patent Costs***"). As of the Effective Date, Patent Costs are approximately $472,889.

5.2.2 Cerecor is solely responsible for payment of the fees and costs of its Patent Counsel and the other costs incurred under Section 5.1 in connection with its filing, prosecution and maintenance activities.

5.2.3 Cerecor may terminate its rights in, and obligations with respect to, any or all of the Licensed Patent Rights by providing written notice to SBP ("***Patent Termination Notice***"). Termination of Cerecor's rights in and obligation with respect to such Patent Rights will be effective thirty (30) days after receipt of such Patent Termination Notice by SBP. In the event of termination of less than the full Licensed Patent Rights, the non-terminated Licensed Patent Rights remain subject to all terms of this Agreement. SBP will use reasonable efforts to curtail Patent Costs chargeable to Cerecor under this Agreement after the receipt of the Patent Termination Notice is received. SBP may prosecute and maintain the Licensed Patent Rights subject to the Patent Termination Notice at its sole discretion and expense, and such Licensed

Patent Rights will thereafter not be subject to this Agreement, including the License, and Cerecor will have no further rights or license to them.

5.3. **Infringement**.

5.3.1 If either Party believes that an infringement by a Third Party with respect to any SBP Patent Right is occurring or may potentially occur, the knowledgeable Party will provide the other Party with (a) written notice of such infringement or potential infringement and (b) evidence of such infringement or potential infringement (the "***Infringement Notice***"). During the period in which, and in the jurisdiction where, Cerecor has exclusive rights under this Agreement, neither SBP or Cerecor will notify such a Third Party (including the infringer) of infringement or put such Third Party on notice of the existence of Licensed Patent Rights without first obtaining the written consent of the other Party. Both SBP and Cerecor will use their diligent efforts to cooperate with each other to terminate such infringement without litigation.

5.3.2 If infringing activity of potential commercial significance has not been abated within ninety (90) days following the date the Infringement Notice for such activity was provided, then Cerecor may institute suit for patent infringement against the infringer. Prior to commencing any such action, Cerecor shall consult with SBP and shall consider the views of SBP regarding the advisability of the proposed action and potential effects on the public interest. SBP may voluntarily join such suit, subject to Cerecor reimbursing SBP's Litigation Expenses, but may not thereafter commence suit against the infringer for the acts of infringement that are the subject of Cerecor's suit or any judgment rendered in such suit; provided that SBP agrees to be named as a nominal third party plaintiff, as the patentee, if necessary in cases in which it is required in order to sustain standing requirements. Except as set forth in the prior sentence, Cerecor may not join SBP in a suit initiated by Cerecor without SBP's prior written consent. If in a suit initiated by Cerecor, SBP is involuntarily joined other than by Cerecor, then Cerecor and SBP may choose mutually agreeable co-counsel, and Cerecor will pay the Litigation Expenses incurred by SBP arising out of such suit, including any legal fees of co-counsel; provided that SBP and Cerecor each may engage separate counsel in addition to co-counsel at the engaging Party's expense. Cerecor shall be free to enter into a settlement, consent judgment or other voluntary disposition, provided that any settlement, consent judgment or other voluntary disposition that (a) limits the scope, validity or enforcement of Licensed Patent Rights or (b) admits fault or wrongdoing on the part of Cerecor or SBP must be approved in advance by SBP in writing. Cerecor's request for such approval shall include complete copies of final settlement documents, a detailed summary of such settlement, and any other information material to such settlement. SBP shall provide Cerecor notice of its approval or denial within thirty (30) days of any request for such approval by Cerecor, provided that, in the event SBP wishes to deny such approval, such notice shall include a detailed written description of SBP's reasonable objections to the proposed settlement, consent judgment, or other voluntary disposition.

5.3.3 If, within one hundred and twenty (120) days following the date the Infringement Notice was provided, infringing activity of potential commercial significance has not been abated and if Cerecor has not brought suit against the infringer, then SBP may at its sole cost and expense, following consultation with and good faith consideration of any Cerecor comments, and

only if Cerecor fails to provide a reasonable basis for its decision, institute suit for patent infringement against the infringer. If SBP institutes such suit, then Cerecor may not join such suit without the prior written consent of SBP and may not thereafter commence suit against the infringer for the acts of infringement that are the subject of SBP's suit or any judgment rendered in such suit. SBP shall be free to enter into a settlement, consent judgment or other voluntary disposition, provided that any settlement, consent judgment or other voluntary disposition that (a) limits the scope, validity or enforcement of Licensed Patent Rights, (b) admits fault or wrongdoing on the part of Cerecor or SBP must be approved in advance by SBP in writing or (c) grants the infringer or any Third Party a license or covenant not to sue under any of the Licensed Patent Rights. SBP's request for such approval shall include complete copies of final settlement documents, a detailed summary of such settlement, and any other information material to such settlement. Cerecor shall provide SBP notice of its approval or denial within thirty (30) days of any request for such approval by SBP, provided that, in the event Cerecor wishes to deny such approval, such notice shall include a detailed written description of Cerecor's reasonable objections to the proposed settlement, consent judgment, or other voluntary disposition.

5.3.4 In the event that any SBP Patent Right is the subject of a Biosimilar Application or the like, Cerecor and SBP will convene to mutually consider options for response. In the event that SBP and Cerecor cannot come to a mutually agreeable response, Cerecor will have unilateral rights to determine how and when respond.

5.3.5 Any recovery or settlement received in connection with any suit for infringement of any of the Licensed Patent Rights will be shared as follows: (i) first, 100% to the Party that filed the infringement suit or other enforcement action up to the total amount of Litigation Expenses incurred by such Party (including prior reimbursements of the other Party's Litigation Expenses, including any Litigation Expenses of co-counsel); (ii) second, 100% of the remaining balance after payment pursuant to clause (i) to the Party that did not file the infringement suit or other enforcement action up to the total amount of Litigation Expenses incurred by such Party and not already reimbursed by the other Party and (iii) third, the remaining balance after payment pursuant to clauses (i) and (ii) shall be allocated as follows:

(a) for any suit that is initiated by Cerecor and in which SBP was not a party in the litigation, such portion shall be treated as Sublicense Income with SBP receiving its applicable percentage thereof as set forth in Section 4.5 and Cerecor shall receive the remainder; and

(b) for any suit that is initiated by Cerecor or SBP and that the other Party joins voluntarily (but only to the extent such voluntary joining is allowed under this Agreement or expressly by the other Party in a separate agreement) or involuntarily, the same percentage as the non-initiating party's percentage of the total Litigation Expenses incurred by SBP and Cerecor, but in no event shall the non-initiating Party receive less than twenty five percent (25%) of such recovery, while the initiating party shall receive the remainder.

5.4. **Invalidity or Unenforceability Defenses or Actions**.

5.4.1 Each Party shall promptly notify the other Party in writing of any alleged or threatened assertion of invalidity or unenforceability of any of the Licensed Patent Rights by a Third Party of which such Party becomes aware.

5.4.2 In the event that a Third Party challenges any of the Licensed Patent Rights, regardless of the name or procedure including, without limitation, opposition, validity challenge, interference, re-examination, reissue, derivation, supplemental examination, post-grant review, inter-parties review, negotiation, claim, declaratory judgment action or counterclaim or affirmative defense in an infringement suit brought under Section 5.3 (each, a "***Patent Challenge***"), Cerecor shall have the first right, but not the obligation, to (a) defend and prosecute the Patent Challenge in its own name, at its own expense, and on its own behalf; (b) to the extent applicable to the Patent Challenge, ultimately enjoin infringement and collect for its use, damages, profits, and awards of whatever nature recoverable for such infringement; and (c) settle the Patent Challenge; provided, however, that SBP shall have the second right, but not the obligation, to take such actions at its own expense and in its own name with respect to a Patent Challenge if Cerecor chooses not to defend and prosecute such Patent Challenge. SBP shall join any such Patent Challenge if necessary to avoid dismissal of the Patent Challenge. In all cases, Cerecor agrees to keep SBP reasonably apprised of the status and progress of the Patent Challenge.

5.4.3 Patent Challenge by Cerecor. If Cerecor or any of its Affiliates brings a Patent Challenge against SBP, or assists others in bringing a Patent Challenge against SBP (except as required under a court order or subpoena), then SBP may within thirty (30) days after Cerecor or its Affiliate files the Patent Challenge immediately terminate this Agreement by giving Cerecor written notice of termination. Alternatively, if SBP does not timely exercise its rights to terminate this Agreement, then as of the date of the filing of the Patent Challenge, the royalty rates and any Sublicense Income rates set forth in Sections 4.4 and 4.5, respectively, shall automatically double. In the event that the Patent Challenge of Cerecor is sustained by the federal district court, the royalty rates and SBP Sublicense Income rates will immediately revert to those set forth in Sections 4.4 and 4.5, but Cerecor will have no right to recoup any Royalties paid during the period of the Patent Challenge. In the event that a Patent Challenge by Cerecor or its Affiliates is unsuccessful and SBP did not timely exercise its right to terminate this Agreement following the filing of the Patent Challenge, then the increased rate of royalty and SBP Sublicense Income payments effected by this Section 5.4.3 shall remain in effect, and Cerecor shall reimburse SBP for all reasonable legal fees and expenses incurred in its defense against the Patent Challenge.

5.4.4 Patent Challenge by Sublicensee. If a Sublicensee brings a Patent Challenge or assists another party in bringing a Patent Challenge (except as required under a court order or subpoena), then SBP may send a written demand to Cerecor to terminate such Sublicense. If Cerecor fails to so terminate such Sublicense within sixty (60) days after Cerecor's receipt of such written demand, then SBP may immediately terminate this Agreement by giving Cerecor written notice of termination.

5.5. **Patent Marking**. Cerecor shall place in a conspicuous location on any Product (or its packaging where appropriate and practicable) made or sold under this Agreement a patent notice in accordance with the Laws concerning the marking of patented articles where such Product is made or sold, as applicable.

5.6. **Confidentiality**.

5.6.1 Each Party agrees that, for the Term and for five (5) years thereafter, such Party shall (a) use the same degree of care to maintain the secrecy of the Confidential Information of the other Party that it uses to maintain the secrecy of its Confidential Information of like kind but in no case less than a reasonable degree of care, (b) use the Confidential Information of the other Party only to accomplish the purpose of this Agreement, to exercise its rights under this Agreement or for audit or management purposes and (c) ensure that any Person to whom it discloses Confidential Information of the other Party are bound to it by similar obligations of confidence and to make sure such disclosure is only as required to accomplish the purposes of this Agreement.

5.6.2 Neither Party will have any confidentiality obligations with respect to Confidential Information belonging to the other Party that:

(a) is or becomes generally available to the public other than as a result of disclosure by the recipient;

(b) is already known by or in the possession of the recipient on a non-confidential basis at the time of disclosure by the disclosing Party;

(c) is independently developed by recipient without use of or reference to the disclosing Party's Confidential Information; or

(d) is obtained by recipient on a non-confidential basis from a Third Party that lawfully obtained it and has not breached any obligations of confidentiality.

5.6.3 A Party may disclose the Confidential Information of the other Party to the extent required by Law or court order; provided, however, that the recipient promptly provides to the disclosing Party prior written notice of such disclosure and provides reasonable assistance in obtaining an order or other remedy protecting the Confidential Information from public disclosure. In addition, a Party may disclose this Agreement on a confidential basis to current and prospective investors in, lenders to, acquirors or sublicensees of or collaborators with such Party.

5.7. **Press Releases**. The Parties acknowledge that one or both Parties may desire to publish one or more press releases relating to this Agreement, the License, and developments made thereto. However, each Party agrees not to issue any press release or other public statement, whether written, electronic, oral or otherwise, disclosing the existence of this Agreement, the terms of this Agreement, or any confidential information relating to this Agreement without the prior written consent of the other Party, such consent not to be unreasonably withheld or delayed.

Nothing in this Agreement shall prevent Cerecor from issuing a press release relating to a Sublicense, provided that no such press release shall contain or reference (***)'s name except with (***)'s prior written consent. Neither Party will be prevented from complying with any duty of disclosure it may have pursuant to applicable Laws or the rules of any recognized stock exchange so long as the disclosing Party provides the other Party at least ten (10) business days prior written notice to the extent practicable and only discloses information to the extent required by applicable Laws or the rules of any recognized stock exchange.

5.8. **Publications**. During the Term, Cerecor shall submit to (***) for review and approval any proposed academic, scientific or medical publication or public presentation that contains (***)'s Confidential Information. Such review and approval will be conducted for the purposes of preserving the value of the (***) Patent Rights and determining whether any portion of the proposed publication or presentation containing (***)'s Confidential Information should be modified or deleted. Written copies of such proposed publication or presentation required to be submitted hereunder shall be submitted to (***) no later than forty-five (45) days before submission for publication or presentation (the "***Review Period***"). SBP shall require (***) to provide its comments with respect to such publications and presentations within thirty (30) days of its receipt of such written copy. Cerecor will comply with standard academic practice regarding authorship of scientific publications and recognition of contribution of other parties in any publication governed by this Section 5.8, including International Committee of Medical Journal Editors standards regarding authorship and contributions.

ARTICLE 6
(***) LICENSE AGREEMENT

6.1. **Covenants**. SBP shall:

6.1.1 use Commercially Reasonable Efforts to fulfill its obligations under the (***) License Agreement;

6.1.2 not modify or amend the (***) License Agreement except with Cerecor's prior written consent, such consent not to be unreasonably withheld;

6.1.3 not terminate the (***) License Agreement in whole or in part without Cerecor's prior written consent; and

6.1.4 furnish Cerecor with copies of all notices received by SBP under the (***) License Agreement within five (5) days after SBP's receipt thereof and, if such notice relates to any alleged breach or default by SBP or any of its affiliates or sublicensees and SBP cannot or chooses not to cure or otherwise resolve any such alleged breach or default, SBP will so notify Cerecor within five (5) days after determining that it cannot or chooses not to cure.

ARTICLE 7
REPRESENTATIONS AND WARRANTIES

7.1. **Mutual Representations and Warranties**. Each Party represents and warrants to the other Party that, as of the Effective Date:

7.1.1 such Party is duly organized and validly existing under the Laws of the jurisdiction of its incorporation or organization;

7.1.2 such Party has taken all action necessary to authorize the execution and delivery of this Agreement and the performance of its obligations under this Agreement;

7.1.3 this Agreement is a legal and valid obligation of such Party, binding upon such Party and enforceable against such Party in accordance with the terms of this Agreement, except as enforcement may be limited by applicable bankruptcy, fraudulent conveyance, insolvency, reorganization, moratorium and other Laws relating to or affecting creditors' rights generally and by general equitable principles; and

7.1.4 such Party has all right, power and authority to enter into this Agreement and to perform its obligations under this Agreement.

7.2. **SBP Representations and Warranties**. SBP represents and warrants that:

7.2.1 the SBP Patent Rights are solely owned by SBP and the (***) Patent Rights are jointly owned by (***) and SBP;

7.2.2 SBP has the right to grant the licenses set forth in this Agreement;

7.2.3 the (***) License Agreement is in full force and effect, and there are no other agreements, written or oral, between SBP and/or any of its Affiliates and (***) and/or any of its Affiliates concerning any of the Licensed Patent Rights (other than agreements that have been terminated, expired or superseded);

7.2.4 neither SBP nor, to SBP's knowledge, (***) is in material breach of any of their respective obligations under the (***) License Agreement;

7.2.5 SBP's entry into and performance of this Agreement and the rights granted by SBP under this Agreement do not violate or conflict with the (***) License Agreement or any other agreement between SBP and any Third Party including (***) and its sublicensees; and

7.2.6 except for (a) potential rights of the United States Government including under 35 U.S.C. §§200-212, as amended, (b) the (***) Patent Rights which are jointly owned by SBP and (***) and subject to the (***) License Agreement and (c) a non-exclusive license under the SBP Patent Rights identified on Schedule 1.26 as within SBP Patent Family Ref. Nos. (***) granted in favor of (***) in respect of certain molecules of (***) that are clinical stage as of the Effective Date or that commence human clinical testing on or before June 30, 2022, the Licensed Patent Rights are not subject to the rights of any Third Party.

7.3. **Disclaimer of Representations and Warranties**.

7.3.1 Other than the representations and warranties provided in Sections 7.1 and 7.2 above, **SBP MAKES NO REPRESENTATIONS OR WARRANTIES, WHETHER EXPRESS OR IMPLIED, AND EXPLICITLY DISCLAIMS ANY REPRESENTATION AND WARRANTY, INCLUDING WITH RESPECT TO ANY ACCURACY, COMPLETENESS, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COMMERCIAL UTILITY, VALIDITY OR NON-INFRINGEMENT OF ANY OF THE LICENSED PATENT RIGHTS. CERECOR ACCEPTS THE LICENSED PATENT RIGHTS "AS IS" AND SBP DOES NOT OFFER ANY GUARANTEE OF ANY KIND**.

7.3.2 Furthermore, nothing in this Agreement will be construed as:

(a) a representation or warranty by SBP as to the validity or scope of any SBP Patent Right;

(b) a representation or warranty that anything made, used, sold or otherwise disposed of under the License is or will be free from infringement of patents, copyrights, trademarks or any other forms of intellectual property rights or tangible property rights of Third Parties; or

(c) except as set forth in Section 5.3 and 5.4, obligating SBP to bring or prosecute actions or suits against Third Parties for patent, copyright or trademark infringement.

7.4. **Covenants of Cerecor**. Cerecor will comply with all Laws that apply to its activities or obligations under this Agreement. For example, Cerecor will comply with applicable United States export Laws and regulations. The transfer of certain technical data and commodities may require a license from the applicable agency of the United States government and/or written assurances by Cerecor that Cerecor will not export data or commodities to certain foreign countries without prior approval of the agency.

ARTICLE 8
INDEMNIFICATION; INSURANCE AND LIMITATION OF LIABILITY

8.1. **Indemnification by Cerecor**.

8.1.1 Cerecor shall indemnify SBP and (***) and their respective current and former directors, governing board members, trustees, officers, faculty, students, fellows, employees, consultants, contractors and agents and their respective successors, heirs and assigns (the "***SBP Indemnitees***") from and against any and all liability, damage, loss, demands, cost or expense (including reasonable attorneys' fees), including bodily injury, risk of bodily injury, death and property damage to the extent arising out of Third Party claims, demands, actions and proceedings related to (a) Cerecor or its Affiliates or Sublicensees or their respective customers' activities related to the Product or Licensed Patent Rights, (b) the development, design, testing, use, manufacture, packaging, promotion, import, export, distribution, lease, sale or other disposition of any Product (including any product liability claim) by Cerecor or its Affiliates or

Sublicensees, (c) any claim by a Third Party that the composition, manufacture, use, sale or other disposition of any Product by Cerecor or its Affiliates or Sublicensees infringes or violates any patent, copyright, trade secret, trademark or other intellectual property right of such Third Party, (d) Cerecor's negligence, willful misconduct, recklessness or wrongful intentional acts or omissions or (e) any material breach of any obligation, representation or warranty of Cerecor hereunder; provided that Cerecor's obligations pursuant to this Section 8.1 shall not apply to the extent such claims or suits result from the gross negligence or willful misconduct of any SBP Indemnitee.

8.1.2 SBP shall: (a) promptly notify Cerecor as soon as it becomes aware of a claim or suit for which indemnification may be sought pursuant hereto; provided that any failure to provide such prompt notice shall not relieve Cerecor of any of its obligations hereunder except and only to the extent Cerecor is materially prejudiced thereby; (b) reasonably cooperate, and cause the individual SBP Indemnitees to reasonably cooperate, with Cerecor in the defense, settlement or compromise of such claim or suit; and (c) permit Cerecor to control the investigation, defense, settlement or compromise of such claim or suit, including the right to select defense counsel reasonably acceptable to SBP. In no event, however, may Cerecor compromise or settle any claim or suit in a manner which (i) admits fault or negligence on the part of any SBP Indemnitee, (ii) materially adversely impacts such SBP Indemnitee's rights or obligations or (iii) commits such SBP Indemnitee to take, or forbear to take, any action, without the prior written consent of such SBP Indemnitee. Each SBP Indemnitee has the right to participate (but not control) and be represented in any suit or action by advisory counsel of its selection and at its own expense. Cerecor shall have no liability for any settlement entered into by any SBP Indemnitee without Cerecor's prior written consent.

8.2. **Insurance**.

8.2.1 Cerecor, at its sole cost and expense, must insure its activities in connection with the work under this Agreement and obtain, and keep in force and maintain Commercial Form General Liability Insurance (contractual liability included) with limits as follows:

(a) Each occurrence $1,000,000

(b) General aggregate $2,000,000

Prior to the commencement of clinical trials, if applicable, involving the Product:

(c) Clinical Trial coverage $2,000,000

Prior to the First Commercial Sale of the Product:

(d) Product Liability $5,000,000

8.2.2 The above insurance limits may be satisfied with a combination of a primary and umbrella policies. If the above insurance is written on a claims-made form, it shall continue for three (3) years following termination or expiration of this Agreement or Cerecor will purchase an

extended reporting privilege covering the same period. All such insurance shall be written by insurance companies with a minimum A- AM Best rating.

8.2.3 Cerecor shall provide certificates of insurance to SBP and (***) from time to time evidencing the above insurance and stating that (a) the insurer will provide thirty (30) day advance written notice to the certificate holder of any modification, termination or cancellation and (b) SBP and (***) and its Affiliates is an additional insured with respect to the coverages in Section 8.2.1. Cerecor shall require the issuers of the above insurance to waive subrogation against SBP and (***) and its Affiliates. All such insurance shall be primary and non-contributing with respect to any similar insurance policies available to SBP or (***) or its Affiliates.

8.3. **LIMITATION OF LIABILITY**. EXCEPT TO THE EXTENT INCLUDED IN LOSSES TO WHICH CERECOR'S INDEMNIFICATION OBLIGATIONS UNDER SECTION 8.1 APPLY, IN NO EVENT SHALL EITHER PARTY OR ANY OF ITS AFFILIATES BE LIABLE TO THE OTHER PARTY OR ANY OF ITS AFFILIATES FOR SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING LOSS OF PROFITS, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREIN OR ANY BREACH HEREOF.

ARTICLE 9
TERM AND TERMINATION

9.1. **Term**. The term of this Agreement (the "***Term***") shall commence on the Effective Date and, unless terminated sooner as provided below, shall continue in full force and effect until the expiration of the Royalty Term. Upon expiration of the Term, the licenses granted to Cerecor under Section 2.1 shall automatically become non-exclusive, perpetual, irrevocable, fully paid-up and royalty-free.

9.2. **Termination by Cerecor**.

9.2.1 At any time during the Term, Cerecor may, at its convenience, terminate this Agreement upon providing at least ninety (90) days prior written notice to SBP of such intention to terminate. Such written notice shall contain an explanation of Cerecor's rationale for termination, and Cerecor shall pay, in accordance with this Agreement, all amounts due as of the effective date of termination including Patent Costs incurred up to the effective date of such termination.

9.2.2 If SBP materially breaches any of its material obligations under this Agreement, Cerecor may give to SBP a written notice specifying the nature of the default, requiring it to cure such breach, and stating its intention to terminate this Agreement. If such breach is not cured within thirty (30) days of such notice, such termination shall become effective upon a notice of termination by Cerecor thereafter.

9.3. **Termination by SBP for Cause**.

9.3.1 **Termination for Breach of Diligence Obligations**. If Cerecor fails to fulfill its obligations under Section 3.1 or 3.3 (including the failure to use Commercially Reasonable Efforts to achieve any Diligence Event by the corresponding Achievement Date, as may be amended pursuant to Section 3.3.3), then SBP may provide written notice to Cerecor of such failure. If Cerecor fails to address such failure to the reasonable satisfaction of SBP within three (3) months of receiving such written notice, SBP may, upon written notice to Cerecor, terminate this Agreement.

9.3.2 **Termination for Other Material Breach**. If Cerecor materially breaches any of its material obligations under this Agreement other than those covered in Section 9.3.1, SBP may give to Cerecor a written notice specifying the nature of the default, requiring it to cure such breach, and stating its intention to terminate this Agreement. If such breach is not cured within thirty (30) days of such notice, such termination shall become effective upon a notice of termination by SBP thereafter. For clarity, such breach of a material obligation includes:

(a) failure to deliver to SBP any payment at the time or times that such payment is due to SBP under this Agreement;

(b) failure to provide reports as set forth in Sections 3.4.1 and 4.7;

(c) failure to possess and maintain insurance as set forth in Section 8.2; or

(d) failure to terminate a Sublicense upon written request of SBP where Sublicensee is in breach of the obligations on it pursuant to Section 2.4.2(f) and fails to cure such breach within thirty (30) days of being notified of such breach.

9.4. **Termination for Cerecor's Insolvency**. This Agreement terminates immediately without an obligation of notice of termination to Cerecor in the event the Cerecor ceases conducting business in the normal course, makes a general assignment for the benefit of creditors, admits in writing its inability to pay its debts as they are due, permits the appointment of a receiver for its business or assets or avails itself or becomes subject to any voluntary liquidation proceeding under any Laws relating to insolvency or the protection of rights of creditors.

9.5. **Termination Disputes**. If a Party gives notice of default or termination under Section 9.3 and the other Party disagrees with the Party's assertion of default or right to terminate the Agreement, then the Agreement shall remain in full force and effect until the dispute is finally resolved pursuant to Section 10.8. All cure periods shall be tolled during the dispute resolution process, and if, as a result of the dispute resolution process, it is determined that the Party was entitled to give the notice of default or termination, then the other Party shall be entitled to the remainder of the relevant cure period and termination shall not become effective if the relevant default or other matter is not cured during such remaining cure period. On the other hand, if as a result of the dispute resolution process, it is determined that the Party was not entitled to give the notice of default or termination, then the notice shall be rendered null and void.

9.6. **Effects of Termination**.

9.6.1 Notwithstanding the termination or expiration of this Agreement, the following provisions shall survive termination or expiration: Article 1, Section 4.1, Sections 4.8 - 4.11, Section 5.2.1, 5.2.2 and 5.6, Article 6, Article 8, Sections 9.1 and 9.6, and Article 10.

9.6.2 Upon the effective date of termination of this Agreement but subject to Section 9.6.6, all rights and licenses granted by SBP hereunder shall terminate. In connection with exercising rights under Section 9.6.6 or if Cerecor violates this Section 9.6.2 and continues such activities, in addition to all other remedies available to SBP under Law or this Agreement, Sections 4.2, 4.4, 4.5, 4.6 and 4.7 shall also survive termination of this Agreement and Cerecor shall continue to pay all Milestone Payments and Royalties applicable to such ongoing activities following termination.

9.6.3 Upon the effective date of the termination of this Agreement for any reason, either Party may request in writing, and the other Party either, with respect to Confidential Information to which such first Party does not retain rights under the surviving provisions of this Agreement: (a) as soon as reasonably practicable, destroy all copies of such Confidential Information in the possession of the other Party and confirm such destruction in writing to the requesting Party; or (b) as soon as reasonably practicable, deliver to the requesting Party, at the other Party's expense, all copies of such Confidential Information in the possession of the other Party; provided, that the other Party shall be permitted to retain one (1) copy of such Confidential Information for the sole purpose of performing any continuing obligations hereunder, as required by Law, or for archival purposes. Notwithstanding the foregoing, such other Party also shall be permitted to retain such additional copies of or any computer records or files containing such Confidential Information that have been created solely by such Party's automatic archiving and back-up procedures, to the extent created and retained in a manner consistent with such other Party's standard archiving and back-up procedures, but not for any other use or purpose.

9.6.4 Termination of this Agreement shall not relieve the Parties of any obligation or liability that, at the time of termination, has already accrued hereunder, or which is attributable to a period prior to the effective date of such termination. Termination of this Agreement shall not preclude either Party from pursuing all rights and remedies it may have hereunder or at Law or in equity with respect to any breach of this Agreement nor prejudice either Party's right to obtain performance of any continuing obligation.

9.6.5 If this Agreement is terminated for any reason, all outstanding Sublicenses to Qualified Biopharmaceutical Companies (including all Sublicense Documents for each Sublicense) not in default will, in SBP's sole discretion either (a) be assigned by Cerecor to SBP or (b) continue in full force and effect. Any Sublicense with a Sublicensee who is not a Qualified Biopharmaceutical Company shall survive at SBP's sole option. Each assigned Sublicense will remain in full force and effect with SBP as the licensor instead of Cerecor, but the duties and obligations of SBP under the assigned Sublicenses will not be greater than the duties of SBP under this Agreement, and the rights of SBP under the assigned Sublicenses will not be less than the rights of SBP under this Agreement, including all financial consideration and other rights of SBP.

9.6.6 If this Agreement is terminated for any reason, then Cerecor shall have the right to dispose of all previously made or partially made Products within a period of one hundred and eighty (180) days following the effective date of any such termination; provided, however, that the sale of such Products shall be subject to the terms of this Agreement including the payment of royalties at the rate and at the time provided herein and the rendering of reports thereon.

9.6.7 In the event this Agreement is terminated by Cerecor pursuant to Section 9.2.1 or by SBP pursuant to 9.3 or 9.4, on written request from SBP (the "***Negotiation Request***"), Cerecor will exclusively negotiate in good faith with SBP or a Third Party designated by SBP (such as a prospective licensee of SBP) for one or more agreements under which SBP and/or such Third Party will acquire a license to and/or, at Cerecor's option, ownership of one or more of, all Patent Rights, know-how, regulatory materials (including any IND and/or BLA covering any Product) and development contracts owned by Cerecor and/or any of its Affiliates or that Cerecor and/or any of its Affiliates has the right to license, in each case necessary for SBP or such Third Party to make, have made (subject to Section 2.2), use, sell, offer for sale, import and otherwise commercially exploit Products described in clause (a) of the definition of Product, in return for mutually agreed consideration payable to Cerecor and/or its Affiliates. If a definitive agreement for such a license and/or acquisition is not executed and delivered by Cerecor, on the one hand, and SBP or such Third Party, on the other hand, within ninety (90) days after the date of the Negotiation Request (the "***Negotiation Period***"), Cerecor shall have no further obligation under this Section 9.6.7. For the avoidance of doubt, this Section 9.6.7 does not obligate Cerecor to maintain any of the assets that could be licensed to or acquired by SBP or its Third Party designee or refrain from licensing and/or selling any or all of such assets, either before its receipt of the Negotiation Request or after the Negotiation Period.

ARTICLE 10
ADDITIONAL PROVISIONS

10.1. **Relationship of the Parties**. Nothing in this Agreement is intended or shall be deemed, for financial, tax, legal or other purposes, to constitute a partnership, agency, joint venture or employer-employee relationship between the Parties. The Parties are independent contractors and at no time will either Party make commitments or incur any charges or expenses for or on behalf of the other Party.

10.2. **Third Party Beneficiary**. The Parties agree that each Sublicensee is a third party beneficiary of this Agreement with respect to Section 9.6.5. (***) is a third party beneficiary of this Agreement with respect to Sections 5.7, 8.1, 8.2 and 10.3 in relation to the (***) Patent Rights. Except as set forth in this Section 10.2, there are no third party beneficiaries to this Agreement.

10.3. **Use of Names**. Cerecor, its Affiliates and Sublicensees may not use the trade name, logo, insignia, symbol, designs, seal, trademark, service mark, or trade dress of (***), SBP or any SBP school, organization, employee, student or representative, without the prior written consent of (***) or SBP, as the case may be. Notwithstanding the foregoing, Cerecor may use the name of (***) and SBP in a non-misleading and factual manner solely in (a) executive summaries, business plans, offering memoranda and other similar documents used by Cerecor for the purpose of raising financing for the operations of Cerecor as related to Product, or entering into commercial contracts with Third Parties, but in such case only to the extent necessary to inform a reader that the (***) Patent Rights are jointly owned by (***) and SBP and have been licensed

by Cerecor and the SBP Patent Rights are owned by SBP and have been licensed by Cerecor and to inform a reader of the identity and published credentials of the inventors, and (b) any securities reports required to be filed with the Securities and Exchange Commission.

10.4. **Successors and Assignment**.

10.4.1 The terms and provisions hereof shall inure to the benefit of, and be binding upon, the Parties and their respective successors and permitted assigns.

10.4.2 Cerecor may not assign or transfer this Agreement or any of Cerecor's rights or obligations created hereunder without the prior written consent of SBP and (***), such consents not to be unreasonably withheld. Notwithstanding the foregoing, no such consent shall be required in connection with an assignment or transfer to an Affiliate of Cerecor or to a successor, whether in a merger, sale of stock, sale of assets or any other transaction, of all or substantially all the business of Cerecor to which this Agreement relates, provided that such successor is a Qualified Biopharmaceutical Company. Any successor that is not a Qualified Biopharmaceutical Company shall require the express written consent of SBP, not to be unreasonably withheld. Any permitted assignee shall assume all obligations of Cerecor under this Agreement and shall provide SBP with an updated Development Plan within sixty (60) days of the assignment. Cerecor shall notify SBP within ten (10) days of any assignment of this Agreement by Cerecor to an Affiliate.

10.4.3 Any assignment not in accordance with this Section 10.4 shall be void.

10.5. **Further Actions**. Each Party agrees to execute, acknowledge and deliver such further instruments and to do all such other acts as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

10.6. **Entire Agreement of the Parties; Amendments**. This Agreement and the Schedules hereto constitute and contain the entire understanding and agreement of the Parties respecting the subject matter hereof and cancel and supersede any and all prior negotiations, correspondence, understandings and agreements between the Parties, whether oral or written, regarding such subject matter. No waiver, modification or amendment of any provision of this Agreement shall be valid or effective unless made in a writing referencing this Agreement and signed by a duly authorized officer of each Party.

10.7. **Governing Law**. This Agreement shall be governed by and interpreted in accordance with the laws of the State of California, excluding application of any conflict of laws principles that would require application of the law of a jurisdiction outside of the State of California.

10.8. **Dispute Resolution**. With respect to any disputes between the Parties, either Party may by written notice refer the dispute to the Chief Executive Officers (or their respective designees) of the Parties to be resolved by negotiation in good faith as soon as is practicable but in no event later than fifteen (15) days after referral. Such resolution, if any, by the Chief Executive Officers (or their respective designees) will be final and binding on the Parties. If the Chief Executive Officers (or their respective designees) are unable to resolve such dispute within such fifteen (15)

day period, then the Parties shall seek to resolve the dispute via non-binding mediation before a single arbitrator under the auspices JAMS, Inc. If the Parties are unable to resolve the dispute within sixty (60) days after the appointment of the arbitrator, then each Party may seek to resolve the dispute in any court of competent jurisdiction.

10.9. **Notices and Deliveries**. Any notice, request, approval or consent required or permitted to be given under this Agreement shall be in writing and directed to a Party at its address or e-mail as shown below or such other address or e-mail as such Party shall have last given by notice to the other Party. A notice will be deemed received: if delivered personally, on the date of delivery; if mailed, five (5) days after deposit in the United States mail; if sent via courier, one (1) business day after deposit with the courier service; or if sent via e-mail, upon receipt of confirmation of transmission provided that a confirming copy of such notice is sent by certified mail, postage prepaid, return receipt requested.

For SBP	with copies to (which shall not constitute notice):
Sanford Burnham Prebys Medical Discovery Institute 10901 North Torrey Pines Road La Jolla, CA 92037 Attention: Intellectual Property Email: (***)	Email: (***)
For Cerecor:	with copies to (which shall not constitute notice):
Cerecor Inc. 1500 Liberty Ridge Drive, Suite 321 Wayne, PA 19087 Attention: Chief Executive Officer	**Troutman Pepper Hamilton Sanders LLP** 3000 Two Logan Square 18th & Arch Streets Philadelphia, PA 19103 Attention: Brian M. Katz, Esquire

10.10. **Waiver**. A waiver by either Party of any of the terms and conditions of this Agreement in any instance shall not be deemed or construed to be a waiver of such term or condition for the future, or of any other term or condition hereof. All rights, remedies, undertakings, obligations and agreements contained in this Agreement shall be cumulative and none of them shall be in limitation of any other remedy, right, undertaking, obligation or agreement of either Party.

10.11. **Severability**. When possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under Law, but if any provision of this Agreement is held to be prohibited by or invalid under law, such provision will be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of this Agreement. The

Parties shall make a good faith effort to replace the invalid or unenforceable provision with a valid one which in its economic effect is most consistent with the invalid or unenforceable provision.

10.12. **Interpretation**. The words "include," "includes" and "including" shall be deemed to be followed by the phrase "without limitation." All references in this Agreement to Articles, Sections, and Schedules shall be deemed references to Articles and Sections of, and Schedules to, this Agreement unless the context shall otherwise require. Except as otherwise expressly provided in this Agreement, all terms of an accounting or financial nature shall be construed in accordance with the Accounting Standards, as in effect from time to time. Unless the context otherwise requires, countries shall include territories. References to any specific Law or article, section or other division thereof, shall be deemed to include the then-current amendments or any replacement Law thereto.

10.13. **Counterparts**. This Agreement may be executed in counterparts, each of which will be deemed an original, and all of which together will be deemed to be one and the same instrument. A facsimile or a portable document format (PDF) copy of this Agreement, including the signature pages, will be deemed an original.

(*signature page follows*)

IN WITNESS WHEREOF, duly authorized representatives of the Parties have executed this Agreement as of the Effective Date.

SANFORD BURNHAM PREBYS MEDICAL DISCOVERY INSTITUTE	CERECOR INC.
By: /s/ Louis R. Coffman	By: /s/ Michael Cola
Name: Louis R. Coffman	Name: Michael Cola
Title: CAO/CFO	Title: Chief Executive Officer

SCHEDULE 1.26

SBP PATENT RIGHTS

SBP Ref. No.	Wilson's Ref. No.	Title	Application No.	Filing Date	Status	Patent No.
(***)	(***)	(***)	(***)	(***)	(***)	
(***)	(***)	(***)	(***)	(***)	(***)	
(***)	(***)	(***)	(***)	(***)	(***)	(***)
(***)	(***)	(***)	(***)	(***)	(***)	
(***)	(***)	(***)	(***)	(***)	(***)	
(***)	(***)	(***)	(***)	(***)	(***)	
(***)	(***)	(***)	(***)	(***)	(***)	(***)
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(***)	(***)	(***)	(***)	(***)	(***)	
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(***)	(***)	(***)	(***)	(***)	(***)	
(***)	(***)	(***)	(***)	(***)	(***)	

SCHEDULE 1.27

(***) PATENT RIGHTS

SBP Ref. No.	Wilson's Ref. No.	Title	Application No.	Filing Date	Status	Patent No.
(***)	(***)	(***)	(***)	(***)	(***)	
(***)	(***)	(***)	(***)	(***)	(***)	
(***)	(***)	(***)	(***)	(***)	(***)	
(***)	(***)	(***)	(***)	(***)	(***)	
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(***)	(***)	(***)	(***)	(***)	(***)	
(***)	(***)	(***)	(***)	(***)	(***)	

Exhibit 10.2

CERTAIN INFORMATION IDENTIFIED WITH THE MARK "(***)" HAS BEEN EXCLUDED FROM THIS EXHIBIT BECAUSE SUCH INFORMATION IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

VENTURE LOAN AND SECURITY AGREEMENT

Dated as of June 4, 2021

by and among

HORIZON TECHNOLOGY FINANCE CORPORATION,
a Delaware corporation,
312 Farmington Avenue
Farmington, CT 06032

as a Lender and Collateral Agent

POWERSCOURT INVESTMENTS XXV, LP,
a Delaware limited partnership,
1251 Avenue of the Americas
New York, NY 10020

as a Lender

and

CERECOR INC.,
a Delaware corporation,
540 Gaither Road, Suite 400
Rockville, MD 20850

as Borrower Representative and a Co-Borrower

EACH SUBSIDIARY LISTED ON SCHEDULE 1 ATTACHED HERETO

each as a Co-Borrower

Loan A Commitment Amount: $5,000,000	Loan A Commitment Termination Date: June 15, 2021
Loan B Commitment Amount: $5,000,000	Loan B Commitment Termination Date: June 15, 2021
Loan C Commitment Amount: $2,500,000	Loan C Commitment Termination Date: June 15, 2021
Loan D Commitment Amount: $7,500,000	Loan D Commitment Termination Date: June 15, 2021
Loan E Commitment Amount: $5,000,000	Loan E Commitment Termination Date: December 31, 2021
Loan F Commitment Amount: $5,000,000	Loan F Commitment Termination Date: December 31, 2021
Loan G Commitment Amount: $2,500,000	Loan G Commitment Termination Date: March 31, 2022
Loan H Commitment Amount: $2,500,000	Loan H Commitment Termination Date: March 31, 2022

The Lenders, Collateral Agent and Co-Borrowers hereby agree as follows:

AGREEMENT

1. Definitions and Construction.

1.1 Definitions. As used in this Agreement, the following capitalized terms shall have the following meanings (such meanings to be equally applicable to both the singular and plural forms of the terms defined):

"Account Control Agreement" means an agreement acceptable to Lenders which perfects via control Lenders' and Collateral Agent's security interest in each Co-Borrower's deposit accounts and/or securities accounts.

"Affiliate" means, with respect to any Person, any other Person that owns or controls directly or indirectly ten percent (10%) or more of the stock of another entity of such Person, any other Person that controls or is controlled by or is under common control with such Person and each of such Person's officers, directors, managers, joint venturers or partners. For purposes of this definition, the term "control" of a Person means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting Equity Securities, by contract or otherwise and the terms "controlled by" and "under common control with" shall have correlative meanings.

"Allocable Amount" has the meaning given such term in Section 16.7(b) of this Agreement.

"Agreement" means this certain Venture Loan and Security Agreement by and among Co-Borrowers, Collateral Agent and Lenders dated as of the date on the cover page hereto (as it may from time to time be amended, modified or supplemented in a writing signed by Co-Borrowers, Collateral Agent and Lenders).

"Anti-Terrorism Laws" means any laws relating to terrorism or money laundering, including Executive Order No. 13224 (effective September 24, 2001), the USA PATRIOT Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

"AOSD Clinical Trial" means Protocol #AEVI-007-AOSD-101, entitled A Phase 1b, Multicenter, Open-Label Study to Evaluate the Safety and Tolerability, Efficacy, Pharmacokinetics, and Pharmacodynamics of AEVI-007 in Subjects with Adult Onset Still's Disease, as may be amended from time to time.

"BD Activities" means transactions and arrangements directed to the research, development, manufacture and/or commercialization of any Co-Borrower's product candidates and/or Intellectual Property related thereto including joint ventures, strategic partnerships, co-development arrangements, co-promotion arrangements, supply agreements and exclusive or

non-exclusive licensing, each under such agreements and on such terms as the Borrower Representative may determine from time to time are in the best interests of the Co-Borrowers.

"Borrower Representative" means Borrower Representative as set forth on the cover page of this Agreement.

"Business Day" means any day that is not a Saturday, Sunday, or other day on which banking institutions are authorized or required to close in Connecticut or Maryland.

"CHOP License Agreement" means that certain License Agreement, dated as of November 12, 2014, by and between Medgenics Medical Israel Ltd. and The Children's Hospital of Philadelphia (as the same may be amended, restated, or extended from time to time).

"CHOP Research Agreement" means that certain Sponsored Research Agreement, dated as of November 12, 2014, by and between The Children's Hospital of Philadelphia and Medgenics Medical Israel Ltd. (as the same may be amended, restated or extended from time to time).

"Claim" has the meaning given such term in Section 10.3 of this Agreement.

"CLM Clinical Trial" means Protocol #CERC-006-LM-101, entitled A Phase 1b, Open-Label, Pharmacokinetic, Pharmacodynamic, Safety and Tolerability Study of CERC-006 in Adults (Aged 18-31 Years) with Complex Lymphatic Malformations, as may be amended from time to time.

"Co-Borrower" means each Co-Borrower as set forth on the cover page of this Agreement and "Co-Borrowers" means all such Co-Borrowers collectively.

"Code" means the Uniform Commercial Code as adopted and in effect in the State of Connecticut, as amended from time to time; provided that if by reason of mandatory provisions of law, the creation and/or perfection or the effect of perfection or non-perfection of the security interest in any Collateral is governed by the Uniform Commercial Code as in effect in a jurisdiction other than the State of Connecticut, the term "Code" shall also mean the Uniform Commercial Code as in effect from time to time in such jurisdiction for purposes of the provisions hereof relating to such creation, perfection or effect of perfection or non-perfection.

"Collateral" has the meaning given such term in Section 4.1 of this Agreement.

"Collateral Agent" means Horizon, or any successor collateral agent appointed by Lenders.

"Commitment Amount" means the Loan A Commitment Amount, the Loan B Commitment Amount, the Loan C Commitment Amount, the Loan D Commitment Amount, the Loan E Commitment Amount, the Loan F Commitment Amount, the Loan G Commitment Amount or the Loan H Commitment Amount, as applicable.

"Commitment Fee" has the meaning given such term in Section 2.6(c) of this Agreement.

"Consolidated" means the consolidation of accounts in accordance with GAAP.

"Control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management, policies or investment decisions of such Person.

"Controlled Investment Affiliate" means, as applied to any Person, any other Person organized for the primary purpose of making equity or debt investments which is directly or indirectly is in Control of, is Controlled by, or is under common Control with, such Person.

"Default" means any Event of Default or any event which with the passing of time or the giving of notice or both would become an Event of Default hereunder.

"Default Rate" means the per annum rate of interest equal to five percent (5%) over the Loan Rate, but such rate shall in no event be more than the highest rate permitted by applicable law to be charged on commercial loans in a default situation.

"Disclosure Schedule" means Exhibit A attached hereto as updated or amended pursuant to an Officer's Certificate or Funding Certificate.

"Environmental Laws" means all foreign, federal, state or local laws, statutes, common law duties, rules, regulations, ordinances and codes, together with all administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authorities, in each case relating to environmental, health, safety and land use matters, including the Comprehensive Environmental Response, Compensation and Liability Act of 1980, the Clean Air Act, the Federal Water Pollution Control Act of 1972, the Solid Waste Disposal Act, the Federal Resource Conservation and Recovery Act, the Toxic Substances Control Act and the Emergency Planning and Community Right-to-Know Act.

"Equity Securities" of any Person means (a) all common stock, preferred stock, participations, shares, partnership interests, membership interests or other equity interests in and of such Person (regardless of how designated and whether or not voting or non-voting) and (b) all warrants, options and other rights to acquire any of the foregoing.

"ERISA" has the meaning given to such term in Section 7.12 of this Agreement.

"Event of Default" has the meaning given to such term in Section 8 of this Agreement.

"Excluded Accounts" means any deposit accounts, securities accounts or other similar accounts of a Co-Borrower (i) into which there are deposited no funds other than those intended solely to cover wages and employee benefit payments for employees (and related contributions to be made on behalf of such employees to health and benefit plans), provided, however that the amount on deposit in such accounts does not exceed the amount necessary to fund one complete payroll cycle of such Co-Borrower, plus balances for outstanding checks for wages from prior periods; (ii) constituting employee withholding accounts and containing only funds deducted from pay otherwise due to employees for services rendered to be applied toward the tax obligations of such employees; and (iii) into which there are deposited no funds other than funds constituting cash collateral in accordance with clause (h) of the definition of Permitted Liens.

"Excluded Property" means, collectively, (i) any interests in real property, other than fee ownership, (ii) property and assets the pledge of which would require governmental consent,

approval, license or authorization or is prohibited or restricted by applicable law (after giving effect to the applicable anti-assignment provisions of the Code or other applicable law), (iii) any lease, license or agreement to the extent that a grant of a security interest therein would violate or invalidate such lease, license or agreement or create a right of termination in favor of any other party thereto or otherwise require consent thereunder (after giving effect to the applicable anti-assignment provisions of the Code or other applicable law), the assignment of which is not expressly deemed ineffective under the Code or other applicable law notwithstanding such prohibition (only so long as such consent has not been obtained and such prohibition exists and provided that such prohibition is not adopted in contemplation of circumventing the obligation to provide Collateral hereunder), (iv) motor vehicles, airplanes and other assets subject to certificates of title (except to the extent a security interest therein can be perfected by the filing of UCC financing statements), (v) letter of credit rights (other than those constituting supporting obligations of other Collateral) of any Co-Borrower below a threshold of One Hundred Thousand Dollars ($100,000), (vi) all Intellectual Property, (vii) equipment or other assets otherwise constituting Collateral owned by any Co-Borrower on the date hereof or hereafter acquired that is subject to a Lien securing purchase money Indebtedness or finance lease obligations permitted to be incurred pursuant to the provisions of this Agreement if the contract or other agreement in which such Lien is granted (or the documentation providing for such purchase money Indebtedness or capital lease obligations) validly prohibits the creation of any other Lien on such equipment or such other asset, (viii) Excluded Accounts, (ix) nonassignable licenses or contracts, which by their terms require the consent of the licensor thereof or another party (but only to the extent such prohibition on transfer is enforceable under applicable law, including, without limitation, Sections 9406, 9407 and 9408 of the Code), (x) any Equity Securities in a Person that is not a wholly-owned Subsidiary to the extent that the grant of a security interest thereon would breach any agreement or governing document with respect thereto (only for so long as such prohibition exists and provided that such prohibition was not adopted in contemplation of circumventing the obligation to provide Collateral hereunder) and (xi) any property or assets to the extent that the creation or perfection of a security interest therein would require agreements or other actions under the laws of any jurisdiction outside of the United States.

"Excluded Taxes" means any of the following Taxes imposed on or with respect to a Lender or required to be withheld or deducted from a payment to a Lender: (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Lender being organized under the laws of, or having its principal office or its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or a commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Loan or commitment or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 2.4(c), amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) Taxes attributable to such Lender's failure to comply with Section 2.4(c)(iv) and (d) any withholding Taxes imposed under FATCA.

"Extended Interest Scheduled Payments" has the meaning given to such term in Section 2.2(a) of this Agreement.

"FATCA" means Sections 1471 through 1474 of the Internal Revenue Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Internal Revenue Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities and implementing such Sections of the Internal Revenue Code.

"FDA" means the United States Food and Drug Administration.

"Funding Certificate" means a certificate executed by a duly authorized Responsible Officer of Borrower Representative substantially in the form of Exhibit B or such other form as Lenders may agree to accept.

"Funding Date" means any date on which a Loan is made to or on account of any Co-Borrower under this Agreement.

"GAAP" means generally accepted accounting principles as in effect in the United States of America from time to time, consistently applied.

"Good Faith Deposit" has the meaning given such term in Section 2.6(a) of this Agreement.

"Governmental Authority" means (a) any federal, state, county, municipal or foreign government, or political subdivision thereof, (b) any governmental or quasi-governmental agency, authority, board, bureau, commission, department, instrumentality or public body, (c) any court or administrative tribunal, or (d) with respect to any Person, any arbitration tribunal or other non-governmental authority to whose jurisdiction that Person has consented.

"Guarantee Agreement" means that certain Guarantee, dated November 1, 2019, made by Borrower Representative in favor of Deerfield CSF, LLC, Peter Steelman and James Flynn, as on effect on the date hereof.

"Guarantor Payment" has the meaning given such term in Section 16.7(a) of this Agreement.

"Hazardous Materials" means all those substances which are regulated by, or which may form the basis of liability under, any Environmental Law, including all substances identified under any Environmental Law as a pollutant, contaminant, hazardous waste, hazardous constituent, special waste, hazardous substance, hazardous material, or toxic substance, or petroleum or petroleum derived substance or waste.

"Horizon" means Horizon Technology Finance Corporation, a Delaware corporation.

"Indebtedness" means, with respect to any Person, the aggregate amount of, without duplication, (a) all obligations of such Person for borrowed money, (b) all obligations of such Person evidenced by bonds, debentures, notes or other similar instruments, (c) all obligations of such Person to pay the deferred purchase price of property or services (excluding trade payables

aged less than one hundred eighty (180) days), (d) all finance lease obligations of such Person, (e) all obligations or liabilities of others secured by a Lien on any asset of such Person, whether or not such obligation or liability is assumed, and (f) all obligations or liabilities of others of the type described in clauses (a) through (d) guaranteed by such Person.

"Indemnified Person" has the meaning given such term in Section 10.3 of this Agreement.

"Indemnified Taxes" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of a Co-Borrower under any Loan Document and (b) to the extent not otherwise described in (a), Other Taxes.

"Initial Scheduled Payments" has the meaning given such term in Section 2.2(a) of this Agreement.

"Intellectual Property" means, with respect to any Person, all of such Person's right, title and interest in and to, whether by ownership or license, patents, patent rights (and applications and registrations therefor and divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same), trademarks and service marks (and applications and registrations therefor and the goodwill associated therewith), whether registered or not, inventions, copyrights (including applications and registrations therefor and like protections in each work or authorship and derivative work thereof), whether published or unpublished, mask works (and applications and registrations therefor), trade names, trade styles, software and computer programs, source code, object code, trade secrets, licenses, methods, processes, know how, drawings, specifications, descriptions, and all memoranda, notes, and records with respect to any research and development, all whether now owned or subsequently acquired or developed by such Person and whether in tangible or intangible form or contained on magnetic media readable by machine together with all such magnetic media (but not including embedded computer programs and supporting information included within the definition of "goods" under the Code).

"Interest Only Extension Milestone" means the applicable Lenders shall have made Loan E and Loan F to or on behalf of Co-Borrowers.

"Internal Revenue Code" has the meaning given such term in Section 5.20 of this Agreement.

"Investment" means the purchase or acquisition of any capital stock, equity interest, or any obligations or other securities of, or any interest in, any Person, or the extension of any advance, loan, extension of credit or capital contribution to, or any other investment in, or bank deposit or securities account with, any Person.

"Landlord Agreement" means an agreement substantially in the form provided by Lenders to any Co-Borrower or such other form as Lenders may agree to accept.

"Lender" means each Lender as set forth on the cover page of this Agreement and "Lenders" means all such Lenders, collectively.

"Lenders' Expenses" means all reasonable and documented costs or expenses (including reasonable and documented attorneys' fees and expenses) incurred in connection with the preparation, negotiation, documentation, drafting, amendment, modification, administration, perfection and funding of the Loan Documents; and all of each Lender's attorneys' fees, costs and expenses incurred in enforcing or defending the Loan Documents (including fees and expenses of appeal or review), including the exercise of any rights or remedies afforded hereunder or under applicable law, whether or not suit is brought, whether before or after bankruptcy or insolvency, including all fees and costs incurred by any Lender in connection with such Lender's enforcement of its rights in a bankruptcy or insolvency proceeding filed by or against any Co-Borrower, any Subsidiary or their respective Property.

"Lien" means any voluntary or involuntary security interest, pledge, bailment, lease, mortgage, hypothecation, conditional sales and title retention agreement, encumbrance or other lien with respect to any Property in favor of any Person.

"Loan" means each advance of credit by any Lender to any Co-Borrower under this Agreement.

"Loan A" means the advance of credit by Horizon to any Co-Borrower under this Agreement in the Loan A Commitment Amount.

"Loan A Commitment Amount" has the meaning set forth on the cover page of this Agreement.

"Loan A Commitment Termination Date" has the meaning set forth on the cover page of this Agreement.

"Loan A Final Payment" has the meaning given such term in Section 2.2(g) of this Agreement.

"Loan Amortization Date" means, with respect to each Loan, the Payment Date on which Co-Borrowers are required, pursuant to Section 2.2(a) below, to commence making equal payments of principal plus accrued interest on the outstanding principal amount of such Loan.

"Loan B" means the advance of credit by Horizon to any Co-Borrower under this Agreement in the Loan B Commitment Amount.

"Loan B Commitment Amount" has the meaning set forth on the cover page of this Agreement.

"Loan B Commitment Termination Date" has the meaning set forth on the cover page of this Agreement.

"Loan B Final Payment" has the meaning given such term in Section 2.2(g) of this Agreement.

"Loan C" means the advance of credit by Horizon to any Co-Borrower under this Agreement in the Loan C Commitment Amount.

"Loan C Commitment Amount" has the meaning set forth on the cover page of this Agreement.

"Loan C Commitment Termination Date" has the meaning set forth on the cover page of this Agreement.

"Loan C Final Payment" has the meaning given such term in Section 2.2(g) of this Agreement.

"Loan D" means the advance of credit by Powerscourt to any Co-Borrower under this Agreement in the Loan D Commitment Amount.

"Loan D Commitment Amount" has the meaning set forth on the cover page of this Agreement.

"Loan D Commitment Termination Date" has the meaning set forth on the cover page of this Agreement.

"Loan D Final Payment" has the meaning given such term in Section 2.2(g) of this Agreement.

"Loan Documents" means, collectively, this Agreement, the Notes, the Warrants, any Landlord Agreement, any Account Control Agreement and all other documents, instruments and agreements entered into in connection with this Agreement.

"Loan E" means the advance of credit by Horizon to any Co-Borrower under this Agreement in the Loan E Commitment Amount.

"Loan E Commitment Amount" has the meaning set forth on the cover page of this Agreement.

"Loan E Commitment Termination Date" has the meaning set forth on the cover page of this Agreement.

"Loan E Final Payment" has the meaning given such term in Section 2.2(g) of this Agreement.

"Loan F" means the advance of credit by Horizon to any Co-Borrower under this Agreement in the Loan F Commitment Amount.

"Loan F Commitment Amount" has the meaning set forth on the cover page of this Agreement.

"Loan F Commitment Termination Date" has the meaning set forth on the cover page of this Agreement.

"Loan F Final Payment" has the meaning given such term in Section 2.2(g) of this Agreement.

"Loan G" means the advance of credit by Horizon to any Co-Borrower under this Agreement in the Loan G Commitment Amount.

"Loan G Commitment Amount" has the meaning set forth on the cover page of this Agreement.

"Loan G Commitment Termination Date" has the meaning set forth on the cover page of this Agreement.

"Loan G Final Payment" has the meaning given such term in Section 2.2(g) of this Agreement.

"Loan H" means the advance of credit by Horizon to any Co-Borrower under this Agreement in the Loan H Commitment Amount.

"Loan H Commitment Amount" has the meaning set forth on the cover page of this Agreement.

"Loan H Commitment Termination Date" has the meaning set forth on the cover page of this Agreement.

"Loan H Final Payment" has the meaning given such term in Section 2.2(g) of this Agreement.

"Loan Rate" means, with respect to each Loan, the sum of (a) the per annum rate of interest from time to time published in the Wall Street Journal, or any successor publication thereto, as the "prime rate" then in effect, plus (b) 6.25%; provided that, in the event such "prime rate" of interest is less than 3.25%, such rate shall be deemed to be 3.25% for purposes of calculating the Loan Rate, provided, further, that if the "prime rate", (a) is no longer reported in the Wall Street Journal, (b) is no longer widely used as a benchmark market rate for new facilities of this type, or (c) becomes permanently unavailable, Lenders shall select a successor benchmark rate, which successor rate shall be applied in a manner consistent with market practice, or if there is no consistent market practice, such successor rate shall be applied in a manner reasonably determined by Lenders. Notwithstanding the foregoing, in no event shall the Loan Rate be less than 9.50%. Each Co-Borrower acknowledges that the "prime rate" is used for reference purposes only as an index and is not necessarily the lowest or the best interest rate charged to any borrower of any Lender.

"Material Adverse Effect" means a material adverse effect on (a) the condition (financial or otherwise), business, operations, Properties or prospects of Borrower Representative or of Co-Borrowers in the aggregate and their Subsidiaries taken as a whole, (b) the ability of Borrower Representative or of Co-Borrowers in the aggregate and their Subsidiaries taken as a whole to perform their Obligations under the Loan Documents or (c) the Collateral or Collateral Agent's or any Lender's security interest in the Collateral.

"Maturity Date" means, with respect to each Loan, forty-two (42) months from the first day of the month next following the month in which the Funding Date for such Loan occurs, or if

earlier, the date of acceleration of such Loan following an Event of Default or the date of prepayment, whichever is applicable.

"Milestones" means (a) the achievement of (i) Positive Data CERC-002, (ii) Positive Data CERC-006, (iii) Positive Data CERC-007 AOS, (iv) Positive Data CERC-007 Multiple Myeloma, (v) Positive Data CERC-801, (vi) Positive Data CERC-802 or (vii) Positive Data CERC-803 or (***).

"Multiple Myeloma Clinical Trial" means Protocol #AEVI-007-MM-101, entitled A Multicenter, Open-Label, Dose-Escalation Phase 1b Study of AEVI-007 in Subjects with Relapsed or Refractory Multiple Myeloma, as may be amended from time to time.

"Note" means each promissory note executed in connection with a Loan in substantially the form of Exhibit C attached hereto.

"Obligations" means all debt, principal, interest, fees, charges, expenses and attorneys' fees and costs and other amounts, obligations, covenants, and duties owing by any Co-Borrower to Collateral Agent or any Lender of any kind and description (whether pursuant to or evidenced by the Loan Documents (other than the Warrants), or by any other agreement between Lenders and any Co-Borrower (other than the Warrants), and whether or not for the payment of money), whether direct or indirect, absolute or contingent, due or to become due, now existing or hereafter arising, including all Lenders' Expenses.

"OFAC" means the Office of Foreign Assets Control of the United States Department of the Treasury.

"Officer's Certificate" means a certificate executed by a Responsible Officer of Borrower Representative substantially in the form of Exhibit E attached hereto or such other form as Lenders may agree to accept.

"Other Connection Taxes" means, with respect to any Lender, Taxes imposed as a result of a present or former connection between such Lender and the jurisdiction imposing such Tax (other than connections arising from such Lender having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

"Other Taxes" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment.

"Payment Date" has the meaning given such term in Section 2.2(a) of this Agreement.

"Pediatric Onset Crohn's Disease Clinical Trial" means Protocol #MDGN-002-CD-101, entitled Phase Ib Escalating Dose, Open-Label, Signal-Finding Study to Evaluate the Safety, Tolerability, and Short-Term Efficacy of the Anti-Light Monoclonal Antibody MDGN-002 in

Adults with Moderate to Severe Active Crohn's Disease (CD) who have Failed Prior Treatment with an Anti-TNFα Agent, with and without Loss of Function Mutations in Decoy Receptor 3 (DcR3) (Anti-LIGHT in Anti-TNFα-Resistant Crohn's Disease [TRaCk LIGHT]), as may be amended from time to time.

"Permitted Holders" means Armistice Capital Master Fund Ltd. or any Controlled Investment Affiliate thereof.

"Permitted Indebtedness" means and includes:

(a) Indebtedness of each Co-Borrower to Lenders under the Loan Documents;

(b) Indebtedness arising from the endorsement of instruments in the ordinary course of business;

(c) Indebtedness of any Co-Borrower existing on the date hereof and set forth on the Disclosure Schedule;

(d) Obligations of Borrower Representative pursuant to the terms of the Guarantee Agreement, in an aggregate amount not to exceed (***) Dollars (***);

(e) Obligations of Borrower Representative pursuant to the terms of the Supply Agreement, in an amount not to exceed (***) Dollars (***) per year;

(f) obligations to pay performance-based milestones, earnouts or royalties in existence as of the date of this Agreement or entered into in connection with acquisitions of Intellectual Property whether by ownership, license, sublicense and similar arrangement for the use of Intellectual Property in the ordinary course of business or Investments otherwise permitted under this Agreement;

(g) intercompany Indebtedness owed by any Subsidiary to any Co-Borrower or any wholly-owned Subsidiary, as applicable; provided that, if applicable, such Indebtedness is also permitted as a Permitted Investment and, in the case of such Indebtedness owed to any Co-Borrower, such Indebtedness shall be evidenced by one or more promissory notes;

(h) Indebtedness pursuant to corporate credit cards incurred in the ordinary course of business, in an amount not to exceed One Hundred Fifty Thousand Dollars ($150,000) at any time outstanding;

(i) Indebtedness owed to any Person (including obligations in respect of letters of credit for the benefit of such Person) providing workers' compensation, health, disability or other employee benefits or property, casualty, liability insurance, self-insurance, pursuant to reimbursement or indemnification obligations to such Person, in each case incurred in the ordinary course of business;

(j) Indebtedness in respect of or guarantee of performance bonds, bid bonds, appeal bonds, surety bonds, performance and completion guarantees, workers'

compensation claims, letters of credit, bank guarantees and banker's acceptances, warehouse receipts or similar instruments and similar obligations (other than in respect of other Indebtedness for borrowed money) including those incurred to secure health, safety and environmental obligations, in each case provided in the ordinary course of business;

(k) Indebtedness consisting of the financing of insurance premiums;

(l) endorsement of instruments or other payment items for deposit in the ordinary course of business and Indebtedness arising from the honoring by a bank or other financial institution of a check, draft or similar instrument inadvertently drawn against insufficient funds in the ordinary course of business; and

(m) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness under subsections (a) through (l) above; provided that the principal amount thereof is not increased or the terms thereof are not modified to impose materially more burdensome terms upon such Co-Borrower.

"Permitted Investments" means and includes any of the following Investments:

(a) Deposits and deposit accounts with commercial banks that are organized under the laws of the United States or a state thereof and: (i) the deposit accounts of each such institution are insured by the Federal Deposit Insurance Corporation up to the legal limit; and (ii) each such institution has an aggregate capital and surplus of not less than One Hundred Million Dollars ($100,000,000);

(b) Investments in marketable obligations issued or fully guaranteed by the United States and maturing not more than one (1) year from the date of issuance;

(c) Investments in open market commercial paper rated at least "A1" or "P1" or higher by a national credit rating agency and maturing not more than one (1) year from the creation thereof;

(d) Investments pursuant to or arising under currency agreements or interest rate agreements entered into in the ordinary course of business;

(e) other cash management Investments in the ordinary course of business and consistent with Borrower Representative's investment policy as in effect on the date hereof;

(f) Investments (i) by any Co-Borrower and its Subsidiaries in their Subsidiaries outstanding on the date hereof, (ii) by a Co-Borrower or guarantor into another Co-Borrower or guarantor and (iii) by any Co-Borrower or guarantor in any Subsidiaries that are not Co-Borrowers or guarantors in an aggregate amount not to exceed Two Hundred Thousand Dollars ($200,000) in any fiscal year;

(g) Investments made, accepted or received in connection with Permitted Transfers;

(h) acquisitions of Intellectual Property whether by ownership, licenses, sublicenses and similar arrangements for the use of Intellectual Property in the ordinary course of business;

(i) payments by Borrower Representative on behalf of Medgenics Medical Israel Ltd. of amounts due under the CHOP Research Agreement in an amount not to exceed Five Hundred Thousand Dollars ($500,000);

(j) payments by Borrower Representative on behalf of Medgenics Medical Israel Ltd. of amounts due under the CHOP License Agreement in an amount not to exceed Two Hundred Fifty Thousand Dollars ($250,000) per year; and

(k) other Investments aggregating not in excess of One Hundred Thousand Dollars ($100,000) at any time.

"Permitted Liens" means and includes:

(a) the Liens created by this Agreement;

(b) Liens for fees, taxes, levies, imposts, duties or other governmental charges of any kind which are not yet delinquent or which are being contested in good faith by appropriate proceedings which suspend the collection thereof (provided that such appropriate proceedings do not involve any substantial danger of the sale, forfeiture or loss of any material item of Collateral which in the aggregate is material to any Co-Borrower or Co-Borrowers in the aggregate and that any Co-Borrower has adequately bonded such Lien or reserves sufficient to discharge such Lien have been provided on the books of such Co-Borrower);

(c) Liens identified on the Disclosure Schedule;

(d) carriers', warehousemen's, mechanics', materialmen's, repairmen's or other similar Liens arising in the ordinary course of business and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings (provided that such appropriate proceedings do not involve any substantial danger of the sale, forfeiture or loss of any material item of Collateral or Collateral which in the aggregate is material to any Co-Borrower or Co-Borrowers in the aggregate and that any Co-Borrower has adequately bonded such Lien or reserves sufficient to discharge such Lien have been provided on the books of such Co-Borrower);

(e) rights of lessors or licensors under leases, subleases, licenses or sublicenses of real or personal property to Co-Borrowers or their Subsidiaries;

(f) Permitted Out-Bound Licenses and other Permitted Transfers;

(g) security deposits in connection with real property leases;

(h) deposits under worker's compensation, unemployment insurance, social security and other similar laws, or to secure the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure indemnity, performance or other similar bonds for the performance of bids, tenders or contracts (other than for the repayment of

borrowed money) or to secure statutory obligations (other than Liens arising under ERISA or environmental Liens) or surety or appeal bonds, or to secure indemnity, performance or other similar bonds;

(i) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of custom duties that are promptly paid on or before the date they become due;

(j) statutory and common law rights of set-off and other similar rights as to deposits of cash and securities in favor of banks, other depository institutions and brokerage firms;

(k) Liens (1) of a collecting bank arising in the ordinary course of business under Section 4-208 (or Section 4-210, as applicable) of the Code in effect in the relevant jurisdiction covering only the items being collected upon or (2) in favor of a banking or other financial institution arising as a matter of law encumbering deposits or other funds maintained with a financial institution (including the right of set off) and which are within the general parameters customary in the banking industry;

(l) Liens arising from judgments, decrees or attachments in circumstances which do not constitute an Event of Default hereunder;

(m) Liens on insurance proceeds securing the payment of financed insurance premiums that are promptly paid on or before the date they become due (provided that such Liens extend only to such insurance proceeds and not to any other property or assets);

(n) utility and similar deposits in the ordinary course of business;

(o) Liens that are contractual rights of set-off relating to agreements entered into by any Co-Borrower or any Subsidiary in the ordinary course of business; and

(p) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clauses (a) through (z) above; provided, that any extension, renewal or replacement Lien (i) shall not apply to any other property or asset of any Co-Borrower or any Subsidiary (other than any replacements of such property or assets and additions and accessions thereto) and (ii) shall secure only those obligations and unused commitment that it secures on the date hereof and extensions, renewals and replacements thereof permitted hereunder (plus any accrued but unpaid interest (including any portion thereof which is payable in kind in accordance with the terms of such extended, renewed or replaced Indebtedness) and premium payable by the terms of such obligations thereon and reasonable fees and expenses associated therewith).

"Permitted Out-Bound Licenses" means (i) non-exclusive licenses of Intellectual Property, (ii) exclusive licenses of Intellectual Property applicable solely outside the United States, provided that such exclusive licenses do not result in a legal transfer of title of the licensed Intellectual Property and (iii) exclusive licenses of Intellectual Property that are exclusive as to the United States in connection with BD Activities, provided that (x) no Event of

Default is in existence at the time such license is entered into and (y) such exclusive licenses do not result in a legal transfer of title of the licensed Intellectual Property.

"Permitted Transfer" has the meaning given such term in Section 7.4 of this Agreement.

"Person" means and includes any individual, any partnership, any corporation, any business trust, any joint stock company, any limited liability company, any unincorporated association or any other entity and any domestic or foreign national, state or local government, any political subdivision thereof, and any department, agency, authority or bureau of any of the foregoing.

"Positive Data CERC-002" means with respect to the Pediatric Onset Crohn's Disease Clinical Trial that the data from such trial demonstrates that (i) the adverse events that occurred during such trial do not, in Borrower Representative's reasonable opinion, prevent the continuing clinical development of CERC-002 for the treatment of pediatric onset Crohn's Disease, (***).

"Positive Data CERC-006" means with respect to the CLM Clinical Trial that the data from such trial demonstrates that (i) the adverse events that occurred during such trial do not, in Borrower Representative's reasonable opinion, prevent the continuing clinical development of CERC-006 for the treatment of complex lymphatic malformations and (***).

"Positive Data CERC-007 AOSD" means with respect to the AOSD Clinical Trial that the data from such trial demonstrates that (i) the adverse events that occurred during such trial do not, in Borrower Representative's reasonable opinion, prevent the continuing clinical development of CERC-007 for the treatment of adult on-set Still's disease, (***).

"Positive Data CERC-007 Multiple Myeloma" means with respect to the Multiple Myeloma Clinical Trial that the data from such trial demonstrates that (i) the adverse events that occurred during such trial do not, in Borrower Representative's reasonable opinion, prevent the continuing clinical development of CERC-007 for the treatment of multiple myeloma, (***).

"Positive Data CERC-801" means (***).

"Positive Data CERC-802" means (***).

"Positive Data CERC-803" means (***).

"Powerscourt" means Powerscourt Investments XXV, LP, a Delaware limited partnership.

"Property" means any interest in any kind of property or asset, whether real, personal or mixed, whether tangible or intangible.

"Register" has the meaning given such term in Section 12.9 of this Agreement.

"Responsible Officer" has the meaning given such term in Section 6.3 of this Agreement.

"Restricted License" means any license or other agreement with respect to which any Co-Borrower is the licensee and such license or agreement is material to any Co-Borrower's

business and (a) that prohibits or otherwise restricts any Co-Borrower from granting a security interest in such Co-Borrower's interest in such license or agreement or any other property (other than any customary anti-assignment provisions in such license or other agreement) or (b) for which a default thereunder or termination thereof could interfere with Collateral Agent's or Lenders' right to sell any Collateral.

"Rights to Payment" has the meaning given such term in Section 4.1 of this Agreement.

"Sanctions" means any sanction administered or enforced by the United States Government (including, without limitation, OFAC and the United States Department of State), the United Nations Security Council, the European Union, Her Majesty's Treasury or other relevant sanctions authority.

"Scheduled Payments" has the meaning given such term in Section 2.2(a) of this Agreement.

"Solvent" has the meaning given such term in Section 5.12 of this Agreement.

"Subsidiary" means any corporation or other entity of which a majority of the outstanding Equity Securities entitled to vote for the election of directors or other governing body (otherwise than as the result of a default) is owned by any Co-Borrower directly or indirectly through Subsidiaries.

"Supply Agreement" means that certain Supply and Distribution Agreement, dated as of August 9, 2013, by and between TRIS Pharma, Inc. ("Tris") and FSC Laboratories, Inc. ("FSC"), as amended by that certain First Amendment to Supply and Distribution Agreement dated as of August 13, 2014 and by that certain letter agreement dated as of February 24, 2016, as assigned to Borrower Representative pursuant to an Asset Purchase Agreement, dated as of February 18, 2018, by and between Borrower Representative and Avadel US Holdings, Inc., as successor in interest to FSC, as further amended by that certain Amendment No. 3 to Supply and Distribution Agreement, dated as of October 29, 2019, by and between Tris and Borrower Representative, and as further assigned to Aytu BioScience, Inc. (" Aytu") pursuant to that certain Consent to Assignment of Contract, dated as of October 29, 2019, by and between Borrower Representative and Aytu.

"Taxes" means all present or future taxes, levies, imposts, duties, deductions, withholdings, assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

"Transfer" has the meaning given such term in Section 7.4 of this Agreement.

"Warrant" means the separate warrant or warrants dated on or about the date hereof in favor of each Lender or its designees to purchase securities of Borrower Representative.

1 . 2 Construction. References in this Agreement to "Articles," "Sections," "Exhibits," "Schedules" and "Annexes" are to recitals, articles, sections, exhibits, schedules and annexes herein and hereto unless otherwise indicated. References in this Agreement and each of the other Loan Documents to any document, instrument or agreement shall include (a) all

exhibits, schedules, annexes and other attachments thereto, (b) all documents, instruments or agreements issued or executed in replacement thereof, and (c) such document, instrument or agreement, or replacement or predecessor thereto, as amended, modified and supplemented from time to time and in effect at any given time (subject, in the case of clauses (b) and (c), to any restrictions on such replacement, amendment, modification or supplement set forth in the Loan Documents). The words "hereof," "herein" and "hereunder" and words of similar import when used in this Agreement or any other Loan Document shall refer to this Agreement or such other Loan Document, as the case may be, as a whole and not to any particular provision of this Agreement or such other Loan Document, as the case may be. The words "include" and "including" and words of similar import when used in this Agreement or any other Loan Document shall not be construed to be limiting or exclusive. Unless the context requires otherwise, any reference in this Agreement or any other Loan Document to any Person shall be construed to include such Person's successors and assigns. Unless otherwise indicated in this Agreement or any other Loan Document, all accounting terms used in this Agreement or any other Loan Document shall be construed, and all accounting and financial computations hereunder or thereunder shall be computed, in accordance with GAAP, and all terms describing Collateral shall be construed in accordance with the Code. The terms and information set forth on the cover page of this Agreement are incorporated into this Agreement.

2. Loans; Repayment.

2.1 Commitments.

(a) The Commitment Amounts. Subject to the terms and conditions of this Agreement, and relying upon the representations and warranties herein set forth as and when made or deemed to be made, (i) Horizon agrees to lend to Co-Borrowers (A) prior to the Loan A Commitment Termination Date, Loan A, (B) prior to the Loan B Commitment Termination Date, Loan B, (C) prior to the Loan C Commitment Termination Date, Loan C, (D) prior to the Loan E Commitment Termination Date, Loan E, (E) prior to the Loan F Commitment Termination Date, Loan F, (F) prior to the Loan G Commitment Termination Date, Loan G, and (G) prior to the Loan H Commitment Termination Date, Loan H, and (ii) Powerscourt agrees to lend to Co-Borrowers prior to the Loan D Commitment Termination Date, Loan D.

(b) The Loans and the Notes. The obligation of each Co-Borrower to repay the unpaid principal amount of and interest on each Loan shall be evidenced by a Note issued to the relevant Lender.

(c) Use of Proceeds. The proceeds of each Loan shall be used solely for working capital or general corporate purposes of Co-Borrowers and their Subsidiaries.

(d) Termination of Commitment to Lend. Notwithstanding anything in the Loan Documents, each respective Lender's obligation to lend the undisbursed portion of its Commitment Amount to Co-Borrowers hereunder shall terminate on the earlier of (i) at such Lender's sole election, the occurrence of any Default or Event of Default hereunder, and (ii) (A) with respect to Loan A, the Loan A Commitment Termination Date, (B) with respect to Loan B, the Loan B Commitment Termination Date, (C) with respect to Loan C, the Loan C Commitment Termination Date, (D) with respect to Loan D, the Loan D Commitment Termination Date, (E) with respect to Loan E, the Loan E Commitment Termination Date, (F) with respect to Loan F,

the Loan F Commitment Termination Date, (G) with respect to Loan G, the Loan G Commitment Termination Date and (H) with respect to Loan H, the Loan H Commitment Termination Date. Notwithstanding the foregoing, each Lender's obligation to lend the undisbursed portion of its Commitment Amount to Co-Borrowers shall terminate if, in such Lender's reasonable discretion, there has been a material adverse change in the general affairs, management, results of operations, condition (financial or otherwise) or prospects of Borrower Representative or of Co-Borrowers in the aggregate and their Subsidiaries, taken as a whole, whether or not arising from transactions in the ordinary course of business, or there has been any material adverse deviation by any Co-Borrower or Co-Borrowers in the aggregate from the business plan of Co-Borrowers presented to Lenders on or before the date of this Agreement.

2.2 Payments.

(a) Scheduled Payments. Co-Borrowers shall make (i) a payment of accrued interest only to each applicable Lender on the outstanding principal amount of each Loan on the first eighteen (18) Payment Dates specified in the Note applicable to such Loan and (ii) an equal payment of principal plus accrued interest to each applicable Lender on the outstanding principal amount of each Loan on the next twenty-four (24) Payment Dates as set forth in the Note applicable to such Loan (such payments, the "Initial Scheduled Payments"). Notwithstanding, and in lieu of, the foregoing, if (i) the Interest Only Extension Milestone is satisfied, and (ii) no Default or Event of Default exists under this Agreement, Co-Borrowers shall make (A) a payment of accrued interest only to each applicable Lender on the outstanding principal amount of each Loan on the first twenty-four (24) Payment Dates specified in the Note applicable to such Loan and (B) an equal payment of principal plus accrued interest to each applicable Lender on the outstanding principal amount of each Loan on the next eighteen (18) Payment Dates as set forth in the Note applicable to such Loan (such payments, the "Extended Interest Scheduled Payments" and collectively with the Initial Scheduled Payments, the "Scheduled Payments"). Co-Borrowers shall make such Scheduled Payments commencing on the date set forth in the Note applicable to such Loan and continuing thereafter on the first Business Day of each calendar month (each a "Payment Date") through the Maturity Date. In any event, all unpaid principal and accrued interest shall be due and payable in full on the Maturity Date applicable to such Loan.

(b) Interim Payment. Unless the Funding Date for a Loan is the first day of a calendar month, Co-Borrowers shall pay the per diem interest (accruing at the Loan Rate from the Funding Date through the last day of that month) payable with respect to such Loan on the first Business Day of the next calendar month.

(c) Payment of Interest. Co-Borrowers shall pay interest on each Loan at a per annum rate of interest equal to the Loan Rate. Changes to the Loan Rate based on changes to the Prime Rate (or such substitute benchmark rate selected in accordance with the definition of "Loan Rate" set forth in Section 1.1 above) shall be effective on the effective date of any change to the Prime Rate (or such substitute benchmark rate selected in accordance with the definition of "Loan Rate" set forth in Section 1.1 above) and to the extent of any such change. Interest (including interest at the Default Rate, if applicable) shall be computed on the basis of a 360-day year for the actual number of days elapsed. Notwithstanding any other provision hereof, the

amount of interest payable hereunder shall not in any event exceed the maximum amount permitted by the law applicable to interest charged on commercial loans.

(d) Application of Payments. All payments received by Lenders prior to an Event of Default shall be applied as follows: (i) first, to each Lender's pro rata portion of the Lenders' Expenses then due and owing; and (ii) second, ratably, to all Scheduled Payments then due and owing (provided, however, if such payments are not sufficient to pay the whole amount then due, such payments shall be applied first to unpaid interest at the Loan Rate, then to the remaining amounts then due). After an Event of Default, all payments and application of proceeds shall be made as set forth in Section 9.7.

(e) Late Payment Fee. Borrower shall pay to each Lender a late payment fee equal to six percent (6%) of any Scheduled Payment not paid when due to such Lender.

(f) Default Rate. Co-Borrowers shall pay interest at a per annum rate equal to the Default Rate on any amounts required to be paid by any Co-Borrower to Collateral Agent or any Lender under this Agreement or the other Loan Documents (including Scheduled Payments), payable with respect to any Loan, accrued and unpaid interest, and any fees or other amounts which remain unpaid after such amounts are due. If an Event of Default has occurred and the Obligations have been accelerated (whether automatically or by any Lender's election), Co-Borrowers shall pay interest on the aggregate, outstanding accelerated balance hereunder from the date of the Event of Default until all Events of Default are cured, at a per annum rate equal to the Default Rate.

(g) Final Payment.

(i) Loan A Final Payment. Co-Borrowers shall pay to Horizon a payment in the amount of One Hundred Fifty Thousand Dollars ($150,000) (the "Loan A Final Payment") upon the earlier of (A) payment in full of the principal balance of Loan A, (B) an Event of Default and demand by such Lender of payment in full of Loan A or (C) the Maturity Date, as applicable.

(ii) Loan B Final Payment. Co-Borrowers shall pay to Horizon a payment in the amount of One Hundred Fifty Thousand Dollars ($150,000) (the "Loan B Final Payment") upon the earlier of (A) payment in full of the principal balance of Loan B, (B) an Event of Default and demand by such Lender of payment in full of Loan B or (C) the Maturity Date, as applicable.

(iii) Loan C Final Payment. Co-Borrowers shall pay to Horizon a payment in the amount of Seventy-Five Thousand Dollars ($75,000) (the "Loan C Final Payment") upon the earlier of (A) payment in full of the principal balance of Loan C, (B) an Event of Default and demand by such Lender of payment in full of Loan C or (C) the Maturity Date, as applicable

(iv) Loan D Final Payment. Co-Borrowers shall pay to Powerscourt a payment in the amount of Two Hundred Twenty-Five Thousand Dollars ($225,000) (the "Loan D Final Payment") upon the earlier of (A) payment in full of the principal

balance of Loan D, (B) an Event of Default and demand by such Lender of payment in full of Loan D or (C) the Maturity Date, as applicable.

(v) Loan E Final Payment. Co-Borrowers shall pay to Horizon a payment in the amount of One Hundred Fifty Thousand Dollars ($150,000) (the "Loan E Final Payment") upon the earlier of (A) payment in full of the principal balance of Loan E, (B) an Event of Default and demand by such Lender of payment in full of Loan E or (C) the Maturity Date, as applicable.

(vi) Loan F Final Payment. Co-Borrowers shall pay to Horizon a payment in the amount of One Hundred Fifty Thousand Dollars ($150,000) (the "Loan F Final Payment") upon the earlier of (A) payment in full of the principal balance of Loan F, (B) an Event of Default and demand by such Lender of payment in full of Loan F or (C) the Maturity Date, as applicable.

(vii) Loan G Final Payment. Co-Borrowers shall pay to Horizon a payment in the amount of Seventy-Five Thousand Dollars ($75,000) (the "Loan G Final Payment") upon the earlier of (A) payment in full of the principal balance of Loan G, (B) an Event of Default and demand by such Lender of payment in full of Loan G or (C) the Maturity Date, as applicable.

(viii) Loan H Final Payment. Co-Borrowers shall pay to Horizon a payment in the amount of Seventy-Five Thousand Dollars ($75,000) (the "Loan H Final Payment") upon the earlier of (A) payment in full of the principal balance of Loan H, (B) an Event of Default and demand by such Lender of payment in full of Loan H or (C) the Maturity Date, as applicable.

2.3 Prepayments.

(a) Mandatory Prepayment Upon an Acceleration. If the Loans are accelerated following the occurrence of an Event of Default pursuant to Section 9.1(a) hereof, then Co-Borrowers, in addition to any other amounts which may be due and owing hereunder, shall immediately pay to Lenders the amount set forth in Section 2.3(b) below, as if Co-Borrowers had opted to prepay on the date of such acceleration.

(b) Optional Prepayment. Upon ten (10) Business Days' prior written notice to Lenders, Co-Borrowers may, at their option, at any time, prepay all (and not less than all) of the outstanding Loans by simultaneously paying to each Lender an amount equal to (i) any accrued and unpaid interest on the outstanding principal balance of its Loans; *plus* (ii) an amount equal to (A) if such Loan is prepaid on or before the Loan Amortization Date applicable to such Loan, three percent (3%) of the then outstanding principal balance of such Loan, (B) if such Loan is prepaid after the Loan Amortization Date applicable to such Loan, but on or before the date that is twelve (12) months after such Loan Amortization Date, two percent (2%) of the then outstanding principal balance of such Loan, or (C) if such Loan is prepaid more than twelve (12) months after the Loan Amortization Date applicable to such Loan, one percent (1%) of the then outstanding principal balance of such Loan; *plus* (iii) the outstanding principal balance of such Loan; *plus* (iv) all other sums, if any, that shall have become due and payable hereunder.

2.4 Other Payment Terms.

(a) Place and Manner. Co-Borrowers shall make all payments due to Lenders in lawful money of the United States. All payments of principal, interest, fees and other amounts payable by any Co-Borrower hereunder shall be made, in immediately available funds, not later than 10:00 a.m. Connecticut time, on the date on which such payment is due. Co-Borrowers shall make such payments to each Lender via wire transfer or ACH as instructed by such Lender from time to time.

(b) Date. Whenever any payment is due hereunder on a day other than a Business Day, such payment shall be made on the next succeeding Business Day, and such extension of time shall be included in the computation of interest or fees, as the case may be.

(c) Taxes.

(i) Unless otherwise required under applicable law, any and all payments made hereunder or under the Notes shall be made free and clear of and without deduction for any Taxes; provided that if any Co-Borrower shall be required to deduct any Taxes from such payments, then (A) if such Taxes are Indemnified Taxes, then the sum payable shall be increased as necessary so that after making all required deductions for such Indemnified Taxes (including deductions applicable to additional sums payable under this Section 2.4(c)) the relevant Lender receives an amount equal to the sum it would have received had no such deductions been made, (B) such Co-Borrower shall make such deductions and (C) such Co-Borrower shall pay the full amount deducted to the relevant Governmental Authority in accordance with applicable law.

(ii) Co-Borrowers shall indemnify each Lender, within ten (10) days after written demand therefor, for the full amount of any Indemnified Taxes imposed or asserted directly on such Lender by any Governmental Authority on or attributable to amounts payable under this Agreement solely as a result of such Lender entering into this Agreement to the extent such Indemnified Taxes are paid by such Lender, and any penalties, interest and reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to Borrower Representative by a Lender shall be conclusive absent manifest error.

(iii) As soon as practicable after any payment of Taxes by a Co-Borrower hereunder to a Governmental Authority, such Co-Borrower shall deliver to Lenders the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to Lenders.

(iv) If any Lender is entitled to an exemption from or reduction of withholding Tax, with respect to payments under this Agreement, such Lender shall deliver to Borrower Representative, as reasonably requested by Borrower Representative, such properly completed and executed documentation prescribed by applicable law as will permit such payments to be made without withholding or at a reduced rate. In addition, any Lender, if reasonably requested by Borrower Representative, shall deliver such other documentation

prescribed by applicable law or reasonably requested by Borrower Representative as will enable Borrower Representative or the applicable Co-Borrower to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding the generality of the foregoing, any Lender that is a U.S. Person shall deliver to Borrower Representative on or about the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower Representative), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax. Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify Borrower Representative in writing of its legal inability to do so.

(v) If a Lender receives a refund in respect of Taxes paid by any Co-Borrower pursuant to this Section 2.4(c), which in the sole discretion of such Lender exercised in good faith is allocable to such payment, it shall promptly pay such refund, together with any other amounts paid by such Co-Borrower in connection with such refunded Taxes, to such Co-Borrower, net of all out-of-pocket expenses (including any Taxes to which such Lender has become subject as a result of its receipt of such refund) of such Lender incurred in obtaining such refund and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund); provided that such Co-Borrower, upon the request of the applicable Lender, shall repay to such Lender amounts paid over pursuant to the preceding clause (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such Lender is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (v), in no event will any Lender be required to pay any amount to any Co-Borrower pursuant to this paragraph (v) the payment of which would place such Lender in a less favorable net after-Tax position than such Lender would have been in if the indemnification payments or additional amounts giving rise to such refund had never been paid. This paragraph shall not be construed to require any Lender to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to any Co-Borrower or any other Person.

2.5 Procedure for Making the Loans.

(a) Notice. Borrower Representative shall notify each Lender of the date on which Co-Borrowers desires a Lender to make any Loan at least five (5) Business Days in advance of the desired Funding Date, unless the relevant Lender elects at its sole discretion to allow the Funding Date for a Loan to be made by such Lender to be within five (5) Business Days of Borrower Representative's notice. Each Co-Borrower's execution and delivery to Lenders of one or more Notes in respect of a Loan shall be such Co-Borrower's agreement to the terms and calculations thereunder with respect to such Loan. Each Lender's obligation to make any Loan shall be expressly subject to the satisfaction of the conditions set forth in Section 3.

(b) Loan Rate Calculation. Prior to each Funding Date for any Loan, the applicable Lender shall establish the Loan Rate with respect to such Loan, which shall be conclusive in the absence of a manifest error.

(c) Disbursement. Lenders shall disburse the proceeds of each Loan by wire transfer to Co-Borrowers at the account(s) specified in the Funding Certificate for such Loan.

2.6 Good Faith Deposit; Legal and Closing Expenses; and Commitment Fee.

(a) Good Faith Deposit. Co-Borrowers have delivered to Horizon a good faith deposit in the amount of One Hundred Thousand Dollars ($100,000) (the "Good Faith Deposit"). The Good Faith Deposit paid to Horizon will be credited to the Commitment Fee payable to Horizon. If the Funding Date does not occur, Lenders shall retain the Good Faith Deposit as compensation for their time, expenses and opportunity cost.

(b) Legal, Due Diligence and Documentation Expenses. Concurrently with its execution and delivery of this Agreement, Co-Borrowers shall pay to Lenders all of Lenders' reasonable and documented legal, due diligence and documentation expenses in connection with the negotiation and documentation of this Agreement and the Loan Documents.

(c) Commitment Fee. Co-Borrowers shall pay, concurrently with their execution and delivery of this Agreement, a commitment fee in the amount of Three Hundred Fifty Thousand Dollars ($350,000) (the "Commitment Fee"). The Commitment Fee shall be paid by Co-Borrowers as set forth in the Funding Certificate. The Commitment Fee shall be retained by the applicable Lender and be deemed fully earned upon receipt.

3. Conditions of Loans.

3.1 Conditions Precedent to Closing. At the time of the execution and delivery of this Agreement, each Lender shall have received, in form and substance reasonably satisfactory to such Lender, all of the following (unless all Lenders have agreed to waive such condition or document, in which case such condition or document shall be a condition precedent to the making of any Loan and shall be deemed added to Section 3.2):

(a) Loan Agreement. This Agreement duly executed by Co-Borrowers, Collateral Agent and Lenders.

(b) Warrants. The Warrants duly executed by Borrower Representative.

(c) Secretary's Certificate. A certificate of the secretary or assistant secretary of each Co-Borrower, dated as of the date hereof, with copies of the following documents attached: (i) the certificate of incorporation and bylaws (or equivalent documents) of such Co-Borrower certified by such Co-Borrower as being complete and in full force and effect on the date thereof, (ii) incumbency and representative signatures, and (iii) resolutions authorizing the execution and delivery of this Agreement and each of the other Loan Documents.

(d) Good Standing Certificates. A good standing certificate from each Co-Borrower's state of organization and the state in which such Co-Borrower's principal place of business is located, each dated as of a date no earlier than thirty (30) days prior to the date hereof.

(e) Certificate of Insurance. Evidence of the insurance coverage required by Section 6.8 of this Agreement.

(f) Consents. All necessary consents of shareholders and other third parties with respect to the execution, delivery and performance of this Agreement, the Warrants and the other Loan Documents.

(g) Legal Opinion. A legal opinion of each Co-Borrower's counsel, dated as of the date hereof, covering the matters set forth in Exhibit D attached hereto.

(h) Account Control Agreements. Account Control Agreements for all of each Co-Borrower's deposit accounts and securities accounts (other than Excluded Accounts) duly executed by all of the parties thereto.

(i) Fees and Expenses. Payment of all fees and expenses then due hereunder or under any other Loan Document.

(j) Other Documents. Co-Borrowers shall have provided such other documents and completion of such other matters, as any Lender may reasonably deem necessary or appropriate.

3.2 Conditions Precedent to Making Loan A, Loan B, Loan C and Loan D. The obligation of the applicable Lender to make Loan A, Loan B, Loan C or Loan D is further subject to satisfaction of the following conditions as of the applicable Funding Date:

(a) No Default. No Default or Event of Default shall have occurred and be continuing.

(b) Landlord Agreements. Each Co-Borrower shall have provided Lenders with a Landlord Agreement for each location where such Co-Borrower's books and records and the Collateral is located (unless such Co-Borrower is the fee owner thereof), other than with respect to such Co-Borrower's Maryland office and Pennsylvania office, which Landlord Agreements shall be provided as set forth in Section 6.13.

(c) Note. Each Co-Borrower shall have duly executed and delivered a Note in the amount of Loan A to Horizon, a Note in the amount of Loan B to Horizon, a Note in the amount of Loan C to Horizon and a Note in the amount of Loan D to Powerscourt.

(d) UCC Financing Statements. Lenders shall have received such documents, instruments and agreements, including UCC financing statements or amendments to UCC financing statements and UCC financing statement searches, as any Lender shall reasonably request to evidence the perfection and priority of the security interests granted to Collateral Agent and each Lender pursuant to Section 4. Each Co-Borrower authorizes Collateral Agent and each Lender to file any UCC financing statements, continuations of or amendments to UCC financing statements they deem necessary to perfect its security interest in the Collateral.

(e) Funding Certificate. Borrower Representative shall have duly executed and delivered to Lenders a Funding Certificate for such Loans.

(f) Representations and Warranties. The representations and warranties made by each Co-Borrower in Section 5 and in the other Loan Documents shall be true and correct in all material respects as of such Funding Date (except with respect to any such representation or warranty which is already qualified by a materiality qualifier, in which case such representation or warranty shall be true and correct in all respects, and where such representations and warranties expressly relate to an earlier date, in which case such representations and warranties are true and correct in all material respects as of such earlier date).

(g) Other Documents. Co-Borrowers shall have provided Lenders with such other documents and completion of such other matters, as any Lender may reasonably deem necessary or appropriate.

3.3 Conditions Precedent to Making Loan E and Loan F. The obligation of the applicable Lender to make Loan E or Loan F is further subject to satisfaction of the following conditions as of the applicable Funding Date:

(a) No Default. No Default or Event of Default shall have occurred and be continuing.

(b) Note. Each Co-Borrower shall have duly executed and delivered a Note in the amount of Loan E to Horizon and a Note in the amount of Loan F to Horizon.

(c) Funding Certificate. Borrower Representative shall have duly executed and delivered to Lenders a Funding Certificate for such Loans.

(d) Milestone Achievement. Borrower Representative shall have provided Lenders with evidence reasonably satisfactory to Lenders that Co-Borrowers have achieved at least one Milestone.

(e) Representations and Warranties. The representations and warranties made by each Co-Borrower in Section 5 and in the other Loan Documents shall be true and correct in all material respects as of such Funding Date (except with respect to any such representation or warranty which is already qualified by a materiality qualifier, in which case such representation or warranty shall be true and correct in all respects, and where such representations and warranties expressly relate to an earlier date, in which case such representations and warranties are true and correct in all material respects as of such earlier date).

(f) Other Documents. Co-Borrowers shall have provided Lenders with such other documents and completion of such other matters, as any Lender may reasonably deem necessary or appropriate.

3.4 Conditions Precedent to Making Loan G and Loan H. The obligation of the applicable Lender to make Loan G or Loan H is further subject to satisfaction of the following conditions as of the applicable Funding Date:

(a) No Default. No Default or Event of Default shall have occurred and be continuing.

(b) Note. Each Co-Borrower shall have duly executed and delivered a Note in the amount of Loan G to Horizon and a Note in the amount of Loan H to Horizon.

(c) Funding Certificate. Borrower Representative shall have duly executed and delivered to Lenders a Funding Certificate for such Loans.

(d) Making of Loan E and Loan F. The applicable Lenders shall have made Loan E and Loan F to or on behalf of Co-Borrowers.

(e) Milestones Achievement. Borrower Representative shall have provided Lenders with evidence reasonably satisfactory to Lenders that Co-Borrowers have achieved not less than two Milestones.

(f) Representations and Warranties. The representations and warranties made by each Co-Borrower in Section 5 and in the other Loan Documents shall be true and correct in all material respects as of such Funding Date (except with respect to any such representation or warranty which is already qualified by a materiality qualifier, in which case such representation or warranty shall be true and correct in all respects, and where such representations and warranties expressly relate to an earlier date, in which case such representations and warranties are true and correct in all material respects as of such earlier date).

(g) Other Documents. Co-Borrowers shall have provided Lenders with such other documents and completion of such other matters, as any Lender may reasonably deem necessary or appropriate.

3 . 5 Covenant to Deliver. Each Co-Borrower agrees (not as a condition but as a covenant) to deliver to Lenders each item required to be delivered to Lenders as a condition to each Loan, if such Loan is advanced. Each Co-Borrower expressly agrees that the extension of any Loan prior to the receipt by a Lender of any such item shall not constitute a waiver by such Lender of any Co-Borrower's obligation to deliver such item, and any such extension in the absence of a required item shall be in each Lender's sole discretion.

4. Creation of Security Interest.

4 . 1 Grant of Security Interests. Each Co-Borrower grants to Collateral Agent and each Lender a valid, continuing security interest in all presently existing and hereafter acquired or arising Collateral in order to secure prompt, full and complete payment of any and all Obligations and in order to secure prompt, full and complete performance by each Co-Borrower of each of its covenants and duties under each of the Loan Documents (other than the Warrants). The "Collateral" shall mean and include all right, title, interest, claims and demands of each Co-Borrower in the following:

(a) All goods (and embedded computer programs and supporting information included within the definition of "goods" under the Code) and equipment now owned or hereafter acquired, including all laboratory equipment, computer equipment, office equipment, machinery, fixtures, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing, and all attachments, accessories, accessions, replacements, substitutions, additions, and improvements to any of the foregoing, wherever located;

(b) All inventory now owned or hereafter acquired, including all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products including such inventory as is temporarily out of any Co-Borrower's custody or possession or in transit and including any returns upon any accounts or other proceeds, including insurance proceeds, resulting from the sale or disposition of any of the foregoing and any documents of title representing any of the above, and each Co-Borrower's books relating to any of the foregoing;

(c) All contract rights and general intangibles (except to the extent included within the definition of Intellectual Property), now owned or hereafter acquired, including (except to the extent included within the definition of Intellectual Property) goodwill, license agreements, franchise agreements, blueprints, drawings, purchase orders, customer lists, route lists, infringements, claims, software, computer programs, computer disks, computer tapes, literature, reports, catalogs, design rights, income tax refunds, payment intangibles, commercial tort claims, payments of insurance and rights to payment of any kind;

(d) All now existing and hereafter arising accounts, and other forms of payment obligations owing to any Co-Borrower arising out of the sale or lease of goods, the licensing of technology or the rendering of services by any Co-Borrower (subject, in each case, to the contractual rights of third parties to require funds received by any Co-Borrower to be expended in a particular manner), whether or not earned by performance, and any and all credit insurance, guaranties, and other security therefor, as well as all merchandise returned to or reclaimed by any Co-Borrower and each Co-Borrower's books relating to any of the foregoing;

(e) All documents, cash, deposit accounts, letters of credit and letters of credit rights (whether or not the letter of credit is evidenced by a writing) and other supporting obligations, certificates of deposit, instruments, promissory notes, chattel paper (whether tangible or electronic) and investment property, including all securities, whether certificated or uncertificated, security entitlements, securities accounts, commodity contracts and commodity accounts, and all financial assets held in any securities account or otherwise, wherever located, now owned or hereafter acquired and each Co-Borrower's books relating to the foregoing; and

(f) To the extent not covered by clauses (a) through (e), all other personal property of each Co-Borrower, whether tangible or intangible, and any and all rights and interests in any of the above and the foregoing and, any and all claims, rights and interests in any of the above and all substitutions for, additions and accessions to and proceeds thereof, including insurance, condemnation, requisition or similar payments and proceeds of the sale or licensing of Intellectual Property to the extent such proceeds no longer constitute Intellectual Property.

Notwithstanding the foregoing, the Collateral shall not include any Intellectual Property or Excluded Property; provided, however, that the Collateral shall include all accounts receivables, accounts, and general intangibles that consist of rights to payment and proceeds from the sale, licensing or disposition of all or any part, or rights in, the Intellectual Property (the "Rights to Payment"). Notwithstanding the foregoing, if a judicial authority (including a U.S. Bankruptcy Court) holds that a security interest in the underlying Intellectual Property is necessary to have a security interest in the Rights to Payment, then the Collateral shall

automatically, and effective as of the date hereof, include the Intellectual Property to the extent necessary to permit perfection of each Lender's security interest in the Rights to Payment.

4.2 After-Acquired Property. If any Co-Borrower shall at any time acquire a commercial tort claim, as defined in the Code, in excess of Fifty Thousand Dollars ($50,000), Borrower Representative shall immediately notify Collateral Agent and Lenders in writing signed by Borrower Representative of the brief details thereof and grant to Collateral Agent and each Lender in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance satisfactory to Collateral Agent and each Lender.

4.3 Duration of Security Interest. Collateral Agent's and each Lender's security interest in the Collateral shall continue until the indefeasible payment in full and the satisfaction of all Obligations (other than contingent obligations), and termination of each Lender's commitment to fund the Loans, whereupon such security interest shall terminate. Collateral Agent and each Lender shall, at Co-Borrowers' sole cost and expense, execute such further documents and take such further actions as may be reasonably necessary to make effective the release contemplated by this Section 4.3, including duly authorizing and delivering termination statements for filing in all relevant jurisdictions under the Code.

4.4 Location and Possession of Collateral. The Collateral is and shall remain in the possession of Co-Borrowers at the location listed on the cover page hereof or as set forth in the Disclosure Schedule, or such additional locations as to which (x) Co-Borrowers have given written notice to the Collateral Agent and (y) Co-Borrowers have delivered a Landlord Agreement. Co-Borrowers shall remain in full possession, enjoyment and control of the Collateral (except only as may be otherwise required by Collateral Agent or any Lender for perfection of the security interests therein created hereunder) and so long as no Event of Default has occurred or has been waived by Lenders, shall be entitled to manage, operate and use the same and each part thereof with the rights and franchises appertaining thereto; provided that the possession, enjoyment, control and use of the Collateral shall at all times be subject to the observance and performance of the terms of this Agreement.

4.5 Delivery of Additional Documentation Required. Each Co-Borrower shall from time to time execute and deliver to Collateral Agent and Lenders, at the request of Collateral Agent or any Lender, all financing statements and other documents Collateral Agent or any Lender may reasonably request, in form satisfactory to Collateral Agent and Lenders, to perfect and continue Collateral Agent's and Lenders' perfected security interests in the Collateral and in order to consummate fully all of the transactions contemplated under the Loan Documents.

4.6 Right to Inspect. Collateral Agent and each Lender (through any of their officers, employees, or agents) shall have the right, upon reasonable prior notice, from time to time during each Co-Borrower's usual business hours, to inspect the books and records of each Co-Borrower and Subsidiaries and to make copies thereof and to inspect, test, and appraise the Collateral in order to verify each Co-Borrower's financial condition or the amount, condition of, or any other matter relating to, the Collateral. Any inspection, test or appraisal conducted hereunder shall be conducted at the sole cost and expense of Co-Borrowers; provided, in the

absence of an Event of Default, Borrower shall only be responsible for the cost and expense of one (1) such inspection, test or appraisal in any fiscal year.

4.7 [reserved].

4.8 Protection of Intellectual Property. Each Co-Borrower shall:

(a) to the extent of each Co-Borrower's right to do so, protect, defend and maintain the validity and enforceability of its Intellectual Property that is material to the business of any Co-Borrower and promptly advise Collateral Agent in writing of material infringements thereof;

(b) not consent to any Intellectual Property material to any Co-Borrower's business being abandoned, forfeited or dedicated to the public without each Lender's written consent; and

(c) provide written notice to Collateral Agent within ten (10) days of entering or becoming bound by any Restricted License (other than over-the-counter software that is commercially available to the public).

5 . Representations and Warranties. Except as set forth in the Disclosure Schedule, each Co-Borrower represents and warrants as follows:

5.1 Organization and Qualification. Each Co-Borrower and its Subsidiaries is an entity duly organized and validly existing under the laws of its jurisdiction of formation and qualified and licensed to do business in, and is in good standing in, any jurisdiction in which the conduct of its business or its ownership of Property requires that it be so qualified and licensed, except for such jurisdictions as to which any failure to so qualify would not have a Material Adverse Effect.

5.2 Authority. Each Co-Borrower has all necessary power and authority to execute, deliver, and perform in accordance with the terms thereof, the Loan Documents to which it is a party. Each Co-Borrower and its Subsidiaries have all requisite power and authority to own and operate their Property and to carry on their businesses as now conducted. Each Co-Borrower and its Subsidiaries have obtained all material licenses, permits, approvals and other authorizations necessary for the operation of their business.

5.3 Conflict with Other Instruments, etc. Neither the execution and delivery of any Loan Document to which any Co-Borrower is a party nor the consummation of the transactions therein contemplated nor compliance with the terms, conditions and provisions thereof will conflict with or result in a breach of any of the terms, conditions or provisions of (a) the certificate of incorporation, the by-laws, or any other organizational documents of any Co-Borrower, (b) any law or any regulation, order, writ, injunction or decree of any court or Governmental Authority by which any Co-Borrower or any Subsidiary or any of their respective property or assets may be bound or affected or (c) any material agreement or instrument to which any Co-Borrower is a party or by which it or any of its Property is bound or to which it or any of its Property is subject, or constitute a default thereunder or result in the creation or imposition of any Lien, other than Permitted Liens.

5.4 Authorization; Enforceability. The execution and delivery of this Agreement, the granting of the security interest in the Collateral, the incurrence of the Loans, the execution and delivery of the other Loan Documents to which any Co-Borrower is a party and the consummation of the transactions herein and therein contemplated have each been duly authorized by all necessary action on the part of each Co-Borrower. No authorization, consent, approval, license or exemption of, and no registration, qualification, designation, declaration or filing with, or notice to, any Person is, was or will be necessary to (a) the valid execution and delivery of any Loan Document to which any Co-Borrower is a party, (b) the performance of each Co-Borrower's obligations under any Loan Document or (c) the granting of the security interest in the Collateral, except for filings in connection with the perfection of the security interest in any of the Collateral or the issuance of the Warrants. The Loan Documents have been duly executed and delivered and constitute legal, valid and binding obligations of each Co-Borrower, enforceable in accordance with their respective terms, except as the enforceability thereof may be limited by bankruptcy, fraudulent transfer, insolvency or other similar laws of general application relating to or affecting the enforcement of creditors' rights or by general principles of equity.

5.5 No Prior Encumbrances. Each Co-Borrower has good and marketable title to the Collateral, free and clear of Liens except for Permitted Liens. Each Co-Borrower has good title and ownership of, or is licensed under, all of such Co-Borrower's current material Intellectual Property. Each Co-Borrower is the sole owner of the Intellectual Property which it owns or purports to own and which is material to the business of the Co-Borrowers except for (a) non-exclusive licenses granted to its customers, resellers and/or distributors in the ordinary course of business, (b) over-the-counter software that is commercially available to the public and (c) material Intellectual Property licensed to such Co-Borrower and noted on the Disclosure Schedule. Each patent which it owns or purports to own and which is material to any Co-Borrower's business is valid and enforceable, and no part of the Intellectual Property which any Co-Borrower owns or purports to own and which is material to any Co-Borrower's business has been judged invalid or unenforceable, in whole or in part. No Co-Borrower is a party to, nor is it bound by, any Restricted License. No Co-Borrower has received any communications alleging that any Co-Borrower has violated, or by conducting its business as proposed, would violate any proprietary rights of any other Person. No Co-Borrower has knowledge of any infringement or violation by it of the intellectual property rights of any third party and has no knowledge of any violation or infringement by a third party of any of its Intellectual Property. The Collateral and the Intellectual Property constitute substantially all of the assets and property of Co-Borrowers, and all Intellectual Property owned by a Co-Borrower and associated with the business of such Co-Borrower and its Subsidiaries is free and clear of any liens other than Permitted Liens.

5.6 Security Interest. The provisions of this Agreement create legal and valid security interests in the Collateral in favor of Collateral Agent and each Lender, and, assuming the proper filing of one or more financing statement(s) identifying the Collateral with the proper state and/or local authorities and the taking of other required perfection actions, the security interests in the Collateral granted to Collateral Agent and each Lender pursuant to this Agreement (a) constitute and will continue to constitute first priority security interests (except to the extent any Permitted Liens may have a superior priority to Collateral Agent's and Lenders' Liens under this Agreement) and (b) are and will continue to be superior and prior to the rights of

all other creditors of each Co-Borrower (except to the extent any Permitted Liens may have a superior priority to Collateral Agent's and Lenders' Liens under this Agreement).

5.7 Name; Location of Chief Executive Office, Principal Place of Business and Collateral. No Co-Borrower has done business under any name other than that specified on the signature page hereof. Each Co-Borrower's jurisdiction of formation, chief executive office, principal place of business, and the place where such Co-Borrower maintains its records concerning the Collateral are presently located in the state and at the address set forth on the cover page of this Agreement. The Collateral is presently located at the address set forth on the cover page hereof or as set forth in the Disclosure Schedule.

5.8 Litigation. There are no actions or proceedings pending by or against any Co-Borrower or any Subsidiary before any court, arbitral tribunal, regulatory organization, administrative agency or similar body which would reasonably be expected to have a Material Adverse Effect. No Co-Borrower has knowledge of any such pending or threatened actions or proceedings.

5.9 Financial Statements. All financial statements relating to any Co-Borrower, or any Subsidiary that have been or may hereafter be delivered by any Co-Borrower to Collateral Agent or any Lender present fairly in all material respects each Co-Borrower's Consolidated financial condition as of the date thereof and each Co-Borrower's Consolidated results of operations for the period then ended.

5.10 No Material Adverse Effect. No event has occurred and no condition exists which could reasonably be expected to have a Material Adverse Effect since December 31, 2020.

5.11 Full Disclosure. No representation, warranty or other statement made by any Co-Borrower in any Loan Document (including the Disclosure Schedule), certificate or written statement furnished to Collateral Agent or any Lender contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements not misleading; it being understood by Collateral Agent and Lenders that any such representation, warranty or other statement constituting projections or as to future events (i) are not to be viewed as facts, (ii)(A) are subject to significant uncertainties and contingencies, many of which are beyond the control of Co-Borrowers, (B) no assurance is given by Co-Borrowers that the forecasted results in any such projections will be realized and (C) the actual results during the period or periods covered by any such projections may differ from the forecasted results set forth in such projections and such differences may be material and (iii) are not a guarantee of performance. There is no fact known to any Co-Borrower which materially adversely affects, or which could in the future be reasonably expected to materially adversely affect, its ability to perform its obligations under this Agreement.

5.12 Solvency, Etc. Borrower Representative, individually, and Co-Borrowers, taken as a whole, are Solvent (as defined below) and, after the execution and delivery of the Loan Documents and the consummation of the transactions contemplated thereby, Borrower Representative, individually, and Co-Borrowers, taken as a whole, will be Solvent. "Solvent" means, with respect to any Person on any date, that on such date (a) the fair value of the property of such Person is greater than the fair value of the liabilities (including contingent liabilities) of such Person, (b) the present fair saleable value of the assets of such Person is not less than the

amount that will be required to pay the probable liability of such Person on its debts as they become absolute and matured, (c) such Person does not intend to, and does not believe that it will, incur debts or liabilities beyond such Person's ability to pay as such debts and liabilities mature and (d) such Person is not engaged in business or a transaction, and is not about to engage in business or a transaction, for which such Person's property would constitute an unreasonably small capital.

5.13 Subsidiaries. No Co-Borrower has any Subsidiaries.

5.14 Capitalization. All issued and outstanding Equity Securities of each Co-Borrower are duly authorized and validly issued, fully paid and non-assessable, and such securities were issued in compliance with all applicable state and federal laws concerning the issuance of securities, except for such compliance with such laws that would not reasonably be expected to result in a Material Adverse Effect.

5.15 Catastrophic Events; Labor Disputes. No Co-Borrower, any Subsidiary or any of their respective Property is or has been affected by any fire, explosion, accident, strike, lockout or other labor dispute, drought, storm, hail, earthquake, embargo, act of God or other casualty that could reasonably be expected to have a Material Adverse Effect. There are no disputes presently subject to grievance procedure, arbitration or litigation under any of the collective bargaining agreements, employment contracts or employee welfare or incentive plans to which any Co-Borrower or any Subsidiary is a party, and there are no strikes, lockouts, work stoppages or slowdowns, or, to the knowledge of any Co-Borrower, jurisdictional disputes or organizing activity occurring or threatened, which as to any of the foregoing could reasonably be expected to have a Material Adverse Effect.

5.16 Certain Agreements of Officers, Employees and Consultants.

(a) No Violation. To the knowledge of each Co-Borrower, no officer, employee or consultant of any Co-Borrower is, or is now expected to be, in violation of any term of any employment contract, proprietary information agreement, nondisclosure agreement, noncompetition agreement or any other material contract or agreement or any restrictive covenant relating to the right of any such officer, employee or consultant to be employed by any Co-Borrower because of the nature of the business conducted or to be conducted by any Co-Borrower or relating to the use of trade secrets or proprietary information of others, and to each Co-Borrower's knowledge, the continued employment of each Co-Borrower's officers, employees and consultants does not subject any Co-Borrower to any material liability for any claim or claims arising out of or in connection with any such contract, agreement, or covenant, except as to any of the foregoing to the extent that such matter would not reasonably be expected to result in a Material Adverse Effect.

(b) No Present Intention to Terminate. To the knowledge of each Co-Borrower, no officer of any Co-Borrower, and no employee or consultant of any Co-Borrower whose termination, either individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect, has any present intention of terminating his or her employment or consulting relationship with any Co-Borrower.

5.17 No Plan Assets. No Co-Borrower nor any Subsidiary is an "employee benefit plan," as defined in Section 3(3) of ERISA, subject to Title I of ERISA, and none of the assets of any Co-Borrower or any Subsidiary constitutes or will constitute "plan assets" of one or more such plans within the meaning of 29 C.F.R. Section 2510.3-101. In addition, (a) no Co-Borrower nor any Subsidiary is a "governmental plan" within the meaning of Section 3(32) of ERISA and (b) transactions by or with any Co-Borrower or any Subsidiary are not subject to state statutes regulating investment of, and fiduciary obligations with respect to, governmental plans similar to the provisions of Section 406 of ERISA or Section 4975 of the Internal Revenue Code currently in effect, which prohibit or otherwise restrict the transactions contemplated by this Loan Agreement.

5.18 Sanctions, Etc. No Co-Borrower, any of its Subsidiaries or any director, officer, employee, agent or, to the knowledge of any Co-Borrower, any Affiliate of any Co-Borrower or any of its Subsidiaries, is a Person that is, or is owned or controlled by Persons that are, (a) the subject or target of any Sanctions or (b) located, organized or resident in a country or territory that is, or whose government is, the subject of Sanctions. To the best of each Co-Borrower's knowledge, as of the date hereof and at all times throughout the term of this Agreement, including after giving effect to any transfers of interests permitted pursuant to the Loan Documents, none of the funds of any Co-Borrower, any Subsidiary or, to the knowledge of any Co-Borrower, of their Affiliates have been (or will be) derived from any unlawful activity with the result that the investment in the respective party (whether directly or indirectly), is prohibited by applicable law or the Loans are in violation of applicable law.

5.19 Regulatory Compliance. No Co-Borrower is a "bank holding company" or a direct or indirect subsidiary of a "bank holding company" as defined in the Bank Holding Company Act of 1956, as amended, and Regulation Y thereunder of the Board of Governors of the Federal Reserve System. No Co-Borrower nor any Subsidiary is an "investment company" or a company controlled by an "investment company" under the Investment Company Act of 1940. No Co-Borrower is engaged in the business of extending credit for the purpose of purchasing or carrying margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System) and no proceeds of any Loan will be used to purchase or carry margin stock or to extend credit to others for the purpose of purchasing or carrying any margin stock.

5.20 Payment of Taxes. All federal and other material Tax returns, reports and statements (including any attachments thereto or amendments thereof) of each Co-Borrower and its Subsidiaries filed or required to be filed by any of them have been timely filed (or extensions have been obtained and such extensions have not expired) and all Taxes shown on such Tax returns or otherwise due and payable and all assessments, fees and other governmental charges upon each Co-Borrower, its Subsidiaries and their respective properties, assets, income, businesses and franchises which are due and payable have been paid when due and payable, except for the payment of any such Taxes, assessments, fees and other governmental charges which are being diligently contested by any Co-Borrower in good faith by appropriate proceedings and for which adequate reserves have been made under GAAP. To the knowledge of each Co-Borrower, no Tax return of any Co-Borrower or any Subsidiary is currently under an audit or examination, and no Co-Borrower has received written notice of any proposed audit or examination, in each case, where a material amount of Tax is at issue. No Co-Borrower is an "S

corporation" within the meaning of Section 1361(a)(1) of the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code").

5.21 Anti-Terrorism Laws. No Co-Borrower will, directly or indirectly, use the proceeds of the Loans, or lend, contribute or otherwise make available such proceeds to any Subsidiary, joint venture partner or other Person, (i) to fund any activities or business of or with any Person, or in any country or territory, that, at the time of such funding, is, or whose government is, the subject of Sanctions, or (ii) in any other manner that would result in a violation of Sanctions by any Person (including any Person participating in the Loans, whether as lender, underwriter, advisor, investor or otherwise). Lenders hereby notify each Co-Borrower that pursuant to the requirements of Anti-Terrorism Laws, and each Lender's policies and practices, each Lender is required to obtain, verify and record certain information and documentation that identifies each Co-Borrower and its principals, which information includes the name and address of such Co-Borrower and its principals and such other information that will allow such Lender to identify such party in accordance with Anti-Terrorism Laws.

6. Affirmative Covenants. Each Co-Borrower, until the full and complete payment of the Obligations, covenants and agrees that:

6.1 Good Standing. Each Co-Borrower shall maintain, and cause each of its Subsidiaries to maintain, its corporate existence and its good standing in its jurisdiction of formation and maintain qualification in each jurisdiction in which the failure to so qualify could reasonably be expected to have a Material Adverse Effect. Each Co-Borrower shall maintain, and cause each of its Subsidiaries to maintain, in force all licenses, approvals and agreements, the loss of which could reasonably be expected to have a Material Adverse Effect.

6.2 Government Compliance. Each Co-Borrower shall comply, and cause each of its Subsidiaries to comply, with all statutes, laws, ordinances and government rules and regulations to which it is subject, noncompliance with which could reasonably be expected to have a Material Adverse Effect.

6.3 Financial Statements, Reports, Certificates. Borrower Representative shall deliver to each Lender: (a) as soon as available, but in any event within forty-five (45) days after the end of each fiscal quarter, a Consolidated balance sheet, Consolidated income statement and Consolidated cash flow statement of Borrower Representative; (b) as soon as available, but in any event within one hundred eighty (180) days after the end of Borrower Representative's fiscal year, audited Consolidated financial statements of Borrower Representative prepared in accordance with GAAP, together with an unqualified (it being agreed, for the avoidance of doubt, that a going concern assumption will not constitute a qualification) opinion on such financial statements of a nationally recognized or other independent public accounting firm reasonably acceptable to Lenders; (c) as soon as available, but in any event within thirty (30) days after the end of each calendar month, a copy of each Co-Borrower's deposit account(s) statement(s) as prepared by such depository institution, (d) as soon as available, but in any event within ninety (90) days after the end of Borrower Representative's fiscal year and when revised, the operating budget and plan of Co-Borrowers for the next fiscal year, as approved by Borrower Representative's board of directors (or other similar governing body); and (e) such other financial information as any Lender may reasonably request from time to time. In addition, each

Co-Borrower shall deliver to each Lender (A) promptly upon becoming available, copies of all statements, reports and notices sent or made available generally by such Co-Borrower to its security holders and (B) immediately upon receipt of notice thereof, a report of any material legal actions pending or threatened against a Co-Borrower or any Subsidiary or the commencement of any action, proceeding or governmental investigation involving such Co-Borrower or any Subsidiary is commenced that is reasonably expected to result in damages or costs payable by any Co-Borrower or Co-Borrowers in the aggregate amount of One Hundred Thousand Dollars ($100,000) or more. It is acknowledged and agreed that: (i) the filing of Borrower Representative's Form 10K with the Securities and Exchange Commission within the time required under the rules and regulations of the Securities and Exchange Commission after the end of each fiscal year of Borrower Representative; and (ii) the filing of Borrower Representative's Form 10Q with the Securities and Exchange Commission within the time required under the rules and regulations of the Securities and Exchange Commission after the end of each of the first three fiscal quarters of Borrower Representative, shall be deemed to satisfy the requirements of clauses (a) and (b) above.

6.4 Certificates of Compliance. Each time financial statements are furnished (or deemed furnished) pursuant to Section 6.3 above, each Co-Borrower shall deliver to each Lender an Officer's Certificate signed by a Responsible Officer in the form of, and certifying to the matters set forth in Exhibit E attached hereto.

6.5 Notice of Defaults. As soon as possible, and in any event within five (5) days after the discovery of a Default or an Event of Default, Borrower Representative shall provide each Lender with an Officer's Certificate setting forth the facts relating to or giving rise to such Default or Event of Default and the action which Co-Borrowers propose to take with respect thereto.

6.6 Taxes. Each Co-Borrower shall make, and cause each Subsidiary to make, due and timely payment or deposit of all federal, state, and local Taxes, assessments, or contributions required of it by law or imposed upon any Property belonging to it, and will execute and deliver to Collateral Agent and Lenders, on demand, appropriate certificates attesting to the payment or deposit thereof; and each Co-Borrower will make, and cause each Subsidiary to make, timely payment or deposit of all Tax payments and withholding Taxes required of it by applicable laws, including those laws concerning F.I.C.A., F.U.T.A., state disability, and local, state, and federal income Taxes, and will, upon request, furnish Collateral Agent and Lenders with proof satisfactory to each Lender indicating that each Co-Borrower and each Subsidiary has made such payments or deposits; provided that no Co-Borrower shall be required to make any payment if the amount or validity of such payment is contested in good faith by appropriate proceedings which suspend the collection thereof (provided that such proceedings do not involve any substantial danger of the sale, forfeiture or loss of any material item of Collateral or Collateral which in the aggregate is material to any Co-Borrower or Co-Borrowers in the aggregate and that a Co-Borrower has adequately bonded such amounts or reserves sufficient to discharge such amounts have been provided on the books of such Co-Borrower). In addition, no Co-Borrower shall change, and shall not permit any Subsidiary to change, its respective jurisdiction of residence for taxation purposes.

6.7 Use; Maintenance. Each Co-Borrower shall keep and maintain all items of equipment and other similar types of personal property that form any significant portion or portions of the Collateral in good operating condition and repair and shall make all necessary replacements thereof and renewals thereto so that the value and operating efficiency thereof shall at all times be maintained and preserved, subject to ordinary wear and tear and casualty events. No Co-Borrower shall permit any such material item of Collateral to become a fixture to real estate or an accession to other personal property, without the prior written consent of Collateral Agent and each Lender. No Co-Borrower shall permit any such material item of Collateral to be operated or maintained in violation, in any material respect, of any applicable law, statute, rule or regulation. With respect to items of leased equipment (to the extent Collateral Agent and Lenders have any security interest in any residual Co-Borrower's interest in such equipment under the lease), each Co-Borrower shall keep, maintain, repair, replace and operate such leased equipment, in all material respects, in accordance with the terms of the applicable lease.

6.8 Insurance. Each Co-Borrower shall keep its business and the Collateral insured for risks and in amounts standard for companies in such Co-Borrower's industry and location, and as Collateral Agent or any Lender may reasonably request. Insurance policies shall be in a form, with companies, and in amounts that are satisfactory to Collateral Agent and each Lender. All property policies shall have a lender's loss payable endorsement showing Collateral Agent as an additional loss payee and all liability policies shall show Collateral Agent as an additional insured and all policies shall provide that the insurer must give Collateral Agent at least thirty (30) days notice (or ten (10) days in the case of non-payment of premiums) before canceling its policy. At Collateral Agent's or any Lender's request, each Co-Borrower shall deliver certified copies of policies and evidence of all premium payments. If an Event of Default has occurred, proceeds payable under any property policy shall, at Collateral Agent's or any Lender's option, be payable to Collateral Agent, for the benefit of Lenders, or to Lenders on account of the Obligations. Notwithstanding the foregoing, so long as no Event of Default has occurred and is continuing, each Co-Borrower shall have the option of applying the proceeds of any property policy, toward the replacement or repair of destroyed or damaged property; provided that (a) any such replaced or repaired property (i) shall be of equal or like value as the replaced or repaired Collateral and (ii) shall be deemed Collateral in which Collateral Agent and Lenders have been granted a first priority security interest and (b) after the occurrence and during the continuation of an Event of Default all proceeds payable under such property policy shall, at the option of Collateral Agent or any Lender, be payable to Collateral Agent, for the benefit of Lenders, or to Lenders on account of the Obligations. If any Co-Borrower fails to obtain insurance as required under this Section 6.8 or to pay any amount or furnish any required proof of payment to third persons and Collateral Agent, Collateral Agent or any Lender may make all or part of such payment or obtain such insurance policies required in this Section 6.8, and take any action under the policies Collateral Agent or any Lender deems prudent. On or prior to the first Funding Date and prior to each policy renewal, each Co-Borrower shall furnish to Collateral Agent certificates of insurance or other evidence satisfactory to Collateral Agent that insurance complying with all of the above requirements is in effect.

6.9 Further Assurances. At any time and from time to time each Co-Borrower shall execute and deliver such further instruments and take such further action as may reasonably be requested by Collateral Agent or any Lender to make effective the purposes of this

Agreement, including the continued perfection and priority of Collateral Agent's and Lenders' security interest in the Collateral.

6.10 Subsidiaries. Each Co-Borrower, upon any Lender's or Collateral Agent's request, shall cause any Subsidiary to become a Co-Borrower hereunder or to provide Lenders and Collateral Agent with a guaranty of the Obligations and, in each case, grant a security interest in and to such Subsidiary's assets.

6.11 Keeping of Books. Each Co-Borrower shall keep proper books of record and account, in which full and correct entries shall be made of all financial transactions and the assets and business of such Co-Borrower and its Subsidiaries in accordance with GAAP.

6.12 Notice of Demand for Payment. Promptly upon Borrower Representative or any Co-Borrower having knowledge thereof, Borrower Representative shall provide Collateral Agent and Lenders with written notice of any demand for payment made of Borrower Representative pursuant to the Guarantee Agreement or the Supply Agreement.

6.13 Landlord Agreement - Maryland Office. Co-Borrowers shall, within thirty (30) days of the date of this Agreement or as otherwise agreed to by Collateral Agent, provide Lenders with a Landlord Agreement duly executed by all of the parties thereto with respect to Co-Borrowers' Maryland office and Pennsylvania office.

6.14 UCC Termination Statement. Co-Borrowers shall, within fifteen (15) days of the date of this Agreement or as otherwise agreed to by Collateral Agent, provide Lenders with evidence that a UCC termination statement has been filed and recorded with the Delaware Secretary of State terminating each financing statement filed by or on behalf of The Children's Hospital of Philadelphia, as secured party, evidencing The Children's Hospital of Philadelphia's lien over any Co-Borrower's assets.

7. Negative Covenants. Each Co-Borrower, until the full and complete payment of the Obligations, covenants and agrees that no Co-Borrower shall:

7.1 Chief Executive Office. Change its name, jurisdiction of formation, chief executive office, principal place of business or any of the items set forth in Section 1(a)-(d) of the Disclosure Schedule without thirty (30) days prior written notice to Collateral Agent.

7.2 Collateral Control. Subject to its rights under Sections 4.4 and 7.4, remove any items of Collateral from any Co-Borrower's facility located at the address set forth on the cover page hereof or as set forth on the Disclosure Schedule.

7.3 Liens. Create, incur, allow or suffer, or permit any Subsidiary to create, incur, allow or suffer, any Lien on any of its property, or assign or convey any right to receive income, including the sale of any accounts except for Permitted Liens, or permit any Collateral not to be subject to the first priority security interest granted herein (except for Permitted Liens that are permitted by the terms of this Agreement to have priority to Collateral Agent's and Lenders' Liens), or enter into any agreement, document, instrument or other arrangement (except with or in favor of Collateral Agent, for the benefit of Lenders, or Lenders) with any Person which directly or indirectly prohibits or has the effect of prohibiting any Co-Borrower or any

Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of a Co-Borrower's or any Subsidiary's Intellectual Property, except (a) as otherwise permitted in Section 7.4 hereof and (b) as permitted in the definition of "Permitted Liens" herein.

7.4 Other Dispositions of Collateral. Convey, sell, lease or otherwise dispose of, or permit any Subsidiary to convey, sell, lease or otherwise dispose, of all or any part of the Collateral to any Person (collectively, a "Transfer"), except for the following (each, a "Permitted Transfer"): (a) Transfers of inventory in the ordinary course of business; (b) Transfers of worn-out or obsolete equipment made in the ordinary course of business; (c) Permitted Out-Bound Licenses and other Transfers constituting Permitted Liens or Permitted Investments, (d) sales, transfers, leases and other dispositions of property to the extent that such property constitutes an Investment that is a Permitted Investment; (e) leases or subleases of real property entered into in the ordinary course of business to the extent that such leases or subleases do not materially interfere with the business of Co-Borrowers and their Subsidiaries; (f) dispositions resulting from any casualty or insured damage to, or any taking under power of eminent domain or by condemnation or similar proceeding of, any property or asset of a Co-Borrower or any Subsidiary; (g) the abandonment or lapse of Intellectual Property that is no longer material to the business of Co-Borrowers and their Subsidiaries taken as a whole, or otherwise no longer of material value, including, for the avoidance of doubt, the termination of license agreements and related agreements; (h) sales of FDA priority review vouchers; and (i) sales, transfers, outlicenses or other dispositions of non-core assets, including assets associated with Millipred, CERC-301 and CERC-406, respectively.

7.5 Distributions. (a) Pay any dividends or make any distributions, or permit any Subsidiary to pay any dividends or make any distributions, on their respective Equity Securities; (b) purchase, redeem, retire, defease or otherwise acquire, or permit any Subsidiary to purchase, redeem, retire, defease or otherwise acquire, for value any of their respective Equity Securities (other than (x) repurchases pursuant to the terms of employee stock purchase plans, employee restricted stock agreements or similar arrangements in an aggregate amount not to exceed One Hundred Thousand Dollars ($100,000) in any fiscal year, and (y) repurchases of Equity Securities deemed to occur upon the cashless exercise of stock options when such Equity Securities represent a portion of the exercise price thereof or to satisfy withholding obligations in connection with restricted stock units or similar equity incentive rights); (c) return, or permit any Subsidiary to return, any capital to any holder of its Equity Securities as such; (d) make, or permit any Subsidiary to make, any distribution of assets, Equity Securities, obligations or securities to any holder of its Equity Securities as such; or (e) set apart any sum for any such purpose; provided, however, (A) any Subsidiary may pay dividends solely to a Co-Borrower or another wholly-owned Subsidiary, (B) any Co-Borrower may make cash distributions to another Co-Borrower, (C) any Co-Borrower may pay dividends payable solely in such Co-Borrower's common stock, and (D) any Co-Borrower may pay cash in lieu of fractional Equity Securities in connection with any dividend, split or combination thereof.

7.6 Mergers or Acquisitions. Merge or consolidate, or permit any Subsidiary to merge or consolidate, with or into any other Person or acquire, or permit any Subsidiary to acquire, all or substantially all of the capital stock or assets of another Person; provided that (a) any Subsidiary may merge into another Subsidiary, (b) any Subsidiary may merge into a Co-

Borrower so long as such Co-Borrower is the surviving entity and (c) any Co-Borrower may merge into Borrower Representative.

7.7 Change in Business or Ownership. Engage, or permit any Subsidiary to engage, in any business other than the businesses currently engaged in by any Co-Borrower or such Subsidiary, as applicable, or reasonably related thereto or enter into a transaction or series of transactions (including any merger or consolidation with Borrower Representative) the result of which any "person" or "group" (within the meaning of Section 13(d) and 14(d)(2) of the Securities Exchange Act of 1934, but excluding any employee benefit plan of such Person or its Subsidiaries, and any Person acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan), other than the Permitted Holders, is or becomes the "beneficial owner" (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of greater than twenty-five percent (25%) of the shares of the then outstanding capital stock of Borrower Representative ordinarily entitled to vote in the election of directors.

7.8 Transactions With Affiliates; Creation of Subsidiaries . (a) Enter, or permit any Subsidiary to enter, into any contractual obligation with any Affiliate or engage in any other transaction with any Affiliate except upon terms at least as favorable to each Co-Borrower or such Subsidiary, as applicable, as an arms-length transaction with Persons who are not Affiliates of any Co-Borrower or (b) create a Subsidiary without providing at least ten (10) Business Days advance notice thereof to Lenders and, if requested by Lenders, such Subsidiary becomes a Co-Borrower hereunder or guaranty the Obligations and grant a security interest in its assets, in each case on terms reasonably satisfactory to Collateral Agent and each Lender.

7.9 Indebtedness Payments. (a) Prepay, redeem, purchase, defease or otherwise satisfy in any manner prior to the scheduled repayment thereof any Indebtedness for borrowed money (other than amounts due or permitted to be prepaid under this Agreement) or finance lease obligations (b) amend, modify or otherwise change the terms of any Indebtedness for borrowed money or finance lease obligations so as to accelerate the scheduled repayment thereof or (c) repay any notes to officers, directors or shareholders.

7.10 Indebtedness. Create, incur, assume or permit, or permit any Subsidiary to create, incur, or permit to exist, any Indebtedness except Permitted Indebtedness.

7.11 Investments. Make, or permit any Subsidiary to make, any Investment except for Permitted Investments.

7.12 Compliance. (a) Become, or permit any Subsidiary to become, an "investment company" or a company controlled by an "investment company" under the Investment Company Act of 1940, or undertake as one of its important activities, extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Loan for that purpose; (b) become, or permit any Subsidiary to become, subject to any other federal or state law or regulation which purports to restrict or regulate its ability to borrow money; or (c) (i) fail, or permit any Subsidiary to fail, to meet the minimum funding requirements of the Employment Retirement Income Security Act of 1974, and its regulations, as amended from time to time ("ERISA"), or (ii) permit, or permit any Subsidiary to permit, a Reportable Event or non-exempt Prohibited Transaction, as defined in ERISA, to occur which would reasonably be expected to result in the

imposition of a material penalty on any Co-Borrower; (d) fail, or permit any Subsidiary to fail, to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation could reasonably be expected to have Material Adverse Effect.

7.13 Maintenance of Accounts. (a) Maintain any deposit account or securities account (other than Excluded Accounts) except accounts with respect to which Collateral Agent and each Lender have obtained a perfected security interest in such accounts through one or more Account Control Agreements or (b) grant or allow any other Person (other than Collateral Agent or Lenders) to perfect a security interest in, or enter into any agreements with any Persons (other than Collateral Agent or Lenders) accomplishing perfection via control as to, any of its deposit accounts or securities accounts.

7.14 Negative Pledge Regarding Intellectual Property. Create, incur, assume or suffer to exist, or permit any Subsidiary to create, incur, assume or suffer to exist, any Lien of any kind upon any Intellectual Property or Transfer any Intellectual Property, whether now owned or hereafter acquired, other than Permitted Out-Bound Licenses and other Permitted Liens and Permitted Transfers.

7.15 Subsidiary Ownership of Assets. Permit Subsidiaries that are not Co-Borrowers or guarantors to hold cash on deposit in an amount in excess of Two Hundred Thousand Dollars ($200,000) in the aggregate at any time.

7.16 neuroFix, LLC – Assets. Commencing on the date of this Agreement, and continuing until the date Co-Borrowers provide evidence that the UCC termination statement required pursuant to Section 6.14 has been filed and recorded, permit neuroFix, LLC to hold cash on deposit or other assets in an amount in excess of Five Thousand Dollars ($5,000) in the aggregate at any time.

8. Events of Default. Any one or more of the following events shall constitute an "Event of Default" by Co-Borrowers under this Agreement:

8.1 Failure to Pay. If any Co-Borrower fails to pay when due and payable or when declared due and payable in accordance with the Loan Documents: (a) any Scheduled Payment on the relevant Payment Date or on the relevant Maturity Date; or (b) any other portion of the Obligations within five (5) days after receipt of written notice from any Lender that such payment is due.

8.2 Certain Covenant Defaults. If any Co-Borrower fails to perform any obligation arising under Sections 6.5, 6.8 or 6.12 or violates any of the covenants contained in Section 7 of this Agreement.

8.3 Other Covenant Defaults. If any Co-Borrower fails or neglects to perform, keep, or observe any other term, provision, condition, covenant, or agreement contained in this Agreement (other than as set forth in Sections 8.1, 8.2 or 8.4 through 8.14), in any of the other Loan Documents and such Co-Borrower has failed to cure such default within thirty (30) days of the occurrence of such default. During this thirty (30) day period, the failure to cure the default is not an Event of Default (but no Loan will be made during the cure period).

8.4 Material Adverse Change. If there occurs a material adverse change in Borrower Representative's business, individually, or Co-Borrowers' business, taken as a whole, including a change which results in a material impairment of the prospect of repayment of any portion of the Obligations owing to Collateral Agent or Lenders or a change which results in a material impairment of the value or priority of Collateral Agent's and Lenders' security interest in the Collateral.

8.5 [Intentionally Omitted.]

8.6 Seizure of Assets, Etc. (a) If any material portion of any Co-Borrower's or any Subsidiary's assets (i) is attached, seized, subjected to a writ or distress warrant, or is levied upon or (ii) comes into the possession of any trustee, receiver or Person acting in a similar capacity and such attachment, seizure, writ or distress warrant or levy has not been removed, discharged or rescinded within ten (10) days, (b) if any Co-Borrower or any Subsidiary is enjoined, restrained or in any way prevented by court order from continuing to conduct all or any material part of its business affairs, (c) if a judgment or other claim becomes a lien or encumbrance upon any material portion of any Co-Borrower's or any Subsidiary's assets or (d) if a notice of lien, levy, or assessment is filed of record with respect to any Borrower's or any Subsidiary's assets by the United States Government, or any department agency or instrumentality thereof, or by any state, county, municipal, or governmental agency, and the same is not paid within ten (10) days after any Co-Borrower receives notice thereof; provided that none of the foregoing shall constitute an Event of Default where such action or event is stayed or an adequate bond has been posted pending a good faith contest by any Co-Borrower.

8.7 Service of Process. (a) The service of process upon Collateral Agent or any Lender seeking to attach by a trustee or other process any funds of any Co-Borrower on deposit or otherwise held by Collateral Agent or such Lender, (b) the delivery upon Collateral Agent or any Lender of a notice of foreclosure by any Person seeking to attach or foreclose on any funds of any Co-Borrower on deposit or otherwise held by Collateral Agent or such Lender or (c) the delivery of a notice of foreclosure or exclusive control to any entity holding or maintaining any Co-Borrower's deposit accounts or accounts holding securities by any Person (other than Collateral Agent or any Lender) seeking to foreclose or attach any such accounts or securities.

8.8 Default on Indebtedness. One or more defaults shall exist under any agreement with any third party or parties which consists of the failure to pay any Indebtedness of any Co-Borrower or any Subsidiary at maturity or which results in a right by such third party or parties, whether or not exercised, to accelerate the maturity of Indebtedness in an aggregate amount in excess of Two Hundred Thousand Dollars ($200,000) or a default shall exist under any financing agreement with a Lender or any Lender's Affiliates.

8.9 Judgments. If a judgment or judgments for the payment of money in an amount, individually or in the aggregate, of at least Two Hundred Thousand Dollars ($200,000) shall be rendered against any Co-Borrower or Co-Borrowers in the aggregate or any Subsidiary and shall remain unsatisfied and unstayed for a period of thirty (30) days or more to the extent not covered by independent third-party insurance as to which the insurer has been notified of the potential claim and does not dispute coverage.

8.10 Misrepresentations. If any material misrepresentation or material misstatement exists now or hereafter in any warranty, representation, statement, certification, or report made to Collateral Agent or any Lender by any Co-Borrower or any officer, employee, agent, or director of any Co-Borrower.

8.11 Breach of Warrant. If Borrower Representative shall breach any material term of any Warrant.

8.12 Unenforceable Loan Document. If any Loan Document shall in any material respect cease to be, or any Co-Borrower shall assert that any Loan Document is not, a legal, valid and binding obligation of any Co-Borrower enforceable in accordance with its terms.

8.13 Involuntary Insolvency Proceeding. (a) If a proceeding shall have been instituted in a court having jurisdiction in the premises (i) seeking a decree or order for relief in respect of any Co-Borrower or any Subsidiary in an involuntary case under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, (ii) for the appointment of a receiver, liquidator, administrator, assignee, custodian, trustee (or similar official) of any Co-Borrower or any Subsidiary or for any substantial part of its Property or (iii) for the winding-up or liquidation of its affairs, and such proceeding shall remain undismissed or unstayed and in effect for a period of thirty (30) consecutive days or (b) such court shall enter a decree or order granting the relief sought in any such proceeding.

8.14 Voluntary Insolvency Proceeding. If any Co-Borrower or any Subsidiary shall (a) commence a voluntary case under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, (b) consent to the entry of an order for relief in an involuntary case under any such law, (c) consent to the appointment of or taking possession by a receiver, liquidator, assignee, trustee, custodian (or other similar official) of any Co-Borrower or any Subsidiary or for any substantial part of its Property, (d) shall make a general assignment for the benefit of creditors, (e) shall fail generally to pay its debts as they become due or (f) take any corporate action in furtherance of any of the foregoing.

9. Lenders' Rights and Remedies.

9.1 Rights and Remedies. Upon the occurrence of any Default or Event of Default, no Lender shall have any further obligation to advance money or extend credit to or for the benefit of any Co-Borrower. In addition, upon the occurrence of an Event of Default, Collateral Agent and each Lender shall have the rights, options, duties and remedies of a secured party as permitted by law and, in addition to and without limitation of the foregoing, Collateral Agent, on behalf of Lenders, or any Lender (acting alone) may, at its election, without notice of election and without demand, do any one or more of the following, all of which are authorized by each Co-Borrower:

(a) Acceleration of Obligations. Declare all Obligations, whether evidenced by this Agreement, by any of the other Loan Documents, or otherwise, including (i) any accrued and unpaid interest, (ii) the amounts which would have otherwise come due under Section 2.3(b)(ii) if the Loans had been voluntarily prepaid, (iii) the unpaid principal balance of the Loans and (iv) all other sums, if any, that shall have become due and payable hereunder, immediately due and payable (provided that upon the occurrence of an Event of Default

described in Section 8.13 or 8.14 all Obligations shall become immediately due and payable without any action by Collateral Agent or any Lender);

(b) Protection of Collateral. Make such payments and do such acts as Collateral Agent or such Lender considers necessary or reasonable to protect Collateral Agent's and Lenders' security interest in the Collateral. Each Co-Borrower agrees to assemble the Collateral if Collateral Agent or any Lender so requires and to make the Collateral available to Collateral Agent or Lenders as Collateral Agent or any Lender may designate. Each Co-Borrower authorizes Collateral Agent, each Lender and their designees and agents to enter the premises where the Collateral is located, to take and maintain possession of the Collateral, or any part of it, and to pay, purchase, contest, or compromise any Lien which in Collateral Agent's or such Lender's determination appears or is claimed to be prior or superior to its security interest and to pay all expenses incurred in connection therewith. With respect to any Co-Borrower's owned premises, such Co-Borrower hereby grants Collateral Agent and each Lender a license to enter into possession of such premises and to occupy the same, without charge, for up to one hundred twenty (120) days in order to exercise any of Collateral Agent's and each Lender's rights or remedies provided herein, at law, in equity, or otherwise;

(c) Preparation of Collateral for Sale. Ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell (in the manner provided for herein) the Collateral. Collateral Agent, each Lender and their agents and any purchasers at or after foreclosure are hereby granted a non-exclusive, irrevocable, perpetual, fully paid, royalty-free license or other right, solely pursuant to the provisions of this Section 9.1, to use, without charge, each Co-Borrower's Intellectual Property, including labels, patents, copyrights, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any Property of a similar nature, now or at any time hereafter owned or acquired by any Co-Borrower or in which any Co-Borrower now or at any time hereafter has any rights; provided that such license shall only be exercisable in connection with the disposition of Collateral upon Collateral Agent's or any Lender's exercise of its remedies hereunder;

(d) Sale of Collateral. Sell the Collateral at either a public or private sale, or both, by way of one or more contracts or transactions, for cash or on terms, in such manner and at such places (including any Co-Borrower's premises) as Collateral Agent or any Lender determines are commercially reasonable; and

(e) Purchase of Collateral. Credit bid and purchase all or any portion of the Collateral at any public sale.

Any deficiency that exists after disposition of the Collateral as provided above will be paid immediately by Co-Borrowers.

9.2 Set Off Right. Collateral Agent and each Lender may set off and apply to the Obligations any and all Indebtedness at any time owing to or for the credit or the account of any Co-Borrower or any other assets of any Co-Borrower in Collateral Agent's or such Lender's possession or control.

9.3 Effect of Sale. Upon the occurrence of an Event of Default, to the extent permitted by law, each Co-Borrower covenants that it will not at any time insist upon or plead, or

in any manner whatsoever claim or take any benefit or advantage of, any stay or extension law now or at any time hereafter in force, nor claim, take nor insist upon any benefit or advantage of or from any law now or hereafter in force providing for the valuation or appraisement of the Collateral or any part thereof prior to any sale or sales thereof to be made pursuant to any provision herein contained, or to the decree, judgment or order of any court of competent jurisdiction; nor, after such sale or sales, claim or exercise any right under any statute now or hereafter made or enacted by any state or otherwise to redeem the property so sold or any part thereof, and, to the full extent legally permitted, except as to rights expressly provided herein, hereby expressly waives for itself and on behalf of each and every Person, except decree or judgment creditors of such Co-Borrower, acquiring any interest in or title to the Collateral or any part thereof subsequent to the date of this Agreement, all benefit and advantage of any such law or laws, and covenants that it will not invoke or utilize any such law or laws or otherwise hinder, delay or impede the execution of any power herein granted and delegated to Collateral Agent or any Lender, but will suffer and permit the execution of every such power as though no such power, law or laws had been made or enacted. Any sale, whether under any power of sale hereby given or by virtue of judicial proceedings, shall operate to divest all right, title, interest, claim and demand whatsoever, either at law or in equity, of each Co-Borrower in and to the Property sold, and shall be a perpetual bar, both at law and in equity, against each Co-Borrower, its successors and assigns, and against any and all Persons claiming the Property sold or any part thereof under, by or through such Co-Borrower, its successors or assigns.

9.4 Power of Attorney in Respect of the Collateral. Each Co-Borrower does hereby irrevocably appoint Collateral Agent, on behalf of each Lender (which appointment is coupled with an interest) the true and lawful attorney in fact of such Co-Borrower, with full power of substitution and in its name to file any notices of security interests, financing statements and continuations and amendments thereof pursuant to the Code or federal law, as may be necessary to perfect or to continue the perfection of Collateral Agent's and Lenders' security interests in the Collateral. Each Co-Borrower does hereby irrevocably appoint Collateral Agent, on behalf of each Lender (which appointment is coupled with an interest) on the occurrence of an Event of Default, the true and lawful attorney in fact of such Co-Borrower, with full power of substitution and in its name: (a) to ask, demand, collect, receive, receipt for, sue for, compound and give acquittance for any and all rents, issues, profits, avails, distributions, income, payment draws and other sums in which a security interest is granted under Section 4 with full power to settle, adjust or compromise any claim thereunder as fully as if Collateral Agent or such Lender were such Co-Borrower itself; (b) to receive payment of and to endorse the name of such Co-Borrower to any items of Collateral (including checks, drafts and other orders for the payment of money) that come into Collateral Agent's or any Lender's possession or under Collateral Agent's or any Lender's control; (c) to make all demands, consents and waivers, or take any other action with respect to, the Collateral; (d) in Collateral Agent's or any Lender's discretion to file any claim or take any other action or proceedings, either in its own name or in the name of such Co-Borrower or otherwise, which Collateral Agent or such Lender may reasonably deem necessary or appropriate to protect and preserve the right, title and interest of Collateral Agent and Lenders in and to the Collateral; (e) endorse such Co-Borrower's name on any checks or other forms of payment or security; (f) sign such Co-Borrower's name on any invoice or bill of lading for any account or drafts against account debtors; (g) make, settle, and adjust all claims under such Co-Borrower's insurance policies; (h) settle and adjust disputes and claims about the accounts directly with account debtors, for amounts and on terms Collateral

Agent or Lenders determine reasonable; (i) transfer the Collateral into the name of Collateral Agent, any Lender or a third party as the Code permits; and (j) to otherwise act with respect thereto as though Collateral Agent or such Lender were the outright owner of the Collateral.

9.5 Lenders' Expenses. If any Co-Borrower fails to pay any amounts or furnish any required proof of payment due to third persons or entities, as required under the terms of this Agreement, then Collateral Agent or any Lender may do any or all of the following: (a) make payment of the same or any part thereof; or (b) obtain and maintain insurance policies of the type discussed in Section 6.8 of this Agreement, and take any action with respect to such policies as Collateral Agent or any Lender deems prudent. Any amounts paid or deposited by Collateral Agent or any Lender shall constitute Lenders' Expenses, shall be immediately due and payable, shall bear interest at the Default Rate and shall be secured by the Collateral. Any payments made by Collateral Agent or any Lender shall not constitute an agreement by Collateral Agent or any Lender to make similar payments in the future or a waiver by Collateral Agent or any Lender of any Event of Default under this Agreement. Co-Borrowers shall pay all reasonable fees and expenses, including Lenders' Expenses, incurred by Collateral Agent or any Lender in the enforcement or attempt to enforce any of the Obligations hereunder not performed when due.

9.6 Remedies Cumulative; Independent Nature of Lenders' Rights. Collateral Agent's and each Lender's rights and remedies under this Agreement, the Loan Documents, and all other agreements shall be cumulative. Collateral Agent and each Lender shall have all other rights and remedies not inconsistent herewith as provided under the Code, by law, or in equity. No failure on the part of Collateral Agent or any Lender to exercise, and no delay in exercising, any right or remedy hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any such right or remedy preclude any other or further exercise thereof or the exercise of any other right. The Obligations of each Co- Borrower to any Lender or Collateral Agent may be enforced by such Lender or Collateral Agent against any Co-Borrower in accordance with the terms of this Agreement and the other Loan Documents and, to the fullest extent permitted by applicable law, it shall not be necessary for Collateral Agent or any other Lender, as applicable, to be joined as an additional party in any proceeding to enforce such Obligations.

9.7 Application of Collateral Proceeds. The proceeds and/or avails of the Collateral, or any part thereof, and the proceeds and the avails of any remedy hereunder (as well as any other amounts of any kind held by Collateral Agent or any Lender, at the time of or received by Collateral Agent or any Lender after the occurrence of an Event of Default hereunder) shall be paid to and applied as follows:

(a) First, to the payment of out-of-pocket costs and expenses, including all amounts expended to preserve the value of the Collateral, of foreclosure or suit, if any, and of such sale and the exercise of any other rights or remedies, and of all proper fees, expenses, liability and advances, including reasonable legal expenses and attorneys' fees, incurred or made hereunder by Collateral Agent or any Lender, including Lenders' Expenses;

(b) Second, to the payment to Lenders of the amount then owing or unpaid on the Loans for any accrued and unpaid interest, the amounts which would have otherwise come due under Section 2.3(b)(ii), if the Loans had been voluntarily prepaid, the principal balance of

the Loans, and all other Obligations with respect to the Loans (provided, however, if such proceeds shall be insufficient to pay in full the whole amount so due, owing or unpaid upon the Loans, then *first*, to the unpaid interest thereon ratably, *second*, to the amounts which would have otherwise come due under Section 2.3(b)(ii) ratably, if the Loans had been voluntarily prepaid, *third*, to the principal balance of the Loans ratably, and *fourth*, to the ratable payment of other amounts then payable to Lenders under any of the Loan Documents); and

(c) Third, to the payment of the surplus, if any, to Co-Borrowers, its successors and assigns or to the Person lawfully entitled to receive the same.

9.8 Reinstatement of Rights. If Collateral Agent or any Lender shall have proceeded to enforce any right under this Agreement or any other Loan Document by foreclosure, sale, entry or otherwise, and such proceedings shall have been discontinued or abandoned for any reason or shall have been determined adversely, then and in every such case (unless otherwise ordered by a court of competent jurisdiction), Collateral Agent and Lenders shall be restored to their former position and rights hereunder with respect to the Property subject to the security interest created under this Agreement.

10. Waivers; Indemnification.

10.1 Demand; Protest. Each Co-Borrower waives demand, protest, notice of protest, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees at any time held by Collateral Agent or any Lender on which any Co-Borrower may in any way be liable.

10.2 Lender's Liability for Collateral. So long as Collateral Agent and each Lender comply with their obligations, if any, under the Code, neither Collateral Agent nor any Lender shall in any way or manner be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage thereto occurring or arising in any manner or fashion from any cause other than Collateral Agent's or any Lender's gross negligence or willful misconduct; (c) any diminution in the value thereof; or (d) any act or default of any carrier, warehouseman, bailee, forwarding agency, or other Person whomsoever. All risk of loss, damage or destruction of the Collateral shall be borne by Co-Borrowers.

10.3 Indemnification and Waiver. Whether or not the transactions contemplated hereby shall be consummated:

(a) General Indemnity. Each Co-Borrower agrees upon demand to pay or reimburse Collateral Agent and each Lender for all liabilities, obligations and out-of-pocket expenses, including Lenders' Expenses and reasonable fees and expenses of counsel for Collateral Agent and each Lender from time to time arising in connection with the enforcement or collection of sums due under the Loan Documents, and in connection with any amendment or modification of the Loan Documents or any "work-out" in connection with the Loan Documents. Each Co-Borrower shall indemnify, reimburse and hold Collateral Agent, each Lender, and each of their respective successors, assigns, agents, attorneys, officers, directors, equity holders, servants, agents and employees (each an "Indemnified Person") harmless from and against all liabilities, losses, damages, actions, suits, demands, claims of any kind and nature (including

claims relating to environmental discharge, cleanup or compliance), all costs and expenses whatsoever to the extent they may be incurred or suffered by such Indemnified Person in connection therewith (including reasonable attorneys' fees and expenses), fines, penalties (and other charges of any applicable Governmental Authority), licensing fees relating to any item of Collateral, damage to or loss of use of property (including consequential or special damages to third parties or damages to any Co-Borrower's property), or bodily injury to or death of any person (including any agent or employee of any Co-Borrower) (each, a "Claim"), directly or indirectly relating to or arising out of the use of the proceeds of the Loans or otherwise, the falsity of any representation or warranty of any Co-Borrower or any Co-Borrower's failure to comply with the terms of this Agreement or any other Loan Document. The foregoing indemnity shall cover, without limitation, (i) any Claim in connection with a design or other defect (latent or patent) in any item of equipment or product included in the Collateral, (ii) any Claim for infringement of any patent, copyright, trademark or other intellectual property right, (iii) any Claim resulting from the presence on or under or the escape, seepage, leakage, spillage, discharge, emission or release of any Hazardous Materials on the premises owned, occupied or leased by any Co-Borrower, including any Claims asserted or arising under any Environmental Law, (iv) any Claim for negligence or strict or absolute liability in tort or (v) any Claim asserted as to or arising under any Account Control Agreement or any Landlord Agreement; provided, however, no Co-Borrower shall indemnify any Indemnified Person for any liability incurred by such Indemnified Person as a direct and sole result of such Indemnified Person's gross negligence or willful misconduct. Such indemnities shall continue in full force and effect, notwithstanding the expiration or termination of this Agreement. Upon Collateral Agent's or any Lender's written demand, Co-Borrowers shall assume and diligently conduct, at its sole cost and expense, the entire defense of Collateral Agent and Lenders, each of their members, partners, and each of their respective, agents, employees, directors, officers, equity holders, successors and assigns against any indemnified Claim described in this Section 10.3(a). No Co-Borrower shall settle or compromise any Claim against or involving Collateral Agent or any Lender without first obtaining Collateral Agent's or such Lender's written consent thereto, which consent shall not be unreasonably withheld. This Section 10.3(a) shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

(b) Waiver. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED IN THIS AGREEMENT OR ANYWHERE ELSE, EACH CO-BORROWER AGREES THAT IT SHALL NOT SEEK FROM COLLATERAL AGENT OR ANY LENDER UNDER ANY THEORY OF LIABILITY (INCLUDING ANY THEORY IN TORTS), ANY SPECIAL, INDIRECT, CONSEQUENTIAL OR PUNITIVE DAMAGES.

(c) Survival; Defense. The obligations in this Section 10.3 shall survive payment of all other Obligations pursuant to Section 12.8. At the election of any Indemnified Person, Co-Borrowers shall defend such Indemnified Person using legal counsel satisfactory to such Indemnified Person in such Person's reasonable discretion, at the sole cost and expense of Co-Borrowers. All amounts owing under this Section 10.3 shall be paid within thirty (30) days after written demand.

11. Notices. Unless otherwise provided in this Agreement, all notices or demands by any party relating to this Agreement or any other agreement entered into in connection herewith shall be in writing and (except for financial statements and other informational documents which may

be sent by first-class mail, postage prepaid) shall be personally delivered or sent by certified mail, postage prepaid, return receipt requested, by prepaid nationally recognized overnight courier, or by prepaid facsimile to Borrower Representative, to Collateral Agent or to Lenders, as the case may be, at their respective addresses set forth below:

If to Borrower Representative:	Cerecor Inc. 540 Gaither Road, Suite 400 Rockville, MD 20850 Attention: Schond Greenway Email: sgreenway@cerecor.com Ph: (610) 254-4201
If to Horizon or Collateral Agent:	Horizon Technology Finance Corporation 312 Farmington Avenue Farmington, CT 06032 Attention: Legal Department Email: jay@horizontechfinance.com Fax: (860) 676-8655 Ph: (860) 676-8654
If to Powerscourt:	Powerscourt Investments XXV, LP c/o Waterfall Asset Management, LLC 1251 Avenue of the Americas, 50th Floor New York, NY 10020 Attention: General Counsel Ph: (212) 257-4600 E-mail: notices@waterfallam.com

The parties hereto may change the address at which they are to receive notices hereunder, by notice in writing in the foregoing manner given to the other.

12. General Provisions.

12.1 Successors and Assigns. This Agreement and the Loan Documents shall bind and inure to the benefit of the respective successors and permitted assigns of each of the parties; provided, however, neither this Agreement nor any rights hereunder may be assigned by any Co-Borrower without each Lender's prior written consent, which consent may be granted or withheld in each Lender's sole discretion. Each Lender shall have the right without the consent of or notice to any Co-Borrower to sell, transfer, assign, negotiate, or grant participations in all or any part of, or any interest in such Lender's rights and benefits hereunder. Collateral Agent and each Lender may disclose the Loan Documents and any other financial or other information relating to any Co-Borrower to any potential participant or assignee of any of the Loans; provided that such participant or assignee agrees to protect the confidentiality of such documents and information using the same measures that it uses to protect its own confidential information.

12.2 Time of Essence. Time is of the essence for the performance of all obligations set forth in this Agreement.

12.3 Severability of Provisions. Each provision of this Agreement shall be severable from every other provision of this Agreement for the purpose of determining the legal enforceability of any specific provision.

12.4 Entire Agreement; Construction; Amendments and Waivers.

(a) Entire Agreement. This Agreement and each of the other Loan Documents, taken together, constitute and contain the entire agreement among Co-Borrowers, Collateral Agent and Lenders and supersede any and all prior agreements, negotiations, correspondence, understandings and communications between the parties, whether written or oral, respecting the subject matter hereof. Each Co-Borrower acknowledges that it is not relying on any representation or agreement made by Collateral Agent, any Lender or any employee, attorney or agent thereof, other than the specific agreements set forth in this Agreement and the Loan Documents.

(b) Construction. This Agreement is the result of negotiations between and has been reviewed by each of each Co-Borrower, Collateral Agent and each Lender as of the date hereof and their respective counsel; accordingly, this Agreement shall be deemed to be the product of the parties hereto, and no ambiguity shall be construed in favor of or against any Co-Borrower, Collateral Agent or any Lender. Co-Borrowers, Collateral Agent and Lenders agree that they intend the literal words of this Agreement and the other Loan Documents and that no parol evidence shall be necessary or appropriate to establish any Co-Borrower's, Collateral Agent's or any Lender's actual intentions.

(c) Amendments and Waivers. Any and all discharges or waivers of, or consents to any departures from any provision of this Agreement or of any of the other Loan Documents shall not be effective without the written consent of each Lender; provided that no such discharge, waiver or consent affecting the rights or duties of the Collateral Agent under this Agreement or any other Loan Document shall be effective without the written consent of the Collateral Agent. Any and all amendments and modifications of this Agreement or of any of the other Loan Documents shall not be effective without the written consent of each Lender and each Co-Borrower; provided that no such amendment or modification affecting the rights or duties of the Collateral Agent under this Agreement or any other Loan Document shall be effective without the written consent of the Collateral Agent. Any waiver or consent with respect to any provision of the Loan Documents shall be effective only in the specific instance and for the specific purpose for which it was given. No notice to or demand on any Co-Borrower in any case shall entitle any Co-Borrower to any other or further notice or demand in similar or other circumstances. Any amendment, modification, waiver or consent affected in accordance with this Section 12.4 shall be binding upon Collateral Agent, Lenders and on each Co-Borrower.

12.5 Reliance by Lenders. All covenants, agreements, representations and warranties made herein by any Co-Borrower shall be deemed to be material to and to have been relied upon by Collateral Agent and Lenders, notwithstanding any investigation by Collateral Agent or any Lender.

12.6 No Set-Offs by any Co-Borrower. All sums payable by any Co-Borrower pursuant to this Agreement or any of the other Loan Documents shall be payable without notice

or demand and shall be payable in United States Dollars without set-off or reduction of any manner whatsoever.

12.7 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts (including signatures delivered by facsimile or other electronic means), each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Agreement.

12.8 Survival. All covenants, representations and warranties made in this Agreement shall continue in full force and effect so long as any Obligations or commitment to fund remain outstanding. The obligations of each Co-Borrower to indemnify Collateral Agent and Lenders with respect to the expenses, damages, losses, costs and liabilities described in Section 10.3 shall survive until all applicable statute of limitations periods with respect to actions that may be brought against Collateral Agent or any Lender have run.

12.9 Register. Borrower Representative shall maintain a copy of each document effecting an assignment delivered to it and a register for the recordation of the names and addresses of Lenders, and the commitments of, and principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and Co-Borrowers, Collateral Agent and Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by Co-Borrowers and any Lender, at any reasonable time and from time to time upon reasonable prior notice. Notwithstanding anything to the contrary contained in this Agreement, the Loans (including any Notes evidencing the Loans) are registered obligations, the right, title and interest of Lenders and their assignees in and to such Loans shall be transferable only upon notation of such transfer in the Register and no assignment thereof shall be effective until recorded therein. This Section 12.9 and Section 12.1 shall be construed so that the Loans are at all times maintained in "registered form" within the meaning of Sections 163(f), 871(h)(2) and 881(c)(2) of the Internal Revenue Code.

13. Relationship of Parties. Each Co-Borrower and each Lender acknowledge, understand and agree that the relationship between each Co-Borrower, on the one hand, and Lenders, on the other, is, and at all times shall remain solely that of a borrower and lender. No Lender shall, under any circumstances, be construed to be a partner or a joint venturer of any Co-Borrower or any of its Affiliates; nor shall any Lender, under any circumstances, be deemed to be in a relationship of confidence or trust or a fiduciary relationship with any Co-Borrower or any of its Affiliates, or to owe any fiduciary duty or any other duty to any Co-Borrower or any of its Affiliates. Neither Collateral Agent nor any Lender undertakes or assumes any responsibility or duty to any Co-Borrower or any of its Affiliates to select, review, inspect, supervise, pass judgment upon or otherwise inform any Co-Borrower or any of its Affiliates of any matter in connection with its or their Property, any Collateral held by Collateral Agent or any Lender or the operations of any Co-Borrower or any of its Affiliates. Each Co-Borrower and each of its Affiliates shall rely entirely on their own judgment with respect to such matters, and any review, inspection, supervision, exercise of judgment or supply of information undertaken or assumed by

Collateral Agent or any Lender in connection with such matters is solely for the protection of Collateral Agent and Lenders and no Co-Borrower nor any Affiliate is entitled to rely thereon.

1 4 . Confidentiality. All information (other than periodic reports filed by any Co-Borrower with the Securities and Exchange Commission) disclosed by any Co-Borrower to Collateral Agent or any Lender in writing or through inspection pursuant to this Agreement that is marked confidential shall be considered confidential. Collateral Agent and each Lender agrees to use the same degree of care to safeguard and prevent disclosure of such confidential information as Collateral Agent and such Lender uses with its own confidential information, but in any event no less than a reasonable degree of care. Neither Collateral Agent nor any Lender shall disclose such information to any third party (other than (a) to another party hereto, (b) to Collateral Agent's or any Lender's members, partners, attorneys, governmental regulators (including any self-regulatory authority) or auditors, (c) to Collateral Agent's or any Lender's subsidiaries and affiliates, (d) on a confidential basis, to any rating agency, (e) to prospective transferees and purchasers of the Loans or any actual or prospective party (or its Affiliates) to any swap, derivative or other transaction under which payments are to be made by reference to the Obligations, any Co-Borrower, any Loan Document or any payment thereunder, all subject to the same confidentiality obligation set forth herein or (f) as required by law, regulation, subpoena or other order to be disclosed) and shall use such information only for purposes of evaluation of its investment in a Co-Borrower and the exercise of Collateral Agent's or any Lender's rights and the enforcement of its remedies under this Agreement and the other Loan Documents. The obligations of confidentiality shall not apply to any information that (i) was known to the public prior to disclosure by any Co-Borrower under this Agreement, (ii) becomes known to the public through no fault of Collateral Agent or any Lender, (iii) is disclosed to Collateral Agent or any Lender on a non-confidential basis by a third party or (iv) is independently developed by Collateral Agent or any Lender. Notwithstanding the foregoing, Collateral Agent's and Lenders' agreement of confidentiality shall not apply if Collateral Agent or any Lender has acquired indefeasible title to any Collateral or in connection with any enforcement or exercise of Collateral Agent's or any Lender's rights and remedies under this Agreement following an Event of Default, including the enforcement of Collateral Agent's and any Lender's security interest in the Collateral.

1 5 . CHOICE OF LAW AND VENUE; JURY TRIAL WAIVER . THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF CONNECTICUT. EACH CO-BORROWER, COLLATERAL AGENT AND EACH LENDER HEREBY SUBMITS TO THE NON-EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE STATE OF CONNECTICUT. EACH CO-BORROWER, COLLATERAL AGENT AND EACH LENDER HEREBY WAIVES ITS RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF ANY OF THE LOAN DOCUMENTS OR ANY OF THE TRANSACTIONS CONTEMPLATED THEREIN, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS.

16. Cross-Guaranty of Co-Borrowers.

16.1 Cross-Guaranty. Each Co-Borrower hereby agrees that such Co-Borrower is jointly and severally liable for, and hereby absolutely and unconditionally guarantees to Lenders and their successors and assigns, the full and prompt payment (whether at stated maturity, by acceleration or otherwise) and performance of, all Obligations owed or hereafter owing to Lenders by each other Co-Borrower. Each Co-Borrower agrees that its guaranty obligation hereunder is a continuing guaranty of payment and performance and not of collection, that its obligations under this Section 16 shall not be discharged until payment and performance, in full, of the Obligations has occurred, and that its obligations under this Section 16 shall be absolute and unconditional, irrespective of, and unaffected by:

(a) the genuineness, validity, regularity, enforceability or any future amendment of, or change in, this Agreement, any other Loan Document or any other agreement, document or instrument to which any Co-Borrower is or may become a party;

(b) the absence of any action to enforce this Agreement (including this Section 16) or any other Loan Document, or the waiver or consent by Lenders with respect to any of the provisions hereof or thereof;

(c) the existence, value or condition of, or failure to perfect its Lien against, any security for the Obligations or any action, or the absence of any action, by Lenders in respect thereof (including the release of any such security);

(d) the insolvency of any Co-Borrower or any other Person; or

(e) any other action or circumstances that might otherwise constitute a legal or equitable discharge or defense of a surety or guarantor.

Each Co-Borrower shall be regarded, and shall be in the same position, as principal debtor with respect to the Obligations guaranteed hereunder.

16.2 Waivers by Co-Borrowers. Each Co-Borrower expressly waives all rights it may have now or in the future under any statute, at common law, at law, in equity or otherwise, to compel Lenders to marshal assets or to proceed in respect of the Obligations guaranteed hereunder against any other Co-Borrower, any other party or against any security for the payment and performance of the Obligations before proceeding against, or as a condition to proceeding against, such Co-Borrower. Each Co-Borrower and each Lender agrees that the foregoing waivers are of the essence of the transaction contemplated by this Agreement and the other Loan Documents and that, but for the provisions of this Section 16 and such waivers, Lenders would decline to enter into this Agreement.

16.3 Benefit of Guaranty. Each Co-Borrower agrees that the provisions of this Section 16 are for the benefit of Lenders and their successors, transferees, endorsees and assigns, and nothing herein contained shall impair, as between any other Co-Borrower and Lenders, the obligations of such other Co-Borrower under the Loan Documents.

16.4 Waiver of Subrogation, Etc. Notwithstanding anything to the contrary in this Agreement or in any other Loan Document, and except as set forth in Section 16.7, each Co-Borrower hereby expressly and irrevocably waives any and all rights at law or in equity to

subrogation, reimbursement, exoneration, contribution, indemnification or set off and any and all defenses available to a surety, guarantor or accommodation co-obligor until the Obligations are indefeasibly paid in full in cash. Each Co-Borrower acknowledges and agrees that this waiver is intended to benefit Lenders and shall not limit or otherwise affect such Co-Borrower's liability hereunder or the enforceability of this Section 16, and that Lenders and their successors and assigns are intended third party beneficiaries of the waivers and agreements set forth in this Section 16.

16.5 Election of Remedies. If any Lender may, under applicable law, proceed to realize its benefits under any of the Loan Documents giving such Lender a Lien upon any Collateral, whether owned by any Co-Borrower or by any other Person, either by judicial foreclosure or by non-judicial sale or enforcement, such Lender may, at its sole option, determine which of its remedies or rights it may pursue without affecting any of its rights and remedies under this Section 16. If, in the exercise of any of its rights and remedies, such Lender shall forfeit any of its rights or remedies (including, without limitation, its right to enter a deficiency judgment against any Co-Borrower or any other Person), whether because of any applicable laws pertaining to "election of remedies" or the like, each Co-Borrower hereby consents to such action by such Lender and waives any claim based upon such action, even if such action by such Lender shall result in a full or partial loss of any rights of subrogation that each Co-Borrower might otherwise have had but for such action by such Lender. Any election of remedies that results in the denial or impairment of the right of such Lender to seek a deficiency judgment against any Co-Borrower shall not impair any other Co-Borrower's obligation to pay the full amount of the Obligations. In the event any Lender shall bid at any foreclosure or trustee's sale or at any private sale permitted by law or the Loan Documents, such Lender may bid all or less than the amount of the Obligations and the amount of such bid need not be paid by such Lender but shall be credited against the Obligations. The amount of the successful bid at any such sale, whether a Lender or any other party is the successful bidder, shall be conclusively deemed to be the fair market value of the Collateral and the difference between such bid amount and the remaining balance of the Obligations shall be conclusively deemed to be the amount of the Obligations guaranteed under this Section 16, notwithstanding that any present or future law or court decision or ruling may have the effect of reducing the amount of any deficiency claim to which such Lender might otherwise be entitled but for such bidding at any such sale.

16.6 Limitation. Notwithstanding any provision herein contained to the contrary, each Co-Borrower's liability under this Section 16 (which liability is in any event in addition to amounts for which such Co-Borrower is primarily liable under this Agreement) shall be limited to an amount not to exceed as of any date of determination the lesser of:

(a) the net amount of all Loans advanced to any other Co-Borrower under this Agreement and then re-loaned or otherwise transferred to, or for the benefit of, such Co-Borrower; and

(b) the amount that could be claimed by any Lender from such Co-Borrower under this Section 16 without rendering such claim voidable or avoidable under Section 548 of the Bankruptcy Code or under any applicable state Uniform Fraudulent Transfer Act, Uniform Fraudulent Conveyance Act or similar statute or common law after

taking into account, among other things, such Co-Borrower's right of contribution and indemnification from each other Co-Borrower under Section 16.7.

16.7 Contribution with Respect to Guaranty Obligations.

(a) To the extent that any Co-Borrower shall make a payment under this Section 16 of all or any of the Obligations (other than Loans made to such Co-Borrower for which it is primarily liable) (a "Guarantor Payment") that, taking into account all other Guarantor Payments then previously or concurrently made by any other Co-Borrower, exceeds the amount that such Co-Borrower would otherwise have paid if each Co-Borrower had paid the aggregate Obligations satisfied by such Guarantor Payment in the same proportion that such Co-Borrower's "Allocable Amount" (as defined below) (as determined immediately prior to such Guarantor Payment) bore to the aggregate Allocable Amounts of each of the Co-Borrowers as determined immediately prior to the making of such Guarantor Payment, then, following indefeasible payment in full in cash of the Obligations and termination of the commitments to lend hereunder, such Co-Borrower shall be entitled to receive contribution and indemnification payments from, and be reimbursed by, each other Co-Borrower for the amount of such excess, pro rata based upon their respective Allocable Amounts in effect immediately prior to such Guarantor Payment.

(b) As of any date of determination, the "Allocable Amount" of any Co-Borrower shall be equal to the maximum amount of the claim that could then be recovered from such Co-Borrower under this Section 16 without rendering such claim voidable or avoidable under Section 548 of the Bankruptcy Code or under any applicable state Uniform Fraudulent Transfer Act, Uniform Fraudulent Conveyance Act or similar statute or common law.

(c) This Section 16.7 is intended only to define the relative rights of Co-Borrowers and nothing set forth in this Section 16.7 is intended to or shall impair the obligations of Co-Borrowers, jointly and severally, to pay any amounts as and when the same shall become due and payable in accordance with the terms of this Agreement. Nothing contained in this Section 16.7 shall limit the liability of any Co-Borrower to pay the Loans made directly or indirectly to such Co-Borrower and accrued interest, fees and expenses with respect thereto for which such Co-Borrower shall be primarily liable.

(d) The parties hereto acknowledge that the rights of contribution and indemnification hereunder shall constitute assets of the Co-Borrowers to which such contribution and indemnification is owing.

(e) The rights of the indemnifying Co-Borrowers against other Co-Borrowers under this Section 16 shall be exercisable upon the full and indefeasible payment of the Obligations and the termination of the commitments to lend hereunder.

16.8 Liability Cumulative. The liability of Co-Borrowers under this Section 16 is in addition to and shall be cumulative with all liabilities of each Co-Borrower to Lenders under this Agreement and the other Loan Documents to which such Co-Borrower is a party or in respect of any Obligations or obligation of the other Co-Borrower, without any limitation as

to amount, unless the instrument or agreement evidencing or creating such other liability specifically provides to the contrary.

[*Remainder of page intentionally left blank.*]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written.

BORROWER REPRESENTATIVE and CO-BORROWER:

CERECOR INC.

By: /s/ Michael Cola

Name: Michael Cola

Title: Chief Executive Officer

CO-BORROWERS:

AEVI GENOMIC MEDICINE, LLC

By: /s/ Michael Cola

Name: Michael Cola

Title: President

ICHORION THERAPEUTICS, LLC

By: /s/ Michael Cola

Name: Michael Cola

Title: President

NEUROFIX, LLC

By: /s/ Michael Cola

Name: Michael Cola

Title: President

TRX PHARMACEUTICALS, LLC

By: /s/ Michael Cola

Name: Michael Cola

Title: President

ZYLERA PHARM CORP.

By: /s/ Michael Cola

Name: Michael Cola

Title: President

ZYLERA PHARMACEUTICALS, LLC

By: /s/ Michael Cola

Name: Michael Cola

Title: President

COLLATERAL AGENT and LENDER:

HORIZON TECHNOLOGY FINANCE CORPORATION

By: /s/ Robert D. Pomeroy, Jr.

Name: Robert D. Pomeroy, Jr.

Title: Chief Executive Officer

LENDER:

POWERSCOURT INVESTMENTS XXV, LP

By: /s/ Jeffrey Everhart

Name: Jeffrey Everhart

Title: Authorized Signatory

LIST OF EXHIBITS AND SCHEDULES

Schedule 1 Co-Borrowers

Exhibit A Disclosure Schedule
Exhibit B Funding Certificate
Exhibit C Form of Note
Exhibit D Form of Legal Opinion
Exhibit E Form of Officer’s Certificate

Exhibit 10.3

CERTAIN INFORMATION IDENTIFIED WITH THE MARK "(***)" HAS BEEN EXCLUDED FROM THIS EXHIBIT BECAUSE SUCH INFORMATION IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

AMENDMENT NO. 1 TO OPTION AND LICENSE AGREEMENT

This Amendment No. 1 to the Option and License Agreement (this "**Amendment**") is entered into as of July 16, 2021 (the "**Amendment Effective Date**"), by and between:

(1) MEDIMMUNE LIMITED, a company organized under the laws of England and Wales ("**AstraZeneca**"); and

(2) AEVI GENOMIC MEDICINE, LLC, a Delaware limited liability company and successor by merger of AEVI GENOMIC MEDICINE, INC., a Delaware corporation ("**Aevi**").

AstraZeneca and Aevi may be referred to herein individually as a "**Party**" and collectively as the "**Parties**."

Background

A. AstraZeneca and Aevi entered into the Option and License Agreement dated August 6, 2019 (the "**Agreement**");

B. AstraZeneca AB, an affiliate of AstraZeneca, and (***) are party to a Licenses and Services Agreement dated (***) (as amended, the (***) Agreement") that covers certain Know-How (as defined in the Agreement) that the Parties desire to be sublicensed to Aevi and its Affiliates (as defined in the Agreement) and sublicensees; and

C. The Parties desire to amend the Agreement to amend, modify or restate certain terms and conditions of the Agreement and to make such other changes as are set forth herein for purposes of effecting such sublicense.

Agreement

In consideration of the promises and of the mutual covenants and agreements set forth, the Parties agree as follows:

1. Definitions. All capitalized terms used and not otherwise defined in this Amendment have the meanings ascribed to such terms in the Agreement.

2. (***) **Sublicense.** The following is hereby added to the end of Section 4.3:

MedImmune hereby grants to Aevi and its Affiliates and sublicensees of MedImmune Intellectual Property (which sublicensees MedImmune acknowledges are either Strategic Partners, Competing Contract Manufacturers or Third Parties as such capitalized terms are defined in the (***) Agreement), a worldwide, perpetual and irrevocable (save Aevi's breach of the Agreement), exclusive (even as to MedImmune), royalty-free (subject to Section 7.3) and fully paid-up (subject to Section 7.2) right and sublicense, under MedImmune's right, title and interest in and to the Cell Line and Know-How associated therewith, including the specific Know-How listed on Schedule 4.3 (collectively, the (***) Know-How"), solely to Develop, have Developed, Manufacture, have Manufactured, Commercialize and have Commercialized the Molecule and Products in the Field in the Territory (the "(***) ***Sublicense***"). The (***) Sublicense (a) is subject to the terms and conditions of the (***) Agreement, (b) cannot be sublicensed by Aevi except with MedImmune's prior written consent, which consent shall not be unreasonably withheld, delayed or conditioned, (c) effects a direct sublicense by MedImmune to Aevi and its Affiliates and sublicensees of MedImmune Intellectual Property (and not a sublicense to Aevi who in turn sublicenses to its Affiliates or sublicensees), (d) covers Know-How that is not considered MedImmune Intellectual Property or MedImmune Excluded IP and (e) does not sublicense rights to the (***) (as defined in the (***) Agreement). Notwithstanding the provisions of Article 8 or Article 11, MedImmune shall have the sole and exclusive right and control over the enforcement, defense or other actions with respect to the (***) Know-How and (***) rights in the Cell Line.

3. **(***) Cell Line Know-How.** Schedule 4.3 CELL LINE TO BE PROVIDED TO AEVI of the Agreement is hereby deleted and replaced in its entirety with Exhibit A attached to this Amendment.

4. **Representations and Warranties of AstraZeneca.** AstraZeneca represents and warrants to Aevi that as of the Amendment Effective Date: (a) AstraZeneca Controls the Cell Line and (***) Know-How and is entitled to grant the (***) Sublicense; (b) MedImmune's right, title and interest in and to the Cell Line and the (***) Know-How includes the right to sublicense the rights of MedImmune received from (***) in the Cell

Line and (***) Know-How to Develop, have Developed, Manufacture, have Manufactured, Commercialize and have Commercialized the Molecule and Products in the Field in the Territory; and (c) AstraZeneca has not previously assigned, transferred, conveyed or otherwise encumbered its right, title and interest in the Cell Line or (***) Know-How in a manner that conflicts with any rights granted to Aevi under the Agreement, and AstraZeneca is under no obligation to make any such transfers, conveyances or encumbrances.

5. Defined Terms. The defined terms (***) Agreement, (***) Know-How and (***) Sublicense set forth in this Amendment are hereby added to the table in Section 2.2 of the Agreement in the correct alphabetical order and with the appropriate cross references.

6. Full Force and Effect. Except as set forth in this Amendment, in all other respects the Agreement remains in full force and effect.

7. Modifications. This Amendment may only be modified by a written document, signed by both Parties.

8. Counterparts. This Amendment may be executed in two or more counterparts, each of which will be deemed an original and all of which will together be deemed to constitute one agreement. The Parties agree that the execution of this Amendment by industry standard electronic signature software and/or by exchanging PDF signatures shall have the same legal force and effect as the exchange of original signatures, and that in any proceeding arising under or relating to this Amendment, each Party hereby waives any right to raise any defense or waiver based upon execution of this Amendment by means of such electronic signatures or maintenance of the executed agreement electronically.

Execution

THIS AMENDMENT IS EXECUTED by the authorised representatives of the Parties as of the Amendment Effective Date first written above.

SIGNED for and on behalf of	**SIGNED for and on behalf of**
MedImmune Limited	**Aevi Genomic Medicine, LLC**
/s/ Adrian Kemp	/s/ Michael F. Cola
Signature	Signature
Name: Adrian Kemp	Name: Michael F. Cola
Title: Company Secretary	Title: Chief Executive Officer

EXHIBIT A

SCHEDULE 4.3

CELL LINE TO BE PROVIDED TO AEVI

Description	Lot No.	Quantity	Storage Temperature	Storage Location
(***)	(***)	(***)	(***)	(***)
(***)	(***)	(***)	(***)	(***)

Reports

(***)
(***)

Exhibit 31.1

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

I, Michael Cola, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cerecor Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 2, 2021

/s/ Michael Cola

Michael Cola
Chief Executive Officer
(Registrant's principal executive officer)

Exhibit 31.2

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

I, Schond Greenway, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cerecor Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: August 2, 2021

/s/ Schond L. Greenway
Schond L. Greenway
Chief Financial Officer
(Registrant’s principal financial officer)

Exhibit 32.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
AND PRINCIPAL FINANCIAL OFFICER
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 Cerecor Inc. (the "Registrant") on Form 10-Q for the period ended June 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael Cola, Chief Executive Officer of the Registrant, and I, Schond Greenway, Chief Financial Officer of the Registrant, each hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

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

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: August 2, 2021

/s/ Michael Cola

Michael Cola
Chief Executive Officer
(Registrant's principal executive officer)

Date: August 2, 2021

/s/ Schond L. Greenway

Schond L. Greenway
Chief Financial Officer
(Registrant's principal financial officer)

The foregoing certifications are not deemed filed with the Securities and Exchange Commission for purposes of section 18 of the Securities Exchange Act of 1934, as amended (Exchange Act), and are not to be incorporated by reference into any filing of Cerecor Inc. under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, regardless of any general incorporation language in such filing.