UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2022

OR

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

For the transition period from _____ to _____

Commission File Number: 001-39397

INOZYME PHARMA, INC.
(Exact name of registrant as specified in its charter)

Delaware	**38-4024528**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
321 Summer Street, Suite 400 Boston, Massachusetts	**02210**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (857) 330-4340

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $0.0001 per share	INZY	Nasdaq Global Select Market

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

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

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

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

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

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

As of August 10, 2022, the registrant had 40,145,674 shares of common stock, $0.0001 par value per share, outstanding.

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements, which reflect our current views with respect to, among other things, our operations and financial performance. All statements, other than statements of historical fact, contained in this Quarterly Report on Form 10-Q, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth, are forward-looking statements. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "outlook," "plan," "potential," "predict," "project," "should," "target," "will," "would," and the negative version of these words and other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Such forward-looking statements are subject to various risks and uncertainties. Accordingly, there are or will be important factors that could cause actual outcomes or results to differ materially from those indicated in these statements. We believe these factors include but are not limited to those described in the "Risk Factors" section in our most recent Annual Report on Form 10-K and in this Quarterly Report on Form 10-Q and include, among other things:

- our ongoing Phase 1/2 clinical trials of INZ-701 for ENPP1 and ABCC6 Deficiencies, including statements regarding the timing of enrollment and completion of the clinical trials and the period during which the results of the clinical trials will become available;
- the timing and conduct of our planned later stage clinical trials of INZ-701 for patients with ENPP1 and ABCC6 Deficiencies;
- our plans to conduct research and preclinical testing of INZ-701 for additional indications;
- our plans to conduct research and preclinical testing of other product candidates;
- the timing of, and our ability to obtain and maintain, marketing approvals of INZ-701, and the ability of INZ-701 and our other product candidates to meet existing or future regulatory standards;
- our expectations regarding our ability to fund our operating expenses, capital expenditures, and debt service obligations with our cash, cash equivalents and short-term investments;
- the potential advantages of our product candidates;
- the rate and degree of market acceptance and clinical utility of our product candidates;
- our estimates regarding the potential market opportunity for our product candidates;
- our commercialization and manufacturing capabilities and strategy;
- our intellectual property position;
- the impact of COVID-19 on our business and operations;
- our ability to identify additional products, product candidates or technologies with significant commercial potential that are consistent with our commercial objectives;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- the impact of government laws and regulations;
- our competitive position; and
- our expectations regarding the time during which we will be an emerging growth company under the Jumpstart our Business Startups Act of 2012.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in our most recent Annual Report on Form 10-K and in this Quarterly Report on Form 10-Q, particularly in the "Risk Factors" section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, joint ventures or investments we may make or enter into.

You should read this Quarterly Report on Form 10-Q and the documents that we have filed as exhibits to this Quarterly Report on Form 10-Q completely and with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements contained in this Quarterly Report on Form 10-Q are made as of the date of this Quarterly Report on Form 10-Q, and we do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

INOZYME PHARMA, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(amounts in thousands, except share and per share data)
(Unaudited)

	June 30, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 62,620	$ 23,316
Short-term investments	88,860	88,485
Prepaid expenses and other current assets	2,268	3,541
Total current assets	153,748	115,342
Property and equipment, net	2,208	2,383
Other assets	379	354
Right-of-use assets	1,844	2,053
Prepaid expenses, net of current portion	3,810	3,409
Total assets	$ 161,989	$ 123,541
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 1,339	$ 2,394
Accrued expenses	8,461	8,508
Operating lease liabilities	773	731
Total current liabilities	10,573	11,633
Operating lease liabilities, net of current portion	2,240	2,640
Total liabilities	12,813	14,273
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred Stock, $0.0001 par value – 5,000,000 shares authorized at June 30, 2022 and December 31, 2021; No shares issued and outstanding at June 30, 2022 or December 31, 2021	—	—
Common Stock, $0.0001 par value – 200,000,000 shares authorized at June 30, 2022 and December 31, 2021; 40,097,076 shares issued and outstanding at June 30, 2022 and 23,668,747 shares issued and outstanding at December 31, 2021	4	2
Additional paid in-capital	329,414	256,948
Accumulated other comprehensive (loss) income	(397)	18
Accumulated deficit	(179,845)	(147,700)
Total stockholders' equity	149,176	109,268
Total liabilities and stockholders' equity	$ 161,989	$ 123,541

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

INOZYME PHARMA, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(amounts in thousands, except share and per share data)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Operating expenses:				
Research and development	$ 10,007	$ 8,220	$ 21,821	$ 14,823
General and administrative	5,384	4,435	10,409	8,804
Total operating expenses	15,391	12,655	32,230	23,627
Loss from operations	(15,391)	(12,655)	(32,230)	(23,627)
Other income (expense):				
Interest income	321	58	381	121
Other (expenses) income	(191)	57	(296)	(84)
Other income, net	130	115	85	37
Net loss	$ (15,261)	$ (12,540)	$ (32,145)	$ (23,590)
Other comprehensive (loss) income:				
Unrealized (losses) gains on available-for-sale securities	(225)	6	(357)	16
Foreign currency translation adjustment	(43)	—	(58)	—
Total other comprehensive (loss) income	(268)	6	(415)	16
Comprehensive loss	$ (15,529)	$ (12,534)	$ (32,560)	$ (23,574)
Net loss attributable to common stockholders—basic and diluted	$ (15,261)	$ (12,540)	$ (32,145)	$ (23,590)
Net loss per share attributable to common stockholders—basic and diluted	$ (0.38)	$ (0.53)	$ (1.01)	$ (1.01)
Weighted-average common shares and pre-funded warrants outstanding—basic and diluted	39,703,550	23,490,591	31,739,197	23,460,218

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

INOZYME PHARMA, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(amounts in thousands, except share data)
(Unaudited)

	Common Stock		Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Income (Loss)	Deficit	Equity
Balance at December 31, 2021	23,668,747	$ 2	$ 256,948	$ 18	$ (147,700)	$ 109,268
Stock-based compensation	—	—	1,752	—	—	1,752
Exercise of stock options	149,664	—	240	—	—	240
Comprehensive loss:						
Unrealized loss on investments	—	—	—	(132)	—	(132)
Foreign currency translation adjustment	—	—	—	(15)	—	(15)
Net loss	—	—	—	—	(16,884)	(16,884)
Balance at March 31, 2022	23,818,411	$ 2	$ 258,940	$ (129)	$ (164,584)	$ 94,229
Stock-based compensation	—	—	2,185	—	—	2,185
Exercise of stock options	1,678	—	4	—	—	4
Issuance of common stock, net of issuance costs	16,276,987	2	56,135	—	—	56,137
Issuance of pre-funded warrants, net of issuance costs	—	—	12,150	—	—	12,150
Comprehensive loss:						
Unrealized loss on investments	—	—	—	(225)	—	(225)
Foreign currency translation adjustment	—	—	—	(43)	—	(43)
Net loss	—	—	—	—	(15,261)	(15,261)
Balance at June 30, 2022	40,097,076	$ 4	$ 329,414	$ (397)	$ (179,845)	$ 149,176
Balance at December 31, 2020	23,384,969	$ 2	$ 249,175	$ 2	$ (91,076)	$ 158,103
Stock-based compensation	—	—	1,577	—	—	1,577
Exercise of stock options	88,734	—	249	—	—	249
Comprehensive income:						
Unrealized gain on investments	—	—	—	10	—	10
Net loss	—	—	—	—	(11,050)	(11,050)
Balance at March 31, 2021	23,473,703	$ 2	$ 251,001	$ 12	$ (102,126)	$ 148,889
Stock-based compensation	—	—	1,813	—	—	1,813
Exercise of stock options	96,890	—	106	—	—	106
Comprehensive income:						
Unrealized gain on investments	—	—	—	6	—	6
Net loss	—	—	—	—	(12,540)	(12,540)
Balance at June 30, 2021	23,570,593	$ 2	$ 252,920	$ 18	$ (114,666)	$ 138,274

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

INOZYME PHARMA, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(amounts in thousands)
(Unaudited)

	Six Months Ended June 30,	
	2022	**2021**
Operating activities		
Net loss	$ (32,145)	$ (23,590)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	357	325
Stock-based compensation expense	3,937	3,390
Amortization of premiums and discounts on marketable securities	(583)	116
Reduction in the carrying value of right-of-use assets	209	183
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	1,273	(216)
Accounts payable	(1,090)	(2,281)
Accrued expenses	(21)	(1,142)
Operating lease liabilities	(358)	(293)
Other assets	(25)	—
Prepaid expenses - noncurrent	(401)	1,099
Net cash used in operating activities	(28,847)	(22,409)
Investing activities		
Purchases of marketable securities	(81,647)	(62,035)
Maturities of marketable securities	81,500	82,560
Purchases of property and equipment	(217)	(278)
Net cash (used in) provided by investing activities	(364)	20,247
Financing activities		
Net proceeds from issuance of common stock	56,179	—
Net proceeds from issuance of pre-funded warrants	12,150	—
Proceeds from exercise of stock options	244	361
Net cash provided by financing activities	68,573	361
Net increase (decrease) in cash, cash equivalents and restricted cash	39,362	(1,801)
Effect of foreign currency exchange rate in cash	(58)	—
Cash, cash equivalents and restricted cash at beginning of period	23,670	28,394
Cash, cash equivalents and restricted cash at end of period	$ 62,974	$ 26,593
Supplemental cash flow information:		
Cash and cash equivalents	$ 62,620	$ 26,239
Restricted cash	354	354
Cash, cash equivalents and restricted cash at end of period	$ 62,974	$ 26,593
Property and equipment unpaid at end of period	$ 35	$ 10
Right-of-use asset at adoption of Topic 842	$ —	$ 2,431
Operating lease liabilities at adoption of Topic 842	$ —	$ 3,997
Public offering costs included in accounts payable and accrued expenses at balance sheet dates	$ 44	$ —

The accompanying notes are an integral part of these unaudited condensed consolidated financial statement.

1. Organization and Basis of Presentation

Inozyme Pharma, Inc. (the "Company") is a clinical-stage rare disease biopharmaceutical company developing novel therapeutics for the treatment of diseases of abnormal mineralization impacting the vasculature, soft tissue and skeleton.

The Company is pursuing the development of therapeutics to address the underlying causes of these debilitating diseases. It is well established that two genes, ENPP1 and ABCC6, play key roles in a critical mineralization pathway and that defects in these genes lead to abnormal mineralization. The Company is initially focused on developing a novel therapy to treat rare genetic diseases of ENPP1 Deficiency and ABCC6 Deficiency.

The Company's lead product candidate, INZ-701, is a soluble, recombinant, or genetically engineered, fusion protein that is designed to correct a defect in the mineralization pathway caused by ENPP1 and ABCC6 Deficiencies. This pathway is central to the regulation of calcium deposition throughout the body and is further associated with neointimal proliferation, or the overgrowth of smooth muscle cells inside blood vessels.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles ("U.S. GAAP") for interim financial information. Accordingly, these unaudited condensed consolidated financial statements do not include all of the information and note disclosures required by U.S. GAAP for audited year-end financial statements. The accompanying unaudited condensed consolidated financial statements reflect all normal recurring adjustments that are, in the opinion of management, necessary for a fair presentation of the interim period results. The results for the three and six month periods ended June 30, 2022 are not necessarily indicative of results to be expected for the year ending December 31, 2022, any other interim periods, or any future year or period. These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2021. Any reference in these notes to applicable guidance is meant to refer to authoritative U.S. GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Update ("ASU") of the Financial Accounting Standards Board ("FASB").

Liquidity, Capital Resources, and Going Concern

Since the Company's incorporation in 2017 and through June 30, 2022, the Company has devoted substantially all of its efforts to raising capital, building infrastructure, developing intellectual property and conducting research and development activities. The Company incurred net losses of $32.1 million in the six months ended June 30, 2022 and $56.6 million in the year ended December 31, 2021 and had an accumulated deficit of $179.8 million as of June 30, 2022. The Company had cash, cash equivalents, and short-term investments of $151.5 million as of June 30, 2022.

On April 14, 2022, the Company entered into an underwriting agreement (the "Underwriting Agreement") with Jefferies LLC and Cowen and Company, LLC , relating to an underwritten offering of 16,276,987 shares of the Company's common stock (the "Shares") and, in lieu of common stock to certain investors, pre-funded warrants to purchase 3,523,013 shares of common stock. The closing of the offering took place on April 19, 2022. The offering price of the Shares was $3.69 per share and the offering price of the pre-funded warrants was $3.6899 per share underlying each pre-funded warrant. Net proceeds from the offering were approximately $68.3 million, after deducting underwriting discounts and commissions and offering expenses.

The Company has incurred recurring losses and negative cash flows from operations since inception and has primarily funded its operations with proceeds from the issuance of convertible preferred stock and offerings of common stock and pre-funded warrants. The Company expects its operating losses and negative operating cash flows to continue into the foreseeable future as it continues to expand its research and development efforts.

The accompanying condensed consolidated financial statements have been prepared on the basis of continuity of operations, realization of assets, and the satisfaction of liabilities and commitments in the ordinary course of business. The Company believes its available cash, cash equivalents, and short-term investments as of June 30, 2022 will be sufficient to fund its cash flow requirements for at least twelve months from the date of filing this Quarterly Report on Form 10-Q. Management's expectations with respect to its ability to fund current and long term planned operations are based on estimates that are subject to risks and uncertainties. If actual results are different from management's estimates, the Company may need to seek additional strategic or financing

opportunities sooner than would otherwise be expected. However, there is no guarantee that any of these strategic or financing opportunities will be executed on favorable terms, or at all, and some could be dilutive to existing stockholders. If the Company is unable to obtain additional funding on a timely basis, it may be forced to delay, reduce or eliminate some or all of its research and development programs, portfolio expansion or commercialization efforts, which could adversely affect its business.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries, Inozyme Securities Corp., which is a Massachusetts subsidiary created to buy, sell, and hold securities, Inozyme Ireland Limited, and Inozyme Pharma Switzerland GmbH. All intercompany transactions and balances have been eliminated.

Summary of Significant Accounting Policies

The significant accounting policies and estimates used in the preparation of the accompanying consolidated financial statements are described in the Company's audited consolidated financial statements for the year ended December 31, 2021 included in the Company's Annual Report on Form 10-K for the year ended December 31, 2021. The Company adopted a warrant accounting policy detailed below following the closing of the Company's underwritten offering in April 2022. Apart from this adoption, there have been no material changes in the Company's significant accounting policies during the six months ended June 30, 2022.

Use of Estimates

The preparation of the Company's financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Estimates and judgments are based on historical information and other market-specific or various relevant assumptions, including, in certain circumstances, future projections that management believes to be reasonable under the circumstances. Actual results could differ materially from estimates. Significant estimates and assumptions are used for, but not limited to, the accruals for research and development expenses. The Company evaluates its estimates and assumptions on an ongoing basis. All revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Accrued Research and Development Costs

The Company records accrued liabilities for estimated costs of research and development activities conducted by service providers for sponsored research, preclinical studies, clinical trials, and contract manufacturing activities. The Company records the estimated costs of research and development activities based upon the estimated amount of services provided but not yet invoiced and includes these costs in accrued expenses in the accompanying consolidated balance sheets and within research and development expense in the accompanying consolidated statements of operations and comprehensive loss.

The Company accrues for these costs based on factors such as estimates of the work completed and in accordance with agreements established with service providers. The Company makes significant judgments and estimates in determining the accrued liabilities balance in each reporting period. As actual costs become known, the Company adjusts its accrued liabilities. The Company has not experienced any material differences between accrued costs and actual costs incurred since its inception.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development costs consist of direct and indirect internal costs related to specific projects as well as fees paid to other entities that conduct certain research and development activities on the Company's behalf.

Net Loss Per Share

The Company follows the two-class method when computing net loss allocable to common securities per share as the Company had previously issued shares that meet the definition of participating securities. The two-class method requires a portion of net income to be allocated to the participating securities to determine net income allocable to the common securities. During periods of loss, there is no allocation required under the two-class method since the participating securities do not have a contractual obligation to fund the losses of the Company.

Basic net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock and pre-funded warrants outstanding during the period, without consideration for potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock and pre-funded warrants and potentially dilutive securities outstanding using the treasury-stock and if-converted methods. The Company has generated a net loss in all periods presented, therefore the basic and diluted net loss per share attributable to common stockholders are the same as the inclusion of the potentially dilutive securities would be anti-dilutive.

Fair Value Measurements

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

- Level 1- Unadjusted quoted prices in active markets that are accessible at the measurement date for identical assets or liabilities;
- Level 2- Quoted prices for similar assets and liabilities in active markets, quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability; or
- Level 3- Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity).

Concentration of Credit Risk and Off-Balance Sheet Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash, cash equivalents and short-term investments and, from time to time, long-term investments. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits and limits its exposure to credit risk by placing its cash with high credit quality financial institutions. The Company's investments are comprised of U.S. Treasury securities and commercial paper of corporations. The Company mitigates credit risk by maintaining a diversified portfolio and limiting the amount of investment exposure as to institution, maturity and investment type.

The Company has no significant off-balance sheet risk such as foreign exchange contracts, option contracts, or other foreign hedging arrangements.

Warrants

The Company determines the accounting classification of warrants that are issued, as either liability or equity, by first assessing whether the warrants meet liability classification in accordance with ASC 480-10, *Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity*, and then in accordance with ASC 815-40, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock*. Under ASC 480-10, warrants are considered liability classified if the warrants are mandatorily redeemable, obligate the issuer to settle the warrants or the underlying shares by paying cash or other assets, or must or may require settlement by issuing variable number of shares.

If warrants do not meet liability classification under ASC 480-10, the Company assesses the requirements under ASC 815-40, which states that contracts that require or may require the issuer to settle the contract for cash are liabilities recorded at fair value, irrespective of the likelihood of the transaction occurring that triggers the net cash settlement feature. If the warrants do not require liability classification under ASC 815-40, in order to conclude equity classification, the Company assesses whether the warrants are indexed to its common stock and whether the warrants are classified as equity under ASC 815-40 or other applicable U.S. GAAP. After all relevant assessments are made, the Company concludes whether the warrants are classified as liability or equity. Liability classified warrants are required to be accounted for at fair value both on the date of issuance and on subsequent accounting period ending dates, with all changes in fair value after the issuance date recorded in the statements of operations as a gain or loss. Equity classified warrants are accounted for at fair value on the issuance date with no changes in fair value recognized after the issuance date.

3. Recent Accounting Pronouncements

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

Recently Issued and Adopted Accounting Standards

In December 2019, the FASB issued ASU 2019-12, *Income Taxes – Simplifying the Accounting for Income Taxes*. The new guidance simplifies the accounting for income taxes by removing several exceptions in the current standard and adding guidance to reduce complexity in certain areas, such as requiring that an entity reflect the effect of an enacted change in tax laws or rates in the annual effective tax rate computation in the interim period that includes the enactment date. The Company adopted this standard effective January 1, 2022. There was no material impact to the Company's financial statements upon adoption.

In August 2020, the FASB issued ASU 2020-06, *Debt – Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity's Own Equity (Subtopic 815-40)*. ASU 2020-06 simplifies the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. The Company elected to early adopt this standard effective January 1, 2022. There was no material impact to the Company's financial statements upon adoption.

Recently Issued Accounting Standards Not Yet Adopted

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 and its subsequent related updates establish a new forward-looking "expected loss model" that requires entities to estimate current expected credit losses on accounts receivable and financial instruments by using all practical and relevant information. The new standard and its subsequent related updates are effective for the Company for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, with early adoption permitted. The Company is currently assessing the impact that adopting this standard will have on its consolidated financial statements but does not expect it to be material.

4. Balance Sheet Details

Short-term investments consisted of the following (dollar amounts in thousands):

		June 30, 2022			
Description	Maturity	Amortized Costs	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Commercial paper	1 year or less	$ 55,366	$ —	$ (182)	$ 55,184
U.S. Treasury securities	1 year or less	33,836	—	(160)	33,676
		$ 89,202	$ —	$ (342)	$ 88,860

		December 31, 2021			
Description	Maturity	Amortized Costs	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Commercial paper	1 year or less	$ 78,456	$ 5	$ (3)	$ 78,458
U.S. Treasury securities	1 year or less	5,025	—	—	5,025
U.S. government agency debt securities	1 year or less	5,002	—	—	5,002
		$ 88,483	$ 5	$ (3)	$ 88,485

The Company concluded that the declines in market value of available-for-sale securities were temporary in nature and did not consider any of the investments to be other-than-temporarily impaired. In accordance with its investment policy, the Company invests in investment grade securities with high credit quality issuers, and generally limits the amount of credit exposure to any one issuer. The Company evaluates securities for other-than-temporary impairment at the end of each reporting period. Impairment is evaluated considering numerous factors, and their relative significance varies depending on the situation. Factors considered include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near-term prospects of the issuer, and the Company's intent and ability to hold the investment to allow for an anticipated recovery in fair value. Furthermore,

the aggregate of individual unrealized losses that had been outstanding for 12 months or less was not significant as of June 30, 2022 and December 31, 2021. The Company does not intend to sell these investments and it is not more likely than not that the Company will be required to sell the investments before a recovery of their amortized cost bases, which may be maturity. The Company also believes that it will be able to collect both principal and interest amounts due at maturity.

Prepaid expenses and other current assets consisted of the following (dollar amounts in thousands):

	At June 30, 2022	At December 31, 2021
Interest receivable	$ 106	$ 62
Prepaid insurance	312	1,728
Prepaid research studies	926	1,190
Prepaid other	924	561
Total	$ 2,268	$ 3,541

Prepaid expenses, net of current portion, consisted of the following (dollar amounts in thousands):

	At June 30, 2022	At December 31, 2021
Prepaid clinical trial and other	$ 3,810	$ 3,409
	$ 3,810	$ 3,409

Property and equipment consisted of the following (dollar amounts in thousands):

	At June 30, 2022	At December 31, 2021
Laboratory equipment and manufacturing equipment	$ 657	$ 591
Furniture and fixtures	258	258
Computer equipment and software	556	440
Leasehold improvements	2,095	2,095
	3,566	3,384
Less accumulated depreciation	(1,358)	(1,001)
Total	$ 2,208	$ 2,383

Depreciation expense for the three months ended June 30, 2022 and 2021 was $179 thousand and $167 thousand, respectively. Depreciation expense for the six months ended June 30, 2022 and 2021 was $357 thousand and $325 thousand, respectively.

Accrued expenses consisted of the following (dollar amounts in thousands):

	At June 30, 2022	At December 31, 2021
Payroll and related liabilities	$ 1,679	$ 2,379
Professional fees	469	727
Research and development costs	5,852	5,066
Other	461	336
Total	$ 8,461	$ 8,508

The Company had $0.4 million of restricted cash at June 30, 2022 and June 30, 2021. This amount is included in the "other assets" line item on the balance sheets.

5. Fair Value Measurement

The following table represents the Company's financial assets measured at fair value on a recurring basis and indicate the level of fair value hierarchy utilized to determine such fair values (in thousands):

Description	June 30, 2022	Fair Value Measurements at Reporting Date Using: Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Money market funds (included in cash and cash equivalents)	$ 20,836	$ 20,836	$ —	$ —
Commercial paper (including amounts in cash and cash equivalents)	84,198	—	84,198	—
U.S. Treasury securities	33,676	33,676	—	—
Total assets	$ 138,710	$ 54,512	$ 84,198	$ —

Description	December 31, 2021	Fair Value Measurements at Reporting Date Using: Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Money market funds (included in cash and cash equivalents)	$ 14,302	$ 14,302	$ —	$ —
Commercial paper	78,457	—	78,457	—
U.S. Treasury securities	5,026	5,026	—	—
U.S. government agency debt securities	5,002	—	5,002	—
Total assets	$ 102,787	$ 19,328	$ 83,459	$ —

There have been no transfers between fair value levels during the three or six months ended June 30, 2022.

6. License and Sponsored Research Agreements

In January 2017, the Company entered into a license agreement with Yale University ("Yale"), which was amended in May 2020 and July 2020, under which the Company licensed certain intellectual property related to ectonucleotide pyrophosphatase/phosphodiesterase enzymes, that is the basis for the Company's INZ-701 development program. Pursuant to the license agreement, as partial upfront consideration, the Company made a payment of approximately $0.1 million to Yale, which amount reflected unreimbursed patent expenses incurred by Yale prior to the date of the license agreement. The Company is responsible for paying Yale an annual license maintenance fee in varying amounts throughout the term ranging from the low tens of thousands of dollars to the high tens of thousands of dollars. As of June 30, 2022, the Company incurred a total of $0.2 million in license maintenance fees to Yale. The Company is required to pay Yale $3.0 million, based on the achievement of a specified net product sales milestone or specified development and commercialization milestones, for each therapeutic and prophylactic licensed product developed. In January 2022, the Company paid Yale an approximately $0.3 million milestone payment following dosing of the first patient in Company's Phase 1/2 clinical trial of INZ-701 in adult patients with ENPP1 Deficiency in November 2021. In March 2022, the Company paid Yale an approximately $0.3 million milestone payment following completion of the first cohort of the Company's Phase 1/2 clinical trial of INZ-701 in adult patients with ENPP1 Deficiency in January 2022. In addition, the Company is required to pay Yale an amount in the several hundreds of thousands of dollars, based on the achievement of a specified net product sales milestone or specified development and commercialization milestones, for each diagnostic licensed product developed. While the agreement remains in effect, the Company is required to pay Yale low single-digit percentage royalties on aggregate worldwide net sales of certain licensed products. Yale is guaranteed a minimum royalty payment amount (ranging in dollar amounts from the mid six figures to low seven figures) for each year after the first sale of a therapeutic or prophylactic licensed product that results in net

sales. Yale is guaranteed a minimum royalty payment amount (ranging from the low tens of thousands of dollars to the mid tens of thousands of dollars) for each year after the first sale of a diagnostic licensed product that results in net sales. The Company must also pay Yale a percentage in the twenties of certain types of income it receives from sublicensees. The Company is also responsible for costs relating to the prosecution and maintenance of the licensed patents. Finally, subject to certain conditions, all payments due by the Company to Yale will be tripled following any patent challenge or challenge to a claim by Yale that a product is a licensed product under the agreement, made by the Company against Yale if Yale prevails in such challenge.

In January 2017, the Company also entered into a corporate sponsored research agreement with Yale (the "Sponsored Research Agreement"), which was amended in February 2019, under which the Company agreed to provide research support funding in the aggregate amount of $2.4 million over the five year period from contract inception through December 2021. The Sponsored Research Agreement was amended in February 2022, under which the contract was extended through June 30, 2022 subject to the terms of the existing agreement. The Sponsored Research Agreement was amended again in May 2022, under which the contract was extended through April 2023 with approximately $0.1 million of Company-provided research support funding for such extended period. The Company recorded research and development expenses associated with this arrangement of less than $0.1 million and approximately $0.1 million in the three and six months ended June 30, 2022, respectively, and $0.1 million and $0.3 million in the three and six months ended June 30, 2021, respectively.

7. Commitments and Contingencies

Operating Leases

The Company held the following significant operating leases of office and laboratory space as of June 30, 2022:

- An operating lease for 8,499 square feet of office space in Boston, Massachusetts that expires in 2025, with an option to extend the term for five years; and
- An operating lease for 6,244 square feet of laboratory space in Boston, Massachusetts that expires in 2025.

During the six months ended June 30, 2022, cash paid for amounts included in the measurement of lease liabilities was $0.5 million and the Company recorded operating lease expense of $0.3 million.

Future lease payments under non-cancelable leases as of June 30, 2022 are as follows (dollar amounts in thousands):

Year Ending December 31,		
2022 (remaining 6 months)	$	485
2023		992
2024		1,016
2025		944
Thereafter		—
	$	3,437

Indemnification Agreements

In the ordinary course of business, the Company may provide indemnification of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters arising out of the relationship between such parties and the Company. In addition, the Company has entered into indemnification agreements with members of its board of directors and senior management that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is, in many cases, unlimited. To date, the Company has not incurred any material costs as a result of such indemnifications. The Company is not aware of any claims under indemnification arrangements, and it has not accrued any liabilities related to such obligations as of June 30, 2022 or December 31, 2021.

Legal Proceedings

The Company is not currently a party to any material legal proceedings. At each reporting date, the Company evaluates whether or not a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company expenses the costs related to its legal proceedings as they are incurred. No such costs have been incurred during the three and six months ended June 30, 2022 and 2021.

8. Stockholders' Equity

April 2022 Underwritten Offering

On April 14, 2022, the Company entered into the Underwriting Agreement with Jefferies LLC and Cowen and Company, LLC, relating to an underwritten offering of 16,276,987 Shares of the Company's common stock and, in lieu of common stock to certain investors, pre-funded warrants to purchase 3,523,013 shares of common stock. The closing of the offering took place on April 19, 2022. The offering price of the Shares was $3.69 per share and the offering price of the pre-funded warrants was $3.6899 per share underlying each pre-funded warrant. Net proceeds from the offering were approximately $68.3 million, after deducting underwriting discounts and commissions and offering expenses.

On June 10, 2022, the Company and each holder of the pre-funded warrants entered into amended and restated pre-funded warrants solely to eliminate the seven-year expiration date of the pre-funded warrants. Each amended and restated pre-funded warrant is now exercisable for $0.0001 per share of common stock from the original date of issuance until the date the pre-funded warrant is exercised in full. All other terms of the pre-funded warrants remain unchanged. The pre-funded warrants contain standard adjustment provisions if certain corporate events were to happen.

The pre-funded warrants are classified as a component of permanent equity and were recorded at the issuance date using a relative fair value allocation method. The pre-funded warrants are equity classified because they are freestanding financial instruments that are legally detachable and separately exercisable from the equity instruments, are immediately exercisable, do not embody an obligation for the Company to repurchase its shares, and permit the holders to receive a fixed number of shares of common stock upon exercise. In addition, such pre-funded warrants do not provide any guarantee of value or return. None of the pre-funded warrants have been exercised as of June 30, 2022.

Equity Incentive Plans

In January 2017, the Company's board of directors and stockholders adopted the 2017 Equity Incentive Plan, which was amended and restated in July 2017 (as so amended and restated, the "2017 Plan"), which provided for the grant of incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards and other stock awards. The maximum number of shares of common stock that were authorized for issuance under the 2017 Plan was 2,730,496.

On July 17, 2020, the Company's stockholders approved the 2020 Stock Incentive Plan (the "2020 Plan"), which became effective on July 23, 2020. The 2020 Plan provides for the grant of incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock awards, restricted stock units and other stock-based awards. The number of shares of the Company's common stock reserved for issuance under the 2020 Plan was 1,588,315 shares, plus the 426,065 shares of common stock remaining available for issuance under the 2017 Plan as of July 23, 2020. The number of shares reserved under the 2020 Plan will be annually increased on each January 1 through January 1, 2030 by the lower of (i) 4% of the number of shares of common stock outstanding on the first day of such fiscal year and (ii) an amount determined by the Company's board of directors.

As of the effective date of the 2020 Plan, no further awards will be made under the 2017 Plan. Any options or awards outstanding under the 2017 Plan are governed by their existing terms. The shares of the Company's common stock subject to outstanding awards under the 2017 Plan that expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by the Company at their original issuance price pursuant to a contractual repurchase right will be added back to the shares of common stock available for issuance under the 2020 Plan. No more than 1,588,315 shares of the Company's common stock may be granted subject to incentive stock options under the 2020 Plan. On January 1, 2022, the number of shares of common stock reserved under the 2020 Plan was increased by 946,749 shares. As of June 30, 2022, 479,151 shares of common stock remain available for future issuance under the 2020 Plan.

The following table summarizes stock option activity under the Company's equity incentive plans since December 31, 2021:

	Options Outstanding	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (1) (in thousands)
Outstanding at December 31, 2021	3,582,613	$ 10.63	8.32	$ 7,428
Granted	1,505,019	5.21		
Exercised	(151,342)	1.61		
Forfeited	(195,846)	10.76		
Outstanding at June 30, 2022	4,740,444	$ 9.20	8.43	$ 4,092
Exercisable at June 30, 2022	1,795,985	$ 8.84	7.51	$ 2,758
Vested and expected to vest at June 30, 2022	4,740,444	$ 9.20	8.43	$ 4,092

(1) 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.

The weighted-average grant date fair value of options granted during the three and six months ended June 30, 2022 was $2.65 per share and $3.84 per share, respectively. The aggregate intrinsic value of stock options exercised during the three months ended June 30, 2022 was immaterial. The aggregate intrinsic value of stock options exercised during the six months ended June 30, 2022 was $0.4 million.

For purposes of calculating stock-based compensation expense, the Company estimates the fair value of stock options using the Black-Scholes option-pricing model. This model incorporates various assumptions, including the expected volatility, expected term, and interest rates. The underlying assumptions used to value stock options granted to participants using the Black-Scholes option-pricing were as follows:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2022	2021	2022	2021
Risk-free interest rate range	2.52% to 3.22%	0.92% to 1.15%	1.58% to 3.22%	0.48% to 1.15%
Dividend yield	0%	0%	0%	0%
Expected term of options (years)	5.38 to 6.08	5.37 to 6.08	5.08 to 6.48	5.37 to 6.48
Volatility rate range	85.04% to 87.15%	90.34% to 91.19%	85.04% to 87.15%	88.70% to 91.19%

The total compensation cost recognized in the statements of operations associated with all the stock-based compensation awards granted by the Company is as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Research and development	$ 1,096	$ 1,056	$ 1,992	$ 1,697
General and administrative	1,089	757	1,945	1,693
Total	$ 2,185	$ 1,813	$ 3,937	$ 3,390

The total unrecognized compensation cost related to outstanding employee awards as of June 30, 2022 was $16.7 million and is expected to be recognized over a weighted-average period of 2.8 years.

Employee Stock Purchase Plan

On July 17, 2020, the Company's stockholders approved the 2020 Employee Stock Purchase Plan (the "ESPP"), which became effective on July 23, 2020. The ESPP initially provides participating employees with the opportunity to purchase up to an aggregate of 198,539 shares of the Company's common stock. The number of shares of common stock reserved for issuance under the ESPP will automatically increase on each January 1 through January 1, 2031, in an amount equal to the lowest of (1) 397,079 shares of the Company's common stock, (2) 1% of the number of shares of the Company's common stock outstanding on the first day of such fiscal year and (3) an amount determined by the Company's board of directors. The number of shares available for grant under this plan increased by 236,687 on January 1, 2022 due to this provision. As of June 30, 2022, no shares have been purchased by employees under the ESPP.

The Company activated its first offering period under the ESPP on April 1, 2022. The offering period ends on September 30, 2022. During the three and six months ended June 30, 2022, the Company recorded less than $0.1 million of stock-based compensation expense under the ESPP. The Company did not record any stock-based compensation expense under the ESPP in the three and six months ended June 30, 2021.

9. Net Loss per Share

Net Loss per Share Attributable to Common Stockholders

The following table sets forth the computation of basic and diluted net loss per share for the three months ended June 30, 2022 and 2021 (in thousands, except share and per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Net loss attributable to common stockholders—basic and diluted	$ (15,261)	$ (12,540)	$ (32,145)	$ (23,590)
Net loss per share attributable to common stockholders—basic and diluted	$ (0.38)	$ (0.53)	$ (1.01)	$ (1.01)
Weighted-average common shares and pre-funded warrants outstanding—basic and diluted	39,703,550	23,490,591	31,739,197	23,460,218

The Company has generated a net loss in all periods presented, therefore the basic and diluted net loss per share attributable to common stockholders are the same as the inclusion of the potentially dilutive securities would be anti-dilutive. Since the shares underlying the 3,523,013 pre-funded warrants are issuable for little or no consideration, they are considered outstanding for both basic and diluted earnings per share. The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share attributable to common stockholders for the periods indicated:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Options to purchase common stock	4,740,444	3,396,111	4,740,444	3,396,111
Shares withheld under the ESPP	24,260	—	24,260	—
	4,764,704	3,396,111	4,764,704	3,396,111

10. Employee Benefit Plans

The Company established a defined contribution savings plan in 2018 for all eligible U.S. employees under Section 401(k) of the Internal Revenue Code. Employees can designate the investment of their 401(k) accounts into several mutual funds. Effective January 1, 2021, the Company implemented a matching policy under which the Company matches 50% of an employee's contributions to the 401(k) plan, up to a maximum of 6% of the employee's base salary and bonus paid during the year. For the three and six months ended June 30, 2022, the Company made employer contributions to the 401(k) plan totaling $60 thousand and $142 thousand, respectively.

11. Subsequent Events

Loan Agreement with K2 HealthVentures LLC

On July 25, 2022, the Company, as borrower, entered into a loan and security agreement(the "Loan Agreement") with K2 HealthVentures LLC ("K2HV", together with any other lender from time to time, the "Lenders"), K2HV, as administrative agent for the Lenders, and Ankara Trust Company, LLC, as collateral agent for the Lenders. The Loan Agreement provides up to $70.0 million principal in term loans. The Company received $5.0 million from the first tranche commitment upon closing. The first tranche commitment contains an additional $20.0 million available to be drawn at the Company's option though March 31, 2023. Two subsequent tranche commitments totaling $20.0 million in the aggregate are available to be drawn at the Company's option during certain availability periods, subject to the achievement, as determined by the administrative agent in its sole discretion, of certain time-based, clinical and regulatory milestones relating to INZ-701. A fourth tranche commitment of $25.0 million is available to be drawn down at the Company's option through August 31, 2025, subject to use of proceeds limitations and Lender's consent in its discretion.

The term loan matures on August 1, 2026 and the Company is obligated to make interest only payments for the first 36 months and then interest and equal principal payments for the next 12 months. The term loan bears a variable interest rate equal to the greater of (i) 7.85%, and (ii) the sum of (A) the prime rate last quoted in The Wall Street Journal (or a comparable replacement rate if The Wall Street Journal ceases to quote such rate) and (B) 3.85%; provided that the interest rate cannot exceed 9.60%. The Company may prepay, at its option, all, but not less than all, of the outstanding principal balance and all accrued and unpaid interest with respect to the principal balance being prepaid of the term loans, subject to a prepayment premium to which the Lenders are entitled and certain notice requirements. The Company was required to pay the Lenders' certain customary fees and expenses at closing and will be required to pay additional fees that may be due upon maturity or prepayment such as final payment fees and prepayment fees.

The Lenders may elect prior to the full repayment of the term loans to convert up to $5.0 million of outstanding principal of the term loans into shares of the Company's common stock, at a conversion price of $6.21 per share, subject to customary adjustments and 9.99% and 19.99% beneficial ownership limitations. There will be no prepayment penalty for any principal amount converted into common stock. The Loan Agreement provides the Lenders with certain piggyback registration rights with respect to the shares of common stock issuable upon conversion of term loans under the Loan Agreement.

The Loan Agreement contains customary representations and warranties, events of default and affirmative and negative covenants, including covenants that limit or restrict the Company's ability to, among other things, dispose of assets, make changes to the Company's business, management, ownership or business locations, merge or consolidate, incur additional indebtedness, incur additional liens, pay dividends or other distributions or repurchase equity, make investments, and enter into certain transactions with affiliates, in each case subject to certain exceptions. As security for its obligations under the Loan Agreement, the Company granted the Lenders a first priority security interest on substantially all of the Company's assets (other than intellectual property), subject to certain exceptions.

Subject to certain conditions, the Company granted the Lenders the right, prior to repayment of the term loans, to invest up to $5.0 million in the aggregate in future offerings of common stock, convertible preferred stock or other equity securities of the Company that are broadly marketed and offered to multiple investors, on the same terms, conditions and pricing afforded to others participating in any such financing.

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

The following discussion and analysis of our financial condition and results of operations should be read together with our consolidated financial statements and the related notes appearing elsewhere in the Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the Securities and Exchange Commission, or SEC, on March 15, 2022. This discussion contains forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of our most recent Annual Report on Form 10-K and in this Quarterly Report on Form 10-Q, our actual results could differ materially from the results described in or implied by these forward-looking statements. For convenience of presentation some of the numbers have been rounded in the text below.

Overview

We are a clinical-stage rare disease biopharmaceutical company developing novel therapeutics for the treatment of diseases of abnormal mineralization impacting the vasculature, soft tissue and skeleton. Through our in-depth understanding of the biological pathways involved in mineralization, we are pursuing the development of therapeutics to address the underlying causes of these debilitating diseases. It is well established that two genes, ENPP1 and ABCC6, play key roles in a critical mineralization pathway and that defects in these genes lead to abnormal mineralization. We are initially focused on developing a novel therapy to treat the rare genetic diseases of ENPP1 and ABCC6 Deficiencies.

Our lead product candidate, INZ-701, is a soluble, recombinant, genetically engineered, fusion protein that is designed to correct a defect in the mineralization pathway caused by ENPP1 and ABCC6 Deficiencies. This pathway is central to the regulation of calcium deposition throughout the body and is further associated with neointimal proliferation, or the overgrowth of smooth muscle cells inside blood vessels. We have generated robust preclinical proof of concept data demonstrating that in animal models INZ-701 prevented pathological calcification, led to improvements in overall health and survival and prevented neointimal proliferation. In addition, INZ-701 achieved survival benefit in a mouse model of ENPP1 Deficiency.

We are currently conducting Phase 1/2 clinical trials of INZ-701 for the treatment of ENPP1 Deficiency and ABCC6 Deficiency. These clinical trials are being, and will be, conducted in both North America and in Europe. The U.S. Food and Drug Administration, or FDA, and the European Medicines Agency have granted orphan drug designation to INZ-701 for the treatment of ENPP1 Deficiency and ABCC6 Deficiency. The FDA has also granted fast track designation for INZ-701 for the treatment of ENPP1 Deficiency, and rare pediatric disease designation for INZ-701 for the treatment of ENPP1 Deficiency.

In November 2021, we initiated our Phase 1/2 clinical trial of INZ-701 in adult patients with ENPP1 Deficiency. This trial is currently ongoing in North America and the United Kingdom. In the Phase 1 dose-escalation portion of the clinical trial, we are assessing INZ-701 for 32-days at doses of 0.2 mg/kg, 0.6 mg/kg, and 1.8 mg/kg administered via subcutaneous injection twice weekly, with three patients per dose cohort.

In April 2022, we announced preliminary biomarker, safety and pharmacokinetic, or PK, data from the 0.2 mg/kg cohort of this trial. At the 0.2 mg/kg dose level of INZ-701, all three patients showed rapid, significant, and sustained increases in plasma pyrophosphate, or PPi, levels. Preclinical findings demonstrated PPi as a key predictive biomarker of therapeutic benefit in ENPP1 Deficiency. The range of PPi levels across the three patients at screening was 132-333 nM. At the 0.2 mg/kg dose level of INZ-701, the mean PPi level observed during the 32-day dose evaluation period across the three patients was 1356 nM, an approximately 5-fold mean increase from screening across the three patients. The range of peak PPi levels observed during the 32-day dose evaluation period across the three patients was 1082-2416 nM, and was comparable to data from our study of healthy subjects (n=10), which showed PPi levels between 1002 nM and 2169 nM. PPi levels observed after dosing of INZ-701 correlated to systemic exposure and activity of INZ-701. PK analysis showed INZ-701 nearing steady-state by Day 29 with an approximately 4-fold accumulation from Day 1, based on AUC0-72. We believe that the half-life of INZ-701 observed in this trial suggests the potential for once-weekly dosing. INZ-701 was generally well-tolerated, with no serious adverse events reported, and otherwise exhibited a favorable initial safety profile. All three patients from the first cohort enrolled in the open-label Phase 2 48-week extension portion of the trial. At Week 12, low titers of anti-drug antibodies were observed in two out of three patients. The significantly increased PPi levels observed during the 32-day dose evaluation period were sustained in all three patients through Week 12 of the extension portion of the trial. In June 2022, we completed dosing in the 0.6 mg/kg cohort of this trial and a data safety monitoring board, DSMB, has reviewed the preliminary data from the 0.6 mg/kg cohort to allow us to initiate dosing in the 1.8 mg/kg dose cohort. We plan to report topline data from this trial in the fourth quarter of 2022.

In April 2022, we initiated our Phase 1/2 clinical trial of INZ-701 in adult patients with ABCC6 Deficiency. The trial is currently ongoing in the United States and Europe. In the Phase 1 dose-escalation portion of the clinical trial, we are assessing INZ-701 for 32-days at doses of 0.2 mg/kg, 0.6 mg/kg, and 1.8 mg/kg administered via subcutaneous injection twice weekly, with three patients per dose cohort.

In July 2022, we announced preliminary biomarker, safety and pharmacokinetic, data from the 0.2 mg/kg cohort of this trial. At the 0.2 mg/kg dose level of INZ-701, all three patients showed rapid and significant increases in PPi levels. Preclinical findings demonstrated PPi as a key predictive biomarker of therapeutic benefit in ABCC6 Deficiency. The mean PPi level across the three patients at baseline was 851 nM. At the 0.2 mg/kg dose level of INZ-701, the mean PPi level observed during the 32-day dose evaluation period across the three patients was 1057 nM, which was within the range observed in our study of healthy subjects (n=10), which showed PPi levels between 1002 nM and 2169 nM. The range of peak PPi levels observed across the three patients in the 32-day dose evaluation period was 2139-4090 nM. Preliminary PK and INZ-701 enzymatic activity remained consistent with data reported from our ongoing Phase 1/2 trial of INZ-701 in patients with ENPP1 Deficiency. INZ-701 continued to exhibit a favorable initial safety profile. INZ-701 was generally well-tolerated with no serious adverse events reported, one grade 1 adverse event reported, and no injection site reactions. The grade 1 adverse event was not related to INZ-701. Low titers of anti-drug antibodies were observed in one patient at day 32 of the trial, which had no impact on PK or ENPP1 activity. All three patients from the first cohort enrolled in the open-label Phase 2 48-week extension portion of the trial. In July 2022, following a planned review of the preliminary data from the 0.2 mg/kg cohort by a DSMB, we initiated dosing in the 0.6 mg/kg cohort of this trial. We plan to report topline data from this trial in the first quarter of 2023. We are also actively engaged in designing and planning a clinical trial of INZ-701 in infants and adolescents with ENPP1 Deficiency.

Subject to successfully completing clinical development of INZ-701 in ENPP1 and ABCC6 Deficiencies, we plan to seek marketing approvals for INZ-701 on a worldwide basis. Beyond our development focus on INZ-701, we believe that our therapeutic approach has the potential to benefit patients suffering from additional diseases of abnormal mineralization, including those without a clear genetic basis, such as calciphylaxis. In the fourth quarter of 2022, we plan to finalize the regulatory pathway which will allow us to initiate a clinical trial of INZ-701 in calciphylaxis. We are also exploring the potential for development of a gene therapy for ENPP1 Deficiency.

Our Operations

We have not yet commercialized any products or generated any revenue from product sales. Our operations to date have been limited to organizing and staffing our company, business planning, raising capital, securing intellectual property rights, conducting research and development activities, including preclinical studies and early-stage clinical trials, establishing arrangements for the manufacture of INZ-701 and longer term planning for potential commercialization. To date, we have funded our operations primarily with proceeds from the sales of convertible preferred stock, offerings of common stock and pre-funded warrants and borrowings under our loan and security agreement, or the Loan Agreement, with K2 HealthVentures LLC, or K2HV.

Uncertainty remains as to the potential impact of COVID-19 on our future research and development activities and the potential for a material impact on the Company increases the longer the virus impacts certain aspects of economic activity around the world. The full extent to which COVID-19 will directly or indirectly impact our business, results of operations and financial condition, including our ability to fulfill our clinical trial enrollment needs, will depend on future developments that are highly uncertain, including as a result of new information that may emerge concerning COVID-19 and the actions taken to contain it or treat COVID-19, as well as the economic impact on local, regional, national and international markets, the ultimate geographic spread of the disease, the duration of the pandemic, travel restrictions and social distancing in the United States and other countries, business closures or business disruptions, the ultimate impact on financial markets and the global economy, the effectiveness of vaccines and vaccine distribution efforts and the effectiveness of other actions taken in the United States and other countries to contain and treat the disease.

Since inception, we have incurred significant operating losses. Our ability to generate revenue from product sales sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of INZ-701 or one or more of our future product candidates and programs. Our net losses were $32.1 million for the six months ended June 30, 2022 and $56.6 million for the year ended December 31, 2021. As of June 30, 2022, we had an accumulated deficit of $179.8 million.

Our operating expenses were $32.2 million for the six months ended June 30, 2022 and $56.6 million for the year ended December 31, 2021. We expect to continue to incur significant expenses for the foreseeable future. We expect our expenses to increase substantially in connection with our ongoing and planned activities, particularly as we advance our preclinical activities and clinical trials. In addition, if we obtain marketing approval for INZ-701 or any other product candidate we develop, we expect to incur significant commercialization expenses related to product manufacturing, sales, marketing and distribution. We have incurred and expect to continue to incur additional costs associated with operating as a public company.

As a result, we will need to obtain substantial additional funding to support our continuing operations. Until such time, if ever, as we can generate significant revenues from product sales, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution and licensing arrangements. We do not have any committed external source of funds, other than under our Loan Agreement. Our ability to borrow under our Loan Agreement is subject to our satisfaction of specified conditions and lender discretion. If we are unable to raise capital or obtain adequate funds when

needed or on acceptable terms, we may be required to delay, limit, reduce or terminate our research and development programs or any future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. In addition, attempting to secure additional financing may divert the time and attention of our management from day-to-day activities and distract from our research and development efforts.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our pipeline of product candidates or even continue our operations.

As of June 30, 2022, we had cash, cash equivalents and short-term investments of approximately $151.5 million.

On April 14, 2022, we entered into an underwriting agreement with Jefferies LLC and Cowen and Company, LLC, relating to an underwritten offering of 16,276,987 shares of our common stock or the Shares, and, in lieu of common stock to certain investors, pre-funded warrants to purchase 3,523,013 shares of common stock. The closing of the offering took place on April 19, 2022. The offering price of the Shares was $3.69 per share and the offering price of the pre-funded warrants was $3.6899 per share underlying each pre-funded warrant. Net proceeds from the offering were approximately $68.3 million, after deducting underwriting discounts and commissions and offering expenses.

On July 25, 2022, we entered into a Loan Agreement with K2HV (together with any other lender from time to time party thereto, the "Lenders"), K2HV, as administrative agent for the Lenders, and Ankura Trust Company, LLC, as collateral agent for the Lenders. The Loan Agreement provides up to $70.0 million principal in term loans consisting of (subject to certain customary conditions): (i) a first tranche commitment of $25.0 million, of which $5.0 million was funded at closing and with the remainder available to be drawn at our option through March 31, 2023, or the First Tranche Commitment, (ii) two subsequent tranche commitments totaling $20.0 million in the aggregate to be drawn at our option during certain availability periods, subject to the achievement, as determined by the administrative agent in its sole discretion, of certain time-based, clinical and regulatory milestones relating to INZ-701, and (iii) a fourth tranche commitment of $25.0 million available to be drawn at our option through August 31, 2025, subject to use of proceeds limitations and Lender's consent in its discretion.

The facility carries a 48-month term with interest only payments for 36 months and then interest and equal principal payments for the next 12 months. The term loan will mature on August 1, 2026 and bears a variable interest rate equal to the greater of (i) 7.85% and (ii) the sum of (A) the prime rate last quoted in The Wall Street Journal (or a comparable replacement rate if The Wall Street Journal ceases to quote such rate) and (B) 3.85%; *provided* that the interest rate cannot exceed 9.60%. We may prepay, at our option, all, but not less than all, of the outstanding principal balance and all accrued and unpaid interest with respect to the principal balance being prepaid of the term loans, subject to a prepayment premium to which the Lenders are entitled and certain notice requirements. We paid the Lenders certain customary fees and expenses at closing and are required to pay the Lenders additional fees that may be due upon maturity or prepayment such as final payment fees and prepayment fees. As security for its obligations under the Loan Agreement, we granted the Lenders a first priority security interest on substantially all of our assets (other than intellectual property), subject to certain exceptions.

Subject to certain conditions, we granted the Lenders the right, prior to repayment of the term loans, to invest up to $5,000,000 in the aggregate in our future offerings of common stock, convertible preferred stock or other equity securities that are broadly marketed and offered to multiple investors, on the same terms, conditions and pricing afforded to others participating in any such financing.

We believe that our existing cash, cash equivalents and short-term investments as of June 30, 2022, together with the First Tranche Commitment, will enable us to fund our cash flow requirements into the second quarter of 2024. We have based this estimate on assumptions that may prove to be wrong, and our operating plan may change as a result of many factors currently unknown to us. See "—Liquidity and Capital Resources."

To finance our operations beyond that point, we will need to raise additional capital, which cannot be assured.

We anticipate that our expenses will increase substantially if and as we:

- conduct our ongoing Phase 1/2 clinical trials of INZ-701 for ENPP1 Deficiency and ABCC6 Deficiency;
- prepare for, initiate and conduct later stage clinical trials of INZ-701 for patients with ENPP1 and ABCC6 Deficiencies;

- conduct research and preclinical testing of INZ-701 for additional indications;
- conduct research and preclinical testing of other product candidates;
- advance INZ-701 for additional indications or any other product candidate into clinical development;
- seek marketing approval for INZ-701 or any other product candidate if it successfully completes clinical trials;
- scale up our manufacturing processes and capabilities;
- establish a sales, marketing and distribution infrastructure to commercialize any product candidate for which we may obtain marketing approval;
- in-license or acquire additional technologies or product candidates;
- make any payments to Yale University, or Yale, under our license agreement or sponsored research agreement with Yale;
- maintain, expand, enforce and protect our intellectual property portfolio;
- hire additional clinical, regulatory, quality control and scientific personnel; and
- add operational, financial and management information systems and personnel, including personnel to support our research, product development and planned future commercialization efforts and our operations as a public company.

Financial Operations Overview

Revenue

To date, we have not generated any revenue from product sales and do not expect to generate any revenue from the sale of products in the foreseeable future. If development efforts for our product candidates are successful and result in regulatory approval or we enter into collaboration or similar agreements with third parties, we may generate revenue from those product candidates.

Research and Development Expenses

Research and development expenses primarily consist of costs incurred in connection with the discovery and development of our lead product candidate, INZ-701.

We expense research and development costs as incurred. These expenses include:

- fees and expenses incurred in connection with the in-license of technology and intellectual property rights;
- expenses incurred under agreements with third parties, including contract research organizations, or CROs, and other third parties that conduct research, preclinical and clinical activities on our behalf as well as third parties that manufacture our product candidates for use in our preclinical studies and planned clinical trials;
- manufacturing scale-up expenses and the cost of acquiring and manufacturing preclinical trial materials, including manufacturing validation batches;
- employee-related expenses, including salaries, related benefits, travel and stock-based compensation expense for employees engaged in research and development functions;
- the costs of laboratory supplies and acquiring, developing preclinical studies and clinical trial materials;

- costs related to compliance with regulatory requirements; and
- facilities costs, which include depreciation costs of equipment and allocated expenses for rent, utilities and other operating costs.

We recognize external development costs based on an evaluation of the progress to completion of specific tasks using information provided to us by our service providers.

Research and development activities are central to our business model. We are still in the early stages of development of INZ-701. We are currently conducting our Phase 1/2 clinical trials of INZ-701 for ENPP1 Deficiency and ABCC6 Deficiency. Product candidates in later stages of clinical development generally have higher development costs than those in preclinical development or in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. From inception through June 30, 2022, we have incurred $116.0 million of research and development costs for INZ-701. We expect that our research and development costs will continue to increase substantially for the foreseeable future as we conduct the ongoing clinical trials of INZ-701, prepare for, initiate and conduct later stage clinical trials of INZ-701 for patients with ENPP1 and ABCC6 Deficiencies, further scale our manufacturing processes and advance development of INZ-701 for additional indications and potentially additional product candidates.

The successful development of INZ-701 and other potential future product candidates is highly uncertain. Accordingly, at this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the development of any product candidate. We are also unable to predict when, if ever, we will generate revenue and material net cash inflows from the commercialization and sale of any of our product candidates for which we may obtain marketing approval. We may never succeed in achieving marketing approval for any of our product candidates. The success of INZ-701 and any other product candidate we develop will depend on a variety of factors, including:

- successfully completing preclinical studies and initiating clinical trials;
- successfully enrolling patients in and completing clinical trials;
- scaling up manufacturing processes and capabilities to support clinical trials of INZ-701 and any other product candidates we develop;
- applying for and receiving marketing approvals from applicable regulatory authorities;
- obtaining and maintaining intellectual property protection and regulatory exclusivity for INZ-701 and any other product candidates we develop;
- making arrangements for commercial manufacturing capabilities;
- establishing sales, marketing and distribution capabilities and launching commercial sales of INZ-701 and any other product candidates we develop, if and when approved, whether alone or in collaboration with others;
- acceptance of INZ-701 and any other product candidates we develop, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining coverage, adequate pricing and adequate reimbursement from third-party payors, including government payors;
- maintaining, enforcing, defending and protecting our rights in our intellectual property portfolio;
- not infringing, misappropriating or otherwise violating others' intellectual property or proprietary rights; and
- maintaining a continued acceptable safety profile of our products following receipt of any marketing approvals.

A change in the outcome of any of these variables with respect to the development, manufacture or commercialization activities of any of our product candidates could mean a significant change in the costs, timing and viability associated with the development of that product candidate. For example, if we are required to conduct additional clinical trials or other testing beyond those that we anticipate will be required for the completion of clinical development of a product candidate, or if we experience significant delays in our clinical trials due to patient enrollment or other reasons, we would be required to expend significant additional financial resources and time on the completion of clinical development.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries, related benefits, travel and stock-based compensation expense for personnel in executive, finance and administrative functions. General and administrative expenses also include professional fees for legal, consulting, accounting, tax and audit services, and information technology infrastructure costs. We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research activities and development of our product candidates. We incur and anticipate that we will continue to incur costs associated with being a public company, including costs of accounting, audit, legal, regulatory, compliance and tax-related services related to maintaining compliance with requirements of Nasdaq and the SEC; director and officer insurance costs; and investor and public relations costs. We may experience an increase in payroll and expense as a result of our preparation for potential commercial operations, especially as it relates to sales and marketing costs.

Interest Income

Interest income consists of income from bank deposits and investments.

Other Income (Expense), net

Other income (expense), net primarily consists of foreign exchange gains or losses.

Results of Operations

Comparison of the Three Months Ended June 30, 2022 and 2021

The following table summarizes our results of operations for the three months ended June 30, 2022 and 2021 (in thousands):

	Three Months Ended June 30,		
	2022	2021	Increase (Decrease)
Operating expenses:			
Research and development	$ 10,007	$ 8,220	$ 1,787
General and administrative	5,384	4,435	949
Total operating expenses	15,391	12,655	2,736
Loss from operations	(15,391)	(12,655)	2,736
Other income (expense):			
Interest income	321	58	263
Other (expenses) income	(191)	57	(248)
Other income, net	130	115	15
Net loss	$ (15,261)	$ (12,540)	$ 2,721

Research and Development Expense

Research and development expense increased by $1.8 million to $10.0 million for the three months ended June 30, 2022 from $8.2 million for the three months ended June 30, 2021. The increase in research and development expense was primarily attributable to an increase in clinical trial costs due to progression of the Phase 1/2 clinical trials of INZ-701 for ENPP1 Deficiency and INZ-701 for ABCC6 Deficiency and an increase in outsourced services for additional consultants to support the ongoing trials.

We expect that our research and development expenses will increase for the foreseeable future as we conduct clinical trials of INZ-701, prepare for, initiate and conduct later stage clinical trials of INZ-701 for patients with ENPP1 and ABCC6

Deficiencies, further scale our manufacturing processes and advance development of INZ-701 for additional indications or potentially additional product candidates.

General and Administrative Expense

General and administrative expense increased by $1.0 million to $5.4 million for the three months ended June 30, 2022 from $4.4 million for the three months ended June 30, 2021. The increase in general and administrative expense was primarily attributable to an increase in personnel costs. We expect that our general and administrative expenses will increase in future periods as we expand our operations and incur costs in connection with being a public company.

Interest Income

Interest income for the three months ended June 30, 2022 was approximately $0.3 million as a result of higher interest rates and a larger cash balance on which we are earning interest in the period compared to the three months ended June 30, 2021.

Other (Expenses) Income

Other expenses, consisting primarily of foreign exchange gains and losses, for the three months ended June 30, 2022 decreased by $0.2 million as compared to the three months ended June 30, 2021. This decrease was driven by cash balances we hold which are denominated in Euros and their related depreciation compared to the U.S. Dollar in the three months ended June 30, 2022 compared to the three months ended June 30, 2021.

Comparison of the Six Months Ended June 30, 2022 and 2021

The following table summarizes our results of operations for the six months ended June 30, 2022 and 2021 (in thousands):

	Six Months Ended June 30,		
	2022	2021	Increase (Decrease)
Operating expenses:			
Research and development	$ 21,821	$ 14,823	$ 6,998
General and administrative	10,409	8,804	1,605
Total operating expenses	32,230	23,627	8,603
Loss from operations	(32,230)	(23,627)	8,603
Other income (expense):			
Interest income	381	121	260
Other expense	(296)	(84)	212
Other income, net	85	37	48
Net loss	$ (32,145)	$ (23,590)	$ 8,555

Research and Development Expense

Research and development expense increased by $7.0 million to $21.8 million for the six months ended June 30, 2022 from $14.8 million for the six months ended June 30, 2021. The increase in research and development expense was primarily attributable to an increase in clinical trial costs due to progression of the Phase 1/2 clinical trials of INZ-701 for ENPP1 Deficiency and ABCC6 Deficiency, outsourced services for additional consultants to support the ongoing trials, manufacturing operations, and employee compensation.

We expect that our research and development expenses will increase for the foreseeable future as we conduct clinical trials of INZ-701, prepare for, initiate and conduct later stage clinical trials of INZ-701 for patients with ENPP1 and ABCC6 Deficiencies, further scale our manufacturing processes and advance development of INZ-701 for additional indications or potentially additional product candidates.

General and Administrative Expense

General and administrative expense increased by $1.6 million to $10.4 million for the six months ended June 30, 2022 from $8.8 million for the six months ended June 30, 2021. The increase in general and administrative expense was attributable to an increase in personnel costs, consulting expenses, and expenses to support our operations as a public company. We expect that our

general and administrative expenses will increase in future periods as we expand our operations and incur costs in connection with being a public company.

Interest Income

Interest income for the six months ended June 30, 2022 was approximately $0.4 million as a result of higher interest rates and a larger cash balance on which we are earning interest in the period compared to the six months ended June 30, 2021.

Other Expenses

Other expenses, consisting primarily of foreign exchange gains and losses, for the six months ended June 30, 2022 increased by $0.2 million as compared to the six months ended June 30, 2021. This increase was driven by cash balances we hold which are denominated in Euros and their related depreciation compared to the U.S. Dollar in the six months ended June 30, 2022 compared to the six months ended June 30, 2021.

Liquidity and Capital Resources

Sources of Liquidity

Since our inception, we have not generated any revenue and have incurred significant operating losses and negative cash flows from our operations. To date, we have funded our operations primarily with proceeds from the sales of convertible preferred stock, offerings of common stock and pre-funded warrants and borrowings under our Loan Agreement. Through June 30, 2022, we had received net cash proceeds of approximately $295.7 million from sales of our convertible preferred stock, common stock, and pre-funded warrants, after deducting underwriting discounts and commissions and offering expenses. As of June 30, 2022, we had cash, cash equivalents and short-term investments of approximately $151.5 million.

On August 11, 2021, we filed a universal shelf registration statement on Form S-3, which was declared effective on August 23, 2021, or the Registration Statement. Under the Registration Statement, we may offer and sell up to $200.0 million of a variety of securities, including common stock, preferred stock, depositary shares, debt securities, warrants, subscription rights or units from time to time pursuant to one or more offerings at prices and terms to be determined at the time of the sale. In connection with the filing of the Registration Statement, we entered into an Open Market Sale Agreement with Jefferies LLC, as sales agent, pursuant to which we may offer and sell shares of our common stock with an aggregate offering price of up to $50.0 million under an "at-the-market" offering program. To date, we have not sold any securities pursuant to the Open Market Sale Agreement.

In April 2022, we closed an underwritten offering in which we sold 16,276,987 shares of common stock and pre-funded warrants to purchase 3,523,013 shares of common stock under the Registration Statement. Net proceeds from the offering were approximately $68.3 million, after deducting underwriting discounts and commissions and offering expenses.

In July 2022, we entered into a Loan Agreement with the Lenders, which provides up to $70.0 million principal in term loans consisting of (subject to certain customary conditions): (i) a First Tranche Commitment of $25.0 million, of which $5.0 million was funded at closing and with the remainder available to be drawn at our option through March 31, 2023, (ii) two subsequent tranche commitments totaling $20.0 million in the aggregate to be drawn at our option during certain availability periods, subject to the achievement, as determined by the administrative agent in its sole discretion, of certain time-based, clinical and regulatory milestones relating to INZ-701, and (iii) a fourth tranche commitment of $25.0 million available to be drawn at our option through August 31, 2025, subject to use of proceeds limitations and Lender's consent in its discretion.

The facility carries a 48-month term with interest only payments for 36 months and then interest and equal principal payments for the next 12 months. The term loan will mature on August 1, 2026 and bears a variable interest rate equal to the greater of (i) 7.85% and (ii) the sum of (A) the prime rate last quoted in The Wall Street Journal (or a comparable replacement rate if The Wall Street Journal ceases to quote such rate) and (B) 3.85%; provided that the interest rate cannot exceed 9.60%. We may prepay, at our option, all, but not less than all, of the outstanding principal balance and all accrued and unpaid interest with respect to the principal balance being prepaid of the term loans, subject to a prepayment premium to which the Lenders are entitled and certain notice requirements. We paid the Lenders certain customary fees and expenses at closing and are required to pay the Lenders additional fees that may be due upon maturity or prepayment such as final payment fees and prepayment fees.

The Lenders may elect at any time following the closing and prior to the full repayment of the term loans to convert any portion of the principal amount of the term loans then outstanding, up to an aggregate of $5.0 million in principal amount, into shares of our common stock, at a conversion price of $6.21, subject to customary adjustments and 9.99% and 19.99% beneficial ownership limitations. The Loan Agreement provides the Lenders with certain piggyback registration rights with respect to the shares of common stock issuable upon conversion of term loans under the Loan Agreement.

Subject to certain conditions, we granted the Lenders the right, prior to repayment of the term loans, to invest up to $5,000,000 in the aggregate in our future offerings of common stock, convertible preferred stock or other equity securities that are broadly marketed and offered to multiple investors, on the same terms, conditions and pricing afforded to others participating in any such financing.

Cash in excess of immediate requirements is invested primarily with a view to liquidity and capital preservation. The following table provides information regarding our total cash, cash equivalents and short-term investments at June 30, 2022 and December 31, 2021 (in thousands):

	June 30, 2022	December 31, 2021
Cash and cash equivalents	$ 62,620	$ 23,316
Short-term investments	88,860	88,485
Total cash, cash equivalents and short-term investments	$ 151,480	$ 111,801

Cash Flows

The following table provides information regarding our cash flows for the six months ended June 30, 2022 and 2021 (in thousands):

	Six Months Ended June 30,	
	2022	2021
Net cash used in operating activities	$ (28,847)	$ (22,409)
Net cash (used in) provided by investing activities	(364)	20,247
Net cash provided by financing activities	68,573	361
Net increase (decrease) in cash, cash equivalents and restricted cash	$ 39,362	$ (1,801)

Net Cash Used in Operating Activities

The cash used in operating activities resulted primarily from our net losses adjusted for non-cash charges and changes in components of working capital.

Net cash used in operating activities was $28.8 million for the six months ended June 30, 2022 compared to $22.4 million for the six months ended June 30, 2021. The increase in cash used in operating activities of $6.4 million was primarily due to an increase in net loss adjusted for non-cash items of $8.6 million, offset by changes in operating assets and liabilities of $2.2 million.

Net Cash (Used in)Provided by Investing Activities

Net cash used in investing activities was $0.4 million for the six months ended June 30, 2022 compared to net cash provided by investing activities of $20.2 million for the six months ended June 30, 2021 as purchases of marketable securities surpassed maturities of marketable securities in the six months ended June 30, 2022. For the six months ended June 30, 2022, we had maturities of marketable securities of $81.5 million, purchases of marketable securities of $81.6 million and purchases of property and equipment of $0.2 million. For the six months ended June 30, 2021, we had maturities of marketable securities of $82.6 million, purchases of marketable securities of $62.0 million and purchases of property and equipment of $0.3 million.

Net Cash Provided by Financing Activities

Net cash provided by financing activities of $68.6 million for the six months ended June 30, 2022 reflects the cash proceeds from the issuance of common stock and pre-funded warrants in our underwritten offering in April 2022 as well as proceeds from the exercise of stock options. Net cash provided by financing activities of $0.4 million for the six months ended June 30, 2021 reflects cash proceeds from the exercise of stock options.

Funding Requirements

We expect to devote substantial financial resources to our ongoing and planned activities, particularly as we conduct our ongoing Phase 1/2 clinical trials of INZ-701 for ENPP1 and ABCC6 Deficiencies, and continue research and development and initiate additional clinical trials of, and seek marketing approval for, INZ-701 and any other product candidate we develop. We expect our expenses to increase substantially in connection with our ongoing and planned activities, particularly as we advance our preclinical activities and clinical trials. In addition, if we obtain marketing approval for INZ-701 or any other product candidates we develop, we expect to incur significant commercialization expenses related to product manufacturing, sales, marketing and distribution. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital or obtain adequate funds when needed or on acceptable terms, we may be required to delay, limit, reduce or terminate our research and development programs or any future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. In addition, attempting to secure additional financing may divert the time and attention of our management from day-to-day activities and distract from our research and development efforts.

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

- the progress, costs and results of our ongoing Phase 1/2 clinical trials of INZ-701 for ENPP1 Deficiency and ABCC6 Deficiency and any future clinical development of INZ-701 for these indications;

- the scope, progress, costs and results of research, preclinical testing and clinical trials of INZ-701 for additional indications;
- the number of and development requirements for additional indications for INZ-701 or for any other product candidates we develop;
- our ability to scale up our manufacturing processes and capabilities;
- the costs, timing and outcome of regulatory review of INZ-701 and any other product candidates we develop;
- potential changes in the regulatory environment and enforcement rules;
- our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of such arrangements;
- the payment of license fees and other costs of our technology license arrangements;
- the extent of our debt service obligations and our ability, if desired, to refinance any of our existing debt on terms that are more favorable to us;
- the costs and timing of future commercialization activities, including product manufacturing, sales, marketing and distribution, for INZ-701 and any other product candidates we develop for which we may receive marketing approval;
- the amount and timing of revenue, if any, received from commercial sales of INZ-701 and any other product candidates we develop for which we receive marketing approval;
- potential changes in pharmaceutical pricing and reimbursement infrastructure;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property and proprietary rights and defending any intellectual property-related claims; and
- the extent to which we in-license or acquire additional technologies or product candidates.

As of June 30, 2022, we had cash, cash equivalents and short-term investments of approximately $151.5 million. We believe that our existing cash, cash equivalents and short-term investments as of June 30, 2022, together with the First Tranche Commitment, will enable us to fund our cash flow requirements into the second quarter of 2024. However, we have based this estimate on assumptions that may prove to be wrong, and our operating plan may change as a result of many factors currently unknown to us. In addition, changing circumstances could cause us to consume capital significantly faster than we currently anticipate, and we may need to spend more than currently expected because of circumstances beyond our control. As a result, we could deplete our capital resources sooner than we currently expect. In addition, because the successful development of INZ-701 and any other product candidates that we pursue is highly uncertain, at this time we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the development of any product candidate.

Identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. We will not generate commercial revenues unless and until we can achieve sales of products, which we do not anticipate for a number of years, if at all. Accordingly, we will need to obtain substantial additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all, and may be impacted by the economic climate and market conditions.

Until such time, if ever, as we can generate substantial revenues from product sales, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. We do not have any committed external source of funds, other than under our Loan Agreement. Our ability to borrow under our Loan Agreement is subject to our satisfaction of specified conditions and lender discretion. To the extent that we raise additional capital through the sale of equity or convertible debt securities or to the extent the Lenders elect to convert a portion of their outstanding principal into shares of our common stock pursuant to the Loan Agreement, the ownership interests of our stockholders will be diluted, and the terms of any new securities may include liquidation or other preferences that adversely affect the rights of our existing common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include

covenants limiting or restricting our operations and ability to take specific actions, such as incurring additional indebtedness, making acquisitions, engaging in acquisition, merger or collaboration transactions, selling or licensing our assets, making capital expenditures, redeeming our stock, making certain investments or declaring dividends. The covenants under our Loan Agreement and the pledge of our assets as collateral limit our ability to take specific actions, including obtaining additional debt financing.

If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us.

Critical Accounting Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, as well as the reported expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. During the three months ended June 30, 2022, there were no material changes to our critical accounting estimates from those described in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended December 31, 2021.

Contractual Obligations, Commitments and Contingencies

During the six months ended June 30, 2022, there were no material changes to our contractual obligations and commitments from those described in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

For a description of the Loan Agreement entered into in July 2022, see Note 11 to our consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q.

Recently Issued Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 3 to our consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q.

Emerging Growth Company Status

The Jumpstart Our Business Startups Act of 2012 permits an "emerging growth company" such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies until those standards would otherwise apply to private companies. We have elected to use the extended transition period for complying with new or revised accounting standards and will do so until such time that we either (1) irrevocably elect to "opt out" of such extended transition period or (2) no longer qualify as an emerging growth company.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risk related to changes in interest rates. As of June 30, 2022, our cash equivalents consisted of primarily of short-term money market funds. As of June 30, 2022, our short-term investments consisted of commercial paper, and U.S. Treasury securities. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates. Due to the primarily short-term nature of the investments in our portfolio and the low risk profile of our investments, an immediate change of 100 basis points in interest rates would not have a material effect on the fair market value of our investment portfolio or on our financial position. An immediate increase (decrease) of 100 basis points would result in an increase (decrease) in interest income of approximately $0.9 million annually.

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

Inflation generally affects us by increasing our cost of labor and clinical trial costs. We do not believe that inflation had a material effect on our business, financial condition or results of operations during six months ended June 30, 2022 and 2021.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer (our principal executive officer and principal financial officer, respectively), evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2022. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of June 30, 2022, our Chief Executive Officer and our Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15(d)-15(f) under the Exchange Act) that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1A. Risk Factors.

You should carefully consider the following risks and uncertainties and the risks and uncertainties discussed in Part I, "Item 1A. Risk Factors" in our Annual Report on Form 10–K for the year ended December 31, 2021, together with all of the other information contained in this Quarterly Report on Form 10-Q, which could materially affect our business, financial condition or results of operations. The risk factors disclosure in our Annual Report on Form 10-K for the year ended December 31, 2021 is qualified by the information that is described in this Quarterly Report on Form 10-Q. The risks described below and in our Annual Report on Form 10–K for the year ended December 31, 2021 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.

Risks Related to Our Financial Position and Need for Additional Capital

We have a loan agreement that requires us to meet specified funding conditions and operating covenants and places restrictions on our operating and financial flexibility.

Under our Loan Agreement, we have $5.0 million of outstanding principal indebtedness, and we may in the future draw down up to $65.0 million of additional principal indebtedness under the Loan Agreement, subject to specified conditions and lender discretion. Our ability to draw down two tranche commitments totaling $20.0 million in the aggregate is subject to our achievement, as determined by the administrative agent in its sole discretion, of certain time-based, clinical and regulatory milestones relating to INZ-701. Our ability to draw down an additional tranche commitment of $25.0 million is subject to use of proceeds limitations and Lender's consent in its discretion. As security for its obligations under the Loan Agreement, we granted the Lenders a first priority security interest on substantially all of our assets (other than intellectual property), subject to certain exceptions. Because of the security interest, the Lender's rights to repayment from a liquidation of the assets subject to that security interest would be senior to the rights of other creditors.

The Loan Agreement contains customary representations and warranties, events of default and affirmative and negative covenants, including covenants that limit or restrict our ability to, among other things, dispose of assets, make changes to our business, management, ownership or business locations, merge or consolidate, incur additional indebtedness, incur additional liens, pay dividends or other distributions or repurchase equity, make investments, and enter into certain transactions with affiliates, in each case subject to certain exceptions.

We intend to satisfy our current and future debt service obligations with our existing cash and cash equivalents. However, we may not have sufficient funds or may be unable to arrange for additional financing to pay the amounts due under our outstanding debt. Funds from external sources may not be available on acceptable terms, if at all. In addition, a failure to comply with the conditions of our Loan Agreement, including a breach of any covenant, could result in an event of default thereunder. In the event of an acceleration of amounts due under our Loan Agreement as a result of an event of default, including upon the occurrence of an event or circumstance that could be expected to have a material adverse effect on our business, operations, properties, assets or financial condition or a failure to pay any amount due, we may not have sufficient funds or may be unable to arrange for additional financing to repay our indebtedness or to make any accelerated payments, and the Lenders could seek to enforce security interests in the collateral securing such indebtedness. Any declaration by the Lenders of an event of default could significantly harm our business and prospects and could cause the price of our common stock to decline.

In addition, our outstanding debt combined with our other financial obligations and contractual commitments could have significant adverse consequences, including:

- restricting the amount of our cash resources, after satisfaction of our debt service obligations, available to fund working capital, research and development efforts and other general corporate purposes;
- limiting our flexibility in planning for, or reacting to, changes in our business and our industry; and
- placing us at a competitive disadvantage compared to our competitors that have less debt or better debt servicing options.

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

Recent Sales of Unregistered Equity Securities

We did not issue any securities that were not registered under the Securities Act of 1933, as amended, or the Securities Act, during the three months ended June 30, 2022.

Use of Proceeds from Initial Public Offering

On July 28, 2020, we completed our IPO, pursuant to which we issued and sold 7,000,000 shares of our common stock at a public offering price of $16.00 per share, and on July 30, 2020, we sold an additional 1,050,000 shares of our common stock at a price of $16.00 per share pursuant to the exercise by the underwriters of their option to purchase additional shares.

We received aggregate gross proceeds from our IPO, inclusive of the exercise by the underwriters of their option to purchase additional shares, of approximately $128.8 million, or aggregate net proceeds of approximately $116.1 million after deducting underwriting discounts and commissions and offering expenses.

We have used approximately $33.3 million of the net proceeds from the IPO as of June 30, 2022 to fund clinical development of INZ-701, to fund our preclinical research and development activities, and for working capital and other general corporate purposes. There has been no material change in our planned use of the net proceeds from our IPO as described in our final prospectus filed pursuant to Rule 424(b)(4) under the Securities Act with the SEC on July 24, 2020.

Item 6. Exhibits.

Exhibit Number	Description
3.1	Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-39397) filed with the Securities and Exchange Commission on July 28, 2020).
3.2	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-39397) filed with the Securities and Exchange Commission on July 28, 2020).
4.1	Form of Amended and Restated Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K (File No. 001-39397) filed with the Securities and Exchange Commission on June 10, 2022).
10.1*†	Loan and Security Agreement, dated July 25, 2022, by and among the Registrant, K2 HealthVentures LLC, as lender, K2 HealthVentures LLC, as administrative agent, and Ankura Trust Company, LLC, as collateral agent.
10.2*†	Corporate Sponsored Research Agreement, dated January 6, 2017, by and between Yale University and the Registrant, as amended by Amendment No. 1 to Corporate Sponsored Research Agreement, dated February 19, 2019, by and between Yale University and the Registrant, as amended by Amendment No. 2 to Corporate Sponsored Research Agreement, effective December 31, 2021, by and between Yale University and the Registrant and as amended by Amendment No. 3 to Corporate Sponsored Research Agreement, dated May 31, 2022, by and between Yale University and the Registrant.
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1+	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2+	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL with applicable taxonomy extension information contained in Exhibits 101).

* Filed herewith.

\+ Furnished herewith.

† Certain portions of this exhibit have been omitted because they are not material and contain information that the Registrant customarily and actually treats as private or confidential.

SIGNATURES

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

INOZYME PHARMA, INC.

Date: August 15, 2022

By: /s/ Axel Bolte

Axel Bolte
President and Chief Executive Officer, Director
(Principal Executive Officer)

Date: August 15, 2022

By: /s/ Sanjay Subramanian

Sanjay Subramaniam
Chief Financial Officer
(Principal Financial
Officer and Principal Accounting Officer)

Exhibit 10.1

Certain identified information has been excluded from the exhibit because it is both (i) not material and (ii) is the type of information that the registrant treats as private or confidential. Double asterisks denote omissions.

LOAN AND SECURITY AGREEMENT

This LOAN AND SECURITY AGREEMENT (as amended, restated, supplemented or otherwise modified from time to time, this "**Agreement**") dated as of July 25, 2022 (the "**Closing Date**") is entered into among **INOZYME PHARMA, INC.**, a Delaware corporation ("**Borrower Representative**"), and each other Person party hereto as a borrower from time to time (collectively, "**Borrowers**", and each, a "**Borrower**"), and each other Person party hereto or any other Loan Documents as a guarantor from time to time (collectively, "**Guarantors**" and each, a "**Guarantor**", and together with Borrowers, collectively, "**Loan Parties**", and each, a "**Loan Party**"), the lenders from time to time party hereto (collectively, "**Lenders**", and each, a "**Lender**"), **K2 HEALTHVENTURES LLC**, as administrative agent for Lenders (in such capacity, together with its successors, "**Administrative Agent**"), and **ANKURA TRUST COMPANY, LLC**, as collateral agent for Lenders (in such capacity, together with its successors, "**Collateral Trustee**").

AGREEMENT

Borrower Representative, each Loan Party from time to time party hereto, Administrative Agent, Collateral Trustee and Lenders hereby agree as follows:

1. ACCOUNTING AND OTHER TERMS

Accounting terms not defined in this Agreement shall be construed in accordance with GAAP, and calculations and determinations shall be made following GAAP, consistently applied; provided that any obligations of a Person that are or would have been treated as operating leases or capital leases for purposes of GAAP prior to the issuance by the Financial Accounting Standards Board on February 25, 2016 of an Accounting Standards Update (Topic 842) (the "**ASU**") shall continue to be accounted for as operating leases or capital leases (whether or not such operating lease obligations or capital lease obligations, as applicable, were in effect on such date) notwithstanding the fact that such obligations are required in accordance with the ASU (on a prospective or retroactive basis or otherwise) to be treated as capitalized lease obligations in accordance with GAAP. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth on Exhibit A. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein. As used in the Loan Documents, the word "shall" is mandatory, the word "may" is permissive, the word "or" is not exclusive, the words "includes" and "including" are not limiting, the singular includes the plural, and numbers denoting amounts that are set off in brackets are negative. Unless otherwise specified, all references in this Agreement or any Annex or Schedule hereto to a "Section," "subsection," "Exhibit," "Annex," or "Schedule" shall refer to the corresponding Section, subsection, Exhibit, Annex, or Schedule in or to this Agreement. For purposes of the Loan Documents, whenever a representation or warranty is made to a Person's knowledge or awareness, knowledge or awareness means the actual knowledge, after reasonable investigation, of any Responsible Officer of such Person.

2. LOAN AND TERMS OF PAYMENT

2.1 Promise to Pay. Each Borrower hereby unconditionally promises to pay each Lender the outstanding principal amount of all Loans advanced by such Lender, accrued and unpaid interest, fees and charges thereon and to pay all other Obligations as and when due in accordance with this Agreement.

2.2 Availability and Repayment or Conversion of the Loans.

(a) Availability.

(i) Subject to the terms and conditions of this Agreement, each Lender agrees, severally and not jointly, to make to Borrowers (A) an initial advance on the Closing Date in principal amount equal to $5,000,000, and (B) if requested by Borrower Representative, up to two (2) additional advances during the First Tranche Availability Period in an aggregate principal amount up to $20,0000,000, each in a minimum principal amount of $5,000,000 (the advances described in subclauses (A) and (B), collectively, the "**First Tranche Term Loans**"). The aggregate principal amount of the First Tranche Term Loans made by each Lender shall not exceed such Lender's First Tranche Term Loan Commitment. Lenders' commitments to make the First Tranche Term Loans shall terminate upon the funding of the First Tranche Term Loans on the Closing Date.

(ii) Subject to achievement of the Second Tranche Milestone and the terms and conditions of this Agreement, each Lender agrees, severally and not jointly, to make to Borrowers an advance during the Second Tranche Availability Period in principal amount up to its Second Tranche Term Loan Commitment (the "**Second Tranche Term Loans**"), provided that if the amount of a Second Tranche Term Loan requested is less than the remaining aggregate Second Tranche Term Loan Commitments, each Lender shall fund its Pro Rata Share of the requested Second Tranche Term Loan, provided further that if Borrowers elect not to draw the full amount of the Second Tranche Term Loan Commitments available, then the Third Tranche Term Loan Commitment of each Lender shall be deemed increased by an amount equal to such Lender's Pro Rata Share of the lesser of (x) such unused amount under the Second Tranche Term Loan Commitments, and (y) $2,500,000. Lenders' commitments to make the Second Tranche Term Loans shall terminate upon the earlier of (i) the end of the Second Tranche Availability Period, and (ii) the funding of the Second Tranche Term Loans in an aggregate amount equal to the aggregate amount of the Second Tranche Term Loan Commitments.

(iii) Subject to achievement of the Third Tranche Milestone and the terms and conditions of this Agreement, each Lender agrees, severally and not jointly, to make to Borrowers an advance during the Third Tranche Availability Period in principal amount equal to its Third Tranche Term Loan Commitment (the "**Third Tranche Term Loans**"). Lenders' commitment to make the Third Tranche Term Loans shall terminate upon the earlier of (i) the end of the Third Tranche Availability Period, and (ii) the funding of the Third Tranche Term Loans.

(iv) Subject to Lenders' review of Borrowers' clinical and financial/operating plans at the time of a requested funding of a Fourth Tranche Term Loan, each Lender's discretionary approval of the requested Fourth Tranche Term Loan, and the terms and conditions of this Agreement, each Lender may, severally and not jointly, make to Borrowers one or more advances any time prior to the Amortization Date in principal amount up to the applicable Fourth Tranche Term Loan Amount for such Lender (the "**Fourth Tranche Term Loans**", and together with the First Tranche Term Loans, the Second Tranche Term Loans and the Third Tranche Term Loans, collectively, the "**Term Loans**", and each, a "**Term Loan**"), provided that if the amount of a Fourth Tranche Term Loan requested is less than the remaining aggregate Fourth Tranche Term Loan Amount, each Lender may fund its Pro Rata Share of the requested Fourth Tranche Term Loan. Lenders have no commitment to make any Fourth Tranche Term Loans, which may be made in their sole and absolute discretion.

Borrowers shall use the proceeds of the Term Loans for working capital, general corporate purposes and any other purpose not prohibited by this Agreement, and in case of any Fourth Tranche Term Loan, among other purposes that may be approved by Lenders, to further support development of programs and/or business development opportunities. Once repaid, the Term Loans may not be reborrowed.

(b) Repayment. Commencing on the Amortization Date, and continuing thereafter on each Payment Date through the Term Loan Maturity Date, Borrowers shall make consecutive monthly payments of equal principal and interest, in an amount which would fully amortize the principal amount of the Term Loans and accrued interest thereon on the Term Loan Maturity Date; provided that if the Applicable Rate is adjusted in accordance with the terms hereof, the amortization schedule and the required monthly installment shall be recalculated based on the adjusted Applicable Rate. Any and all unpaid Obligations, including any outstanding principal and accrued and unpaid interest in respect of the Term Loans the fees pursuant to the Fee Letter and any other fees and other sums due and payable hereunder, if any, shall be due and payable in full on the Term Loan Maturity Date. The Term Loans may only be prepaid in accordance with Sections 2.2(c) or (d).

(c) Mandatory Prepayment Upon an Acceleration. If the Loans are accelerated by Administrative Agent in accordance with Section 9.1(a) following the occurrence and during the continuation of an Event of Default, Borrowers shall immediately pay to Lenders, ratably, an amount equal to the sum of:

(i) all outstanding principal plus accrued and unpaid interest thereon, plus

(ii) all amounts then due in accordance with the Fee Letter, plus

(iii) all other sums, if any, that shall have become due and payable hereunder, including interest at the Default Rate with respect to any past due amounts.

(d) Permitted Prepayment of Loans. Borrowers shall have the option to prepay all, but not less than all, of the Loans, provided Borrowers provide written notice to Administrative Agent of its election to prepay the Loans at least thirty (30) days prior to such prepayment (or such shorter period as the Administrative Agent may reasonably agree), and pay, on the date of such prepayment, to Lenders, ratably, an amount equal to the sum of:

(i) all outstanding principal plus accrued and unpaid interest thereon through the prepayment date, plus

(ii) all amounts then due in accordance with the Fee Letter, plus

(iii) all other sums, if any, that shall have become due and payable hereunder, including interest at the Default Rate with respect to any past due amounts.

Notwithstanding the foregoing provisions of this Section 2.2(d), any notice of prepayment hereunder may state that such prepayment is conditioned upon the effectiveness of a refinancing or any other transaction, in which case such Prepayment Notice may be revoked or extended by Borrowers on or prior to the specified effective date of such prepayment if such condition is not satisfied.

(e) Conversion at Lenders' Election.

(i) Conversion Election. Lenders may jointly elect at any time and from time to time after the Closing Date and prior to the repayment in full of the Loans to convert any portion of the principal amount of the Loans then outstanding (the "**Conversion Amount**") into shares of Common Stock ("**Conversion Shares**") at the Conversion Price pursuant to a Conversion Election Notice, to be delivered at the direction of Lenders by the Administrative Agent to Borrower Representative, provided that the aggregate principal amount converted to Common Stock in accordance with this Section 2.2(e) shall not exceed $5,000,000. A Conversion Election Notice, once delivered, shall be irrevocable unless otherwise agreed in writing by Borrower Representative. On the third trading day after a Conversion Election Notice has been duly delivered in accordance with the foregoing, Borrower Representative shall credit to each Designated Holder a number of Conversion Shares equal to (x) the Conversion Amount indicated in the applicable Conversion Election Notice divided by (y) Conversion Price, rounded down to the nearest whole share. The issuance of the Conversion Shares to the Lenders in accordance with this Section 2.2(e)(i) will constitute a satisfaction in full of the Conversion Amount by the Borrower Representative. For the avoidance of doubt, except for fees accruing in respect of Loans advanced as set forth in paragraph 2 of the Fee Letter, no premium, penalty or Prepayment Fee (as defined in the Fee Letter) shall apply to the principal amounts of the Loans converted into shares of Common Stock pursuant to this Section 2.2(e).

(ii) Reservation of Shares. Borrower Representative shall reserve from its duly authorized capital stock not less than the number of shares of Common Stock that may be issuable pursuant to this Section 2.2(e). Upon issuance of Conversion Shares pursuant to this Section 2.2(e), such shares shall be validly issued, fully paid and non-assessable and free from all preemptive or similar rights, any liens and charges with respect to the issue thereof, and shall be free of any restrictions on transfer (except for any restrictions under Federal or state securities laws).

(iii) Rule 144. With a view to making available to Designated Holders the benefits of Rule 144 (or its successor rule) and any other rule or regulation of the Securities and Exchange Commission (the "**SEC**") that may at any time permit Designated Holders to sell shares of Common Stock issued pursuant to a Conversion Election Notice to the public without registration, Borrower Representative covenants and agrees to: (i) use commercially reasonable efforts to make and keep public information available, as those terms are understood and defined in Rule 144, until six (6) months after such date as all of Conversion Shares issued may be sold without restriction by Designated Holders pursuant to Rule 144 or any other rule of similar effect; (ii) use commercially reasonable efforts to file with the SEC in a timely manner (or obtain extensions in respect thereof and file within the applicable grace period) all reports and other documents required of Borrower Representative under the Exchange Act; and (iii) furnish to Designated Holders, upon request, as long as Designated Holders own any shares of Common Stock issued pursuant to a Conversion Election Notice, such information as may be reasonably requested in order to avail Designated Holders of any rule or regulation of the SEC that permits the selling of any Conversion Shares issued without registration.

(iv) Registration Rights. In connection with the option to convert in accordance with this Section 2.2(e), Borrower Representative hereby agrees that each Designated Holder shall be deemed a "Holder" (as defined in the Second Amended and Restated Investor Rights Agreement dated November 9, 2018, by and among the Company and the Investors named therein, as amended from time to time (the "IRA")) for purposes of piggyback registration rights with respect to the shares of Common Stock issued under this Section 2.2(e) pursuant to the terms and conditions of the IRA, on a pari passu basis with the other Holders.

(v) Authorization. For so long as Designated Holders hold any shares of Common Stock issued pursuant to this Section 2.2(e), Borrower Representative shall use commercially reasonable efforts to maintain the Common Stock's authorization for listing on the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market (or on another national securities exchange) and Borrower Representative shall not take any action which would reasonably be expected to result in the delisting or suspension of the Common Stock on such national securities exchange on which the Common Stock is listed.

(vi) Limitations on Conversion.

(1) Beneficial Ownership. Notwithstanding anything herein to the contrary, Borrower Representative shall not issue a number of Conversion Shares pursuant to this Section 2.2(e) to the extent that, upon such issuance, the number of shares of Common Stock then beneficially owned by each Designated Holder and its Affiliates and any other persons or entities whose beneficial ownership of Common Stock would be aggregated with such Designated Holders for purposes of Section 13(d) of the Exchange Act would exceed 9.985% of the total number of shares of Common Stock of the Borrower Representative then issued and outstanding (the "**9.985% Cap**"); provided that the 9.985% Cap shall only apply to the extent that the Common Stock is deemed to constitute an "equity security" pursuant to Rule 13d-1(i) promulgated under the Exchange Act, provided further that Lenders shall have the right, upon 61 days' prior written notice to Borrower Representative, to waive the 9.985% Cap.

(2) Principal Market Regulation. Borrower Representative shall not issue a number of Conversion Shares pursuant to this Section 2.2(e), if the issuance of such shares together with any previously issued Conversion Shares, would result in (A) the issuance of more than 19.99% of the Common Stock outstanding as of the Closing Date or (B) Designated Holders, together with their Affiliates and any other persons or entities whose beneficial ownership of Common Stock would be aggregated with such Designated Holder's for purposes of Section 13(d) of the Exchange Act, beneficially owning in excess of 19.99% of the then outstanding Common Stock and, in each case, for the avoidance of doubt, the applicable Conversion Amount will be reduced as necessary to ensure compliance with the foregoing.

(3) Beneficial Ownership Determination. For purposes of this Section 2.2(e), "group" has the meaning set forth in Section 13(d) of the Exchange Act and applicable regulations of the SEC, and the percentage held by each Designated Holder shall be determined in a manner consistent with the provisions of Section 13(d) of the Exchange Act. Upon the written request of Administrative Agent, Borrower Representative shall, within two (2) trading days, confirm to the Administrative Agent the number of Shares then outstanding. As used herein, beneficial ownership shall be determined in accordance with Section 13(d) of the Exchange Act.

(vii) Certain Adjustments. If Borrower Representative declares or pays a dividend or distribution on the outstanding shares of the Common Stock payable in Common Stock or other securities or property (other than cash), then upon exercise of any conversion option in accordance with this Section 2.2(e), for each Conversion Share acquired, Designated Holder shall receive, without additional cost to Designated Holder, the total number and kind of securities and property which Designated Holder would have received had Designated Holder owned the Conversion Shares of record as of the date the dividend or distribution occurred. Upon any event whereby all of the outstanding shares of the Common Stock are reclassified, converted, exchanged, combined, substituted, or replaced for, into, with or by securities of a different class and/or series, then from and after the consummation of such event, the Conversion Price shall be adjusted accordingly in light of such event and the Conversion Shares issuable will be the number, class and series of securities that Designated Holder would have received had the Conversion Shares been outstanding on and as of the consummation of such event. The provisions of this Section 2.2(e)(vii) shall similarly apply to successive reclassifications, exchanges, combinations substitutions, replacements or other similar events.

(viii) No Fractional Shares. Upon conversion of the Conversion Amount into Conversion Shares, any fraction of a share will be rounded down to the next whole share of the Conversion Shares, and in lieu of such fractional shares to which the Designated Holder would otherwise be entitled, the Borrower Representative shall, at its option, either pay the Designated Holder cash equal to such fraction multiplied by the Conversion Price, or return such amount to principal under the Loan.

2.3 Payment of Interest.

(a) Interest Rate. Subject to Section 2.3(b), the outstanding principal amount of the Loans shall accrue interest from and after its Funding Date, at the Applicable Rate, and Borrowers shall pay such interest monthly in arrears on each Payment Date commencing on September 1, 2022.

(b) Default Rate. Immediately upon the occurrence and during the continuation of an Event of Default, at the election of the Administrative Agent in its sole discretion, Obligations shall bear interest at a rate per annum which is five percentage points (5.0%) above the rate that is otherwise applicable thereto (the "**Default Rate**"). Fees and expenses which are required to be paid by Borrowers pursuant to the Loan Documents (including, without limitation, Lender Expenses) but are not paid when due shall bear interest until paid at a rate equal to the highest interest rate applicable to the Loans. Payment or acceptance of the increased interest rate provided in this Section 2.3(b) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies pursuant to the Loan Documents. Each Borrower agrees that interest at the Default Rate is a reasonable calculation of Lenders' lost profits in view of the difficulties and impracticality of determining actual damages resulting from an Event of Default.

(c) Payment; Interest Computation. Interest is payable monthly in arrears on the Payment Date of the following month and shall be computed on the basis of a 360-day year for the actual number of days elapsed. In computing interest, (i) all payments received after 3:00 p.m. Eastern Time on any day shall be deemed received at the opening of business on the next Business Day, and (ii) the date of the making of any Loan shall be included and the date of payment shall be excluded. Changes to the Applicable Rate based on changes to the Prime Rate, shall be effective as of the date, and to the extent, of such change.

(d) Maximum Interest. Notwithstanding any provision in this Agreement or any other Loan Document, it is the parties' intent not to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law that a court of competent jurisdiction shall deem applicable hereto (the "**Maximum Rate**"). If a court of competent jurisdiction shall finally determine that a Borrower has actually paid to or for the benefit of Lenders an amount of interest in excess of the amount that would have been payable if all of the Obligations had at all times borne interest at the Maximum Rate, then such excess interest actually paid by Borrowers shall be applied as follows: first, to the payment then due of principal outstanding in respect of the Loans; second, after all principal is repaid, to the payment of accrued interest, third, to the payment of Lender Expenses and any other Obligations; and fourth, after all Obligations are repaid, the excess (if any) shall be refunded to Borrowers or paid to whomsoever may be legally entitled thereto, provided that amounts payable to Lenders, shall be paid ratably.

2.4 Fees and Charges. Borrowers shall pay to Administrative Agent, for the ratable benefit of Lenders:

(a) Fees. The fees and charges as and when due in accordance with the Fee Letter; and

(b) Expenses. All Lender Expenses (including reasonable and documented out-of-pocket attorneys' fees and expenses for documentation and negotiation of this Agreement and the other Loan Documents) incurred through and after the Closing Date, when due (or, if no stated due date, within ten (10) Business Days after delivery by Administrative Agent of an invoice with respect thereto).

2.5 Payments; Application of Payments; Automatic Payment Authorization; Withholding.

(a) All payments to be made by Borrowers under any Loan Document, including payments of principal and interest and all fees, charges, expenses, indemnities and reimbursements, shall be made in immediately available funds in Dollars, without setoff, recoupment or counterclaim, before 3:00 p.m. Eastern Time on the date when due, subject to Schedule 3 with respect to Taxes. Payments of principal and/or interest received after 3:00 p.m.

Eastern Time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment shall be due the next Business Day, and additional fees or interest, as applicable, shall continue to accrue until paid.

(b) No Borrower shall have a right to specify the order or the loan accounts to which a Lender shall allocate or apply any payments made by a Borrower to or for the benefit of such Lender or otherwise received by such Lender under this Agreement when any such allocation or application is not expressly specified elsewhere in this Agreement.

(c) Administrative Agent, on behalf of Secured Parties, may initiate debit entries to any Deposit Accounts as authorized on the Automatic Payment Authorization for principal and interest payments or any other Obligations when due. These debits shall not constitute a set-off. If the ACH payment arrangement is terminated for any reason, Borrowers shall make all payments due hereunder at the applicable address specified in Section 10, or as otherwise notified by Administrative Agent in writing.

(d) Borrowers, Administrative Agent, Collateral Trustee and each Lender hereby agree to the terms and conditions set forth on Schedule 3 hereto.

2.6 Promissory Notes. Borrowers agree that: upon written notice by or on behalf of any Lender to Borrowers that a promissory note or other evidence of indebtedness is requested by such Lender to evidence the Loans and other Obligations owing or payable to, or to be made by, such Lender, Borrowers shall promptly (and in any event within ten (10) Business Days of any such request) execute and deliver to such Lender an appropriate promissory note, in substantially the form attached hereto as Exhibit G. Regardless of whether or not any such promissory notes are issued, this Agreement shall evidence the Loans and other Obligations owing or payable by Borrowers to each Lender.

3. CONDITIONS OF LOANS

3.1 Conditions Precedent to Initial Loan. Each Lender's obligation to make the initial Loan is subject to the condition precedent that Administrative Agent shall have received, in form and substance reasonably satisfactory to Administrative Agent, such documents, and completion of such other matters, as Administrative Agent may reasonably request, including, without limitation:

(a) duly executed signatures to this Agreement;

(b) duly executed signatures to the Fee Letter;

(c) [Reserved];

(d) [Reserved];

(e) a certificate of each Loan Party, duly executed by a Responsible Officer, certifying and attaching (i) the Operating Documents, (ii) resolutions duly approved by the Board, (iii) any resolutions, consent or waiver duly approved by the requisite holders of each Loan Party's Equity Interests, if applicable, and (iv) a schedule of incumbency;

(f) the Perfection Certificate of Borrower Representative, together with the duly executed signature thereto;

(g) evidence satisfactory to Administrative Agent, that the insurance policies and endorsements required by Section 6.5 are in full force and effect;

(h) a legal opinion of counsel to the Loan Parties;

(i) the original stock certificates representing any Shares, if any, together with a stock power or other appropriate instrument of transfer, duly executed by the holder of record of such Shares and in blank; and

(j) payment of the fees in accordance with the Fee Letter and Lender Expenses then due as specified in Section 2.4(a) and subject to Section 2.4(c).

3.2 Conditions Precedent to all Loans. Each Lender's obligations to make each Loan is subject to the following conditions precedent:

(a) except for the Term Loan made on the Closing Date, timely receipt of an executed Loan Request by Administrative Agent;

(b) the representations and warranties in this Agreement and the other Loan Documents shall be true and correct in all material respects on the date of the Loan Request and on the Funding Date of each Loan; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall have been true and correct in all material respects as of such date;

(c) no Default or Event of Default shall have occurred and be continuing or result from the Loan; and

(d) There has not been any event or circumstance that has had or could reasonably be expected to have a Material Adverse Effect, or any material adverse deviation by Borrowers from the most recent business and financing plan of Borrowers presented to and accepted by Administrative Agent, as determined by Administrative Agent in Administrative Agent's sole discretion.

3.3 Covenant to Deliver.

(a) Loan Parties agree to deliver each item required to be delivered under this Agreement as a condition precedent to any Loan. Loan Parties expressly agree that a Loan made prior to the receipt of any such item shall not constitute a waiver by Administrative Agent of a Borrower's obligation to deliver such item, and the making of any Loan in the absence of a required item shall be in Administrative Agent's sole discretion.

(b) Loan Parties agree to deliver the items set forth on Schedule 2 hereto within the timeframe set forth therein (or by such other date as Administrative Agent may approve in writing, including by email), in each case, in form and substance reasonably acceptable to Administrative Agent.

3.4 Procedures for Borrowing. To obtain a Loan (other than the Loan to be advanced on the Closing Date), Borrower Representative shall deliver a completed Loan Request to Administrative Agent (which may be delivered by email) no later than 3:00 p.m. Eastern Time, ten (10) Business Days prior to the date such Loan is requested to be made. On the Funding Date, each applicable Lender shall fund the applicable Loan in the manner requested by the Loan Request, provided that each of the conditions precedent to such Loan is satisfied.

4. CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Each Loan Party hereby grants to Collateral Trustee, for the ratable benefit of the Secured Parties, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Collateral Trustee, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof. If this Agreement is terminated, Collateral Trustee's Lien in the Collateral shall continue until the Obligations (other than contingent indemnification obligations as to which no claim has been asserted or is known to exist and any other obligations which, by their terms, are to survive the termination of this Agreement) are repaid in full in cash. Upon payment in full in cash of the Obligations (other than contingent indemnification obligations as to which no claim has been asserted or is known to exist and any other obligations which, by their terms, are to survive the termination of this Agreement) and at such time as the Lenders' obligation to make Loans has terminated, Collateral Trustee shall, upon receipt of written confirmation from Administrative Agent that such conditions have been met (such confirmation shall be sent immediately upon Administrative Agent's receipt of such payoff funds) and at the sole cost and expense of Borrower, release its Liens in the Collateral and all rights therein shall revert to the applicable Loan Party.

4.2 Priority of Security Interest. Each Loan Party represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral (subject only to Permitted Liens). If a Loan Party shall acquire a commercial tort claim with a value in excess of $500,000, such Loan Party shall promptly notify Administrative Agent in writing and deliver such other information and documents as Administrative Agent may reasonably require to take any further action necessary or advisable to perfect Collateral Trustee's Lien in such commercial tort claim. If a Loan Party shall acquire any instrument with a value in excess of $500,000, such Loan Party shall promptly notify Administrative Agent and, at Administrative Agent's request, deliver the same in original to the Collateral Trustee together with a stock power or other appropriate instrument of transfer and any necessary endorsement, all in form reasonably satisfactory to Administrative Agent.

4.3 Authorization to File Financing Statements. Each Loan Party hereby authorizes Collateral Trustee or its designee (or the Administrative Agent, on behalf of the Collateral Trustee) to file at any time financing statements, continuation statements and amendments thereto with all appropriate jurisdictions to perfect or protect Collateral Trustee's interest or rights hereunder.

4.4 Pledge of Collateral. Each Loan Party hereby pledges, collaterally assigns and grants to Collateral Trustee a security interest in the Shares (other than any Excluded Assets), together with all proceeds and substitutions thereof, all cash, stock and other moneys and property paid thereon, all rights to subscribe for securities declared or granted in connection therewith, and all other cash and noncash proceeds of the foregoing, as security for the performance of the Obligations. On the Closing Date, or to the extent any Shares pledged hereunder from time to time are or become certificated, concurrently with the delivery of the next Compliance Certificate required to be delivered pursuant to Section 6.2(c) after such Shares are acquired or certificated, such certificates shall be delivered to Collateral Trustee, accompanied by a stock power or other appropriate instrument of assignment duly executed in blank. To the extent required by the terms and conditions governing the Equity Interests in which a Loan Party has an interest, such Loan Party shall cause the books of each Person whose Equity Interests are part of the Collateral and any transfer agent to reflect the pledge of the Equity Interests. Upon the occurrence and during the continuation of an Event of Default hereunder, Collateral Trustee may effect the transfer of any securities included in the Collateral (including but not limited to the Equity Interests) into the name of Collateral Trustee and cause new certificates representing such securities to be issued in the name of Collateral Trustee or its transferee. Each Loan Party will execute and deliver such documents, and take or cause to be taken such actions, as Administrative Agent may reasonably request to perfect or continue the perfection of Collateral Trustee's security interest in the Equity Interests. Each Loan Party shall (i) be entitled to exercise any voting rights with respect to the Equity Interests in which it has an interest and to give consents, waivers and ratifications in respect thereof and (ii) may pay any dividends or make any distribution or payment or redeem, retire or purchase any Equity Interests not otherwise prohibited by the terms of this Agreement, in each case, unless following an Event of Default, Collateral Trustee shall have given notice to Borrower Representative suspending such rights; provided that, no such notice shall be required if a Loan Party has commenced an Insolvency Proceeding and, in any event, no vote shall be cast or consent, waiver or ratification given or action taken which would be inconsistent with any of the terms of this Agreement or which would constitute or create any violation of any of such terms. All such rights to vote and give consents, waivers and ratifications shall terminate upon the occurrence and during the continuation of an Event of Default and the notification by Collateral Trustee (acting at the direction of Administrative Agent) to Borrower Representative of the exercise of remedies in accordance with the terms hereof.

5. REPRESENTATIONS AND WARRANTIES

Each Loan Party represents and warrants as follows:

5.1 Due Organization, Authorization; Power and Authority.

(a) Each Loan Party and each of its Subsidiaries is duly existing and in good standing as a Registered Organization in its respective jurisdiction of formation and is qualified and licensed to do business and is in good standing in any other jurisdiction in which the conduct of its respective business or ownership of property requires that it be qualified except where the failure to do so could not reasonably be expected to have a Material Adverse Effect. In connection with this Agreement, Borrower Representative has delivered to Administrative Agent a completed certificate signed by a Responsible Officer of Borrower Representative entitled "**Perfection Certificate**". Except to the extent Borrower Representative has provided notice of a legal name change in accordance with Section

7.2, (i) each Loan Party's exact legal name is that indicated on the Perfection Certificate and on the signature page hereof; (ii) each Loan Party is an organization of the type and is organized in the jurisdiction set forth in the Perfection Certificate; (iii) the Perfection Certificate accurately sets forth each Loan Party's organizational identification number or accurately states that such Loan Party has none; (iv) the Perfection Certificate accurately sets forth each Loan Party's place of business, or, if more than one, its chief executive office as well as such Loan Party's mailing address (if different than its chief executive office); (v) except as set forth in the Perfection Certificate, each Loan Party has not, in the past five (5) years, changed its jurisdiction of formation, organizational structure or type, or any organizational number assigned by its jurisdiction; and (vi) all other information set forth on the Perfection Certificate pertaining to each Loan Party and each of its Subsidiaries is accurate and complete in all material respects (it being understood and agreed that (i) each Loan Party may from time to time update certain information in the Perfection Certificate after the Closing Date to the extent permitted by one or more specific provisions in this Agreement, (ii) any such information reported by Borrower Representative on the Compliance Certificate from time to time shall be deemed to update such information on the Perfection Certificate after the Closing Date and (iii) no Loan Party shall be in breach of this Agreement for any changes that are reported on the next Compliance Certificate following such change to the extent such updates are resulting from actions, transactions, circumstances or events not prohibited by the terms of this Agreement or any other Loan Document; such updated Perfection Certificates subject to the review and approval of Administrative Agent unless such facts, events or circumstances being updated first arose or occurred after the Closing Date and do not constitute a breach, default, or Event of Default under this Agreement or any other Loan Document. If any Loan Party is not now a Registered Organization but later becomes one, Borrower shall notify Administrative Agent of such occurrence and provide Administrative Agent with such Person's organizational identification number within ten (10) Business Days of receiving such organizational identification number).

(b) The execution, delivery and performance by each Loan Party of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with such Loan Party's Operating Documents or other organizational documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law, (iii) contravene, conflict or violate any material applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which such Loan Party or any of its Subsidiaries or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except for filings with the Securities and Exchange Commission which do not require any consent by any Governmental Authority, such Governmental Approvals which have already been obtained and are in full force and effect or are being obtained pursuant to Section 6.1, or filings required to perfect the security interest granted herein), or (v) conflict with, contravene, constitute a default or breach under, or result in or permit the termination or acceleration of, any material agreement by which such Loan Party is bound. No Loan Party is in default under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to have a Material Adverse Effect.

5.2 Collateral.

(a) Each Loan Party has good title to, rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien hereunder, free and clear of any and all Liens except Permitted Liens.

(b) Except for the Collateral Accounts described in the Perfection Certificate or in a notice timely delivered pursuant to Section 6.6, no Loan Party has any Collateral Accounts at or with any bank, broker or other financial institution, and each Loan Party has taken such actions as are necessary to give Collateral Trustee a perfected security interest therein as required pursuant to the terms of Section 6.6(b). The Accounts are bona fide, existing obligations of the Account Debtors.

(c) The Collateral is located only at the locations identified in the Perfection Certificate and other Permitted Locations. The Collateral is not in the possession of any third party bailee (such as a warehouse) except as otherwise provided in the Perfection Certificate, in an Excluded Location or as disclosed in writing pursuant to Section 6.11.

(d) Each Loan Party is the sole owner of the Intellectual Property which it owns or purports to solely own except for (i) licenses constituting "Permitted Transfers", (ii) open-source software, (iii) over-the-counter software that is commercially available to the public, (iv) material Intellectual Property licensed to such Loan Party and noted on the Perfection Certificate or as disclosed pursuant to Section 6.7(b), (v) immaterial Intellectual Property

licensed to such Loan Party and (vi) Intellectual Property that could not reasonably be expected to have a Material Adverse Effect. Each Patent (other than patent applications) which such Loan Party solely owns or purports to solely own and which is material to such Loan Party's business, to their knowledge, is valid and enforceable, and no part of the Intellectual Property which such Loan Party solely owns or purports to solely own and which is material to such Loan Parties' business has been judged invalid or unenforceable, in whole or in part except, in each case, as could not reasonably be expected to have a Material Adverse Effect. To each Loan Party's knowledge, no claim has been made in writing that any part of the Intellectual Property violates the rights of any third party except to the extent such claim could not reasonably be expected to have a Material Adverse Effect. Except as noted on the Perfection Certificate or as disclosed pursuant to Section 6.7(b), no Loan Party is a party to, nor is it bound by, any Restricted License. No Subsidiary which is not a Loan Party owns any material Intellectual Property. It will not be necessary to use any inventions of any of such Loan Party's employees or consultants (or Persons it currently intends to hire) made prior to their employment by such Loan Party which, if not owned by such Loan Party or their respective Subsidiaries would reasonably be expected to have a Material Adverse Effect. Each current and prior employee, consultant or other Affiliate thereof has entered into an invention assignment agreement or similar agreement with each applicable Loan Party with respect to all intellectual property rights that he or she owns that are related to such Loan Party's business and arose out of the scope of his or her employment or consulting arrangement with such Loan Party, which, if not owned by such Loan Party or their respective Subsidiaries would reasonably be expected to have a Material Adverse Effect.

5.3 Accounts; Material Agreements. The Accounts are bona fide existing obligations. The material licenses and agreements to which any Loan Party or any of its Subsidiaries is a party is in good standing and in full force and effect and no Loan Party is in breach with respect thereto except as could not reasonably be expected to have a Material Adverse Effect.

5.4 Litigation and Proceedings. Except as set forth in the Perfection Certificate or as disclosed in writing pursuant to Section 6.2, there are no actions, suits, litigations or proceedings, at law or in equity, pending, or, to the knowledge of any Responsible Officer, threatened in writing, by or against any Loan Party or any of its Subsidiaries, officers or directors (a) involving more than, individually or in the aggregate for all related proceedings, $500,000 or (b) in which any adverse decision has had or could reasonably be expected to have any Material Adverse Effect.

5.5 Financial Statements; Financial Condition. All consolidated and consolidating, if applicable, financial statements for the Borrowers and each of their Subsidiaries delivered to Administrative Agent fairly present in all material respects the consolidated and consolidating, if applicable, financial condition and results of operations of the Borrowers (except for the absence of footnotes, and subject to normal year-end adjustments) of the Borrowers and each of their Subsidiaries as of the respective dates and for the respective periods then ended, and there are no material liabilities (including any contingent liabilities) which are not reflected in such financial statements, which would be required to be reflected therein pursuant to GAAP. There has not been any material deterioration in the consolidated and consolidating financial condition of the Loan Parties and their Subsidiaries, on a consolidated basis, or the Collateral since the date of the most recent financial statements submitted to Administrative Agent.

5.6 Solvency. The fair salable value of the assets (including goodwill minus disposition costs) of the Loan Parties and each of their Subsidiaries, on a consolidated basis, exceeds the fair value of liabilities of the Loan Parties and each of their Subsidiaries, on a consolidated basis; no Loan Party is left with unreasonably small capital after the transactions in this Agreement; and each Loan Party is able to pay its debts (including trade debts) as they mature.

5.7 Consents; Approvals. Each Loan Party has obtained all third party consents, approvals, waivers, made all declarations or filings with, given all notices to, and obtained all consents, licenses, permits or other approvals from all Governmental Authorities that are necessary (i) to enter into the Loan Documents to which it is a party and consummate the transactions contemplated thereby, and (ii) to continue their respective businesses as currently conducted, except, in each case, where failure to do so could not reasonably be expected to result in a Material Adverse Effect.

5.8 Subsidiaries; Investments. No Loan Party has any Subsidiaries, except as noted on the Perfection Certificate or as disclosed to Administrative Agent pursuant to Section 6.10 below. No Loan Party owns any stock, partnership, or other ownership interest or other Equity Interests except for Permitted Investments.

5.9 Tax Returns and Payments. Each Loan Party and each of its Subsidiaries have timely filed all required foreign, federal, state and local tax returns (or appropriate extensions therefor), except tax returns as to which a failure to file would not reasonably be expected to result in taxes or penalties in excess of Twenty-Five Thousand Dollars ($25,000), and such Loan Party and each of its Subsidiaries has timely paid all foreign, federal, state and local Taxes owed by such Loan Party or such Subsidiary, as applicable, except (a) to the extent such Taxes are being contested in good faith by appropriate proceedings promptly instituted and diligently conducted, so long as such reserve or other appropriate provision, if any, as shall be required in conformity with GAAP shall have been made therefor, or (b) if such Taxes do not, individually or in the aggregate, exceed Twenty-Five Thousand Dollars ($25,000) except to the extent that such Taxes are being contested in accordance with the immediately preceding sentence,. No Loan Party is aware of any claims or adjustments proposed for any prior tax years of such Loan Party or any of its Subsidiaries which could result in a material amount of additional taxes becoming due and payable by such Loan Party or Subsidiary.

5.10 Shares. Such Loan Party has full power and authority to create a first lien on the Shares and no contractual obligation exists that would prohibit such Loan Party from pledging the Shares pursuant to this Agreement. There are no subscriptions, warrants, rights of first refusal or other restrictions on transfer relative to, or options exercisable with respect to the Shares. As of the date hereof, the Shares have been and will be duly authorized and validly issued, and are fully paid and non-assessable. The Shares are not the subject of any present or threatened (in writing) suit, action, arbitration, administrative or other proceeding, and such Loan Party knows of no reasonable grounds for the institution of any such proceedings.

5.11 Compliance with Laws.

(a) No Loan Party or Subsidiary of a Loan Party is an "investment company" or an "affiliated person" of, or "promoter" or "principal underwriter" for, an "investment company", as such terms are defined in the Investment Company Act of 1940 as amended.

(b) No Loan Party or Subsidiary of a Loan Party is engaged, nor will it engage, principally or as one of its important activities, in the business of extending credit for the purpose of "purchasing" or "carrying" any "margin security" as such terms are defined in Regulation U of the Federal Reserve Board as now and from time to time hereafter in effect (such securities being referred to herein as "**Margin Stock**"). None of the proceeds of the Loans or other extensions of credit under this Agreement have been (or will be) used, directly or indirectly, for the purpose of purchasing or carrying any Margin Stock, for the purpose of reducing or retiring any Indebtedness which was originally incurred to purchase or carry any Margin Stock or for any other purpose which might cause any of the Loans or other extensions of credit under this Agreement to be considered a "purpose credit" within the meaning of Regulation T, U or X of the Federal Reserve Board.

(c) No Loan Party has taken or permitted to be taken any action which might cause any Loan Document to which it is a party to violate any regulation of the Federal Reserve Board. Neither the making of the Loans hereunder nor Borrowers' use of the proceeds thereof will violate the Trading with the Enemy Act, as amended, or any of the foreign assets control regulations of the United States Treasury Department (31 CFR, Subtitle B, Chapter V, as amended) or any enabling legislation or executive order relating thereto. No Loan Party, nor any of its Subsidiaries, nor any Affiliate of any Loan Party or of any Subsidiary, nor any present holder of Equity Interests of any of the foregoing (i) is a Person described or designated in the Specially Designated Nationals and Blocked Persons List of the Office of Foreign Assets Control of the United States Department of Treasury ("**OFAC**") or in Section 1 of the Anti-Terrorism Order or similar sanctions laws of any other Governmental Authority including of any other applicable jurisdiction, (ii) is a citizen or resident of any country or territory that is subject to embargo or trade sanctions enforced by OFAC, (iii) is, or will become, a Person whose property or interest in property is blocked or subject to blocking pursuant to Section 1 of the Anti-Terrorism Order, or (iv) engages in any dealings or transactions, or is otherwise associated, with any such Person.

(d) Each Loan Party and its Subsidiaries are in compliance, in all material respects, with the USA Patriot Act. No part of the proceeds from the Loans made hereunder has been (or will be) used, directly or indirectly, for any payments to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended.

(e) Except as could not reasonably be expected to have a Material Adverse Effect, no Reportable Event or Prohibited Transaction, as defined in ERISA has occurred or is reasonably expected to occur, and no Loan Party has failed to meet the minimum funding requirements of ERISA. No Loan Party has violated any applicable environmental laws in any material respect, maintains any properties or assets which have been designated in any manner pursuant to any environmental protection statute as a hazardous materials disposal site, or has received any notice, summons, citation or directive from the Environmental Protection Agency or any other similar Governmental Authority.

5.12 Products. A complete and accurate list of the Products material to the Loan Party's business is set forth on the Perfection Certificate, as updated from time to time pursuant to the Compliance Certificate. Except as could not reasonably be expected to have a Material Adverse Effect, the Loan Parties and each of its Subsidiaries hold all required Governmental Approvals, a list of which is set forth on the Perfection Certificate, and all Governmental Approvals are in full force and effect. Except as could not reasonably be expected to have a Material Adverse Effect, there are no proceedings in progress, pending or, to such Loan Party's knowledge, threatened, that may result in revocation, cancellation, suspension, rescission or any material adverse modification of any Governmental Approval nor, to the Loan Party's knowledge, are there any facts upon which proceedings could reasonably be based. Without limitation of the foregoing:

(a) Except as could not reasonably be expected to have a Material Adverse Effect, with respect to any Product being tested or manufactured, each Loan Party and each of its Subsidiary has received, and such Product is the subject of, all Governmental Approvals needed in connection with the testing or manufacture of such Product as such testing is currently being conducted by or on behalf of a Loan Party or any of its Subsidiaries, and neither any Loan Party nor any of its Subsidiaries has received any written notice from any applicable Governmental Authority, that such Governmental Authority is conducting an investigation or review of (i) any Loan Party's or any of its Subsidiary's manufacturing facilities and processes for such Product which have disclosed any material deficiencies or violations of any Requirement of Law or the Governmental Approvals related to the manufacture of such Product, or (ii) any such Governmental Approval or that any such Governmental Approval has been revoked or withdrawn, nor has any such Governmental Authority issued any order or recommendation stating that the development, testing and/or manufacturing of such Product should cease.

(b) Except as could not reasonably be expected to have a Material Adverse Effect, with respect to any Product marketed or sold by a Loan Party or any of its Subsidiaries, such Loan Party or such Subsidiary, as applicable, has received, and such Product is the subject of, all Governmental Approvals needed in connection with the marketing and sales of such Product as currently being marketed or sold, and no Loan Party nor any of its Subsidiary has received any written notice from any applicable Governmental Authority, that such Governmental Authority is conducting an investigation or review of any such Governmental Approval or approval or that any such Governmental Approval has been revoked or withdrawn, nor has any such Governmental Authority issued any order or recommendation stating that such marketing or sales of such Product cease or that such Product be withdrawn from the marketplace;

(c) Except as disclosed in writing to Administrative Agent by Borrower Representative, there have been no adverse clinical test results in connection with a Product which have or would reasonably be expected to have a Material Adverse Effect; and

(d) Except as could not reasonably be expected to have a Material Adverse Effect, there have been no Product recalls or voluntary Product withdrawals from any market.

5.13 Royalty and Milestone Payments. As of the Closing Date, except as set forth on Schedule 4 hereto, no Loan Party is obligated to make Royalty and Milestone Payments in excess of $500,000 in the aggregate per fiscal year.

5.14 Full Disclosure. No written representation, warranty or other statement of a Loan Party or any of its Subsidiaries in any certificate or written statement by or on behalf of a Loan Party or any of its Subsidiaries in connection with this Agreement, as of the date such written representation, warranty, or other statement was made, taken together with all such written certificates and written statements given, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or written

statements not materially misleading in any material respect in light of the circumstances under which they were made (it being recognized that the projections and forecasts provided by any Loan Party in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results and such differences may be material).

6. AFFIRMATIVE COVENANTS

Each Borrower shall, and shall cause each other Loan Party to, do all of the following:

6.1 Government Compliance. Except as otherwise provided in 7.3, maintain its and all its Subsidiaries' legal existence and good standing in their respective jurisdictions of formation and maintain qualification in each jurisdiction in which the failure to so qualify would reasonably be expected to have a Material Adverse Effect; comply, and cause each Subsidiary to comply, with all laws, ordinances and regulations to which it is subject except where a failure to do so could not reasonably be expected to have a Material Adverse Effect; obtain all of the Governmental Approvals required in connection with such Loan Party's business and for the performance by each Loan Party of its obligations under the Loan Documents to which it is a party and the grant of a security interest in accordance therewith, and comply with all terms and conditions with respect to such Governmental Approvals, in each case, except where failure do so could not be expected to have a Material Adverse Effect.

6.2 Financial Statements, Reports, Certificates. Provide Administrative Agent with the following:

(a) Monthly Financial Statements. Within thirty (30) days after the last day of each month, a company prepared consolidated and consolidating (if applicable) balance sheet, income statement and statement of cash flows covering the Borrowers and each of their Subsidiaries' operations for such month, in form reasonably acceptable to Administrative Agent, certified by a Responsible Officer as having been prepared in accordance with GAAP, consistently applied, except for the absence of footnotes, and subject to normal quarter-end and year-end adjustments.

(b) Quarterly Financial Statements. Within forty-five (45) days after the last day of each fiscal quarter, a company prepared consolidated and consolidating (if applicable) balance sheet, income statement and statement of cash flows covering the Borrowers and each of their Subsidiaries' operations for such fiscal quarter, in form acceptable to Administrative Agent, certified by a Responsible Officer as having been prepared in accordance with GAAP, consistently applied, except for the absence of footnotes, and subject to normal quarter-end and year-end adjustments.

(c) Compliance Certificates. Together with the monthly financial statements required to be delivered pursuant to Section 6.2(a), a duly completed Compliance Certificate signed by a Responsible Officer.

(d) Annual Operating Budget and Financial Projections. Within sixty (60) days after the end of each fiscal year of Borrower Representative, the annual operating budget that has been approved by and presented to the Borrower Representative's Board, on a consolidated basis (including income statements, balance sheets and cash flow statements, by quarter) for such fiscal year of Borrower Representative, together with any related business forecasts used in the preparation thereof to the extent provided to the Borrower Representative's Board; and any material modification thereof within five (5) days of such modification being approved by and presented to the Borrower Representative's Board.

(e) Annual Audited Financial Statements. As soon as available, but no later than ninety (90) days after the last day of Borrower Representative's fiscal year, audited consolidated financial statements prepared in accordance with GAAP, consistently applied, together with an unqualified opinion on the financial statements from an independent certified public accounting firm reasonably acceptable to Administrative Agent (it being understood that Ernst & Young LLP and any other "Big Four" accounting firm is acceptable to Administrative Agent), together with any management letter with respect thereto; provided that the inclusion of explanatory language casting doubt on the ability of Borrower Representative and its Subsidiaries to continue as a going concern due to the need to raise additional financing or refinance Indebtedness shall not constitute such financial statements to be considered "qualified" for purposes of this clause (e).

(f) Other Statements. Within five (5) Business Days of delivery, copies of all material statements, reports and notices generally made available to all Borrower Representative's stockholders or to any holders of Subordinated Debt.

(g) SEC Filings. Within five (5) Business Days of filing, copies of all periodic and other reports, proxy statements and other materials filed by Borrower Representative with the Securities and Exchange Commission (other than filings in connection with beneficial ownership changes), provided that such filings shall be deemed to have been delivered on the date on which Borrower Representative posts such documents on Borrower Representative's website, subject to notification of the filing on the then-next Compliance Certificate.

(h) Legal Action Notice. A prompt report of any legal actions pending or threatened in writing against any Loan Party or any of its Subsidiaries that could result in damages or costs to any Loan Party or any of its Subsidiaries, individually or in the aggregate for all related proceedings, of $500,000 or more, or of any Loan Party or any of its Subsidiaries taking or threatening legal action against any third person with respect to a material claim, and with respect to any pending action or threatened action, a prompt report of any material development with respect thereto.

(i) Board Materials. Within five (5) Business Days of delivery to the members of Borrower Representative's Board or any committee or subcommittee thereof, copies of all non-executive session materials that Borrower Representative provides to its Board or such committee or subcommittee in connection with meetings thereof, including any reports with respect to Loan Parties' operations or performance, and promptly after minutes of a meeting are approved by the Borrower Representative's Board, minutes of such meetings; provided, however, the foregoing (i) shall exclude any communications between Borrower Representative and its Board that are not provided in connection with any regularly-scheduled or special meeting of the Borrower Representative's Board or committee and (ii) shall be subject to such exclusions and redactions as necessary or appropriate (A) in order to preserve the confidentiality of highly sensitive proprietary or personal information, (B) in order to prevent impairment of the attorney client privilege with respect to pending or threatened litigation, or (C) in the event of an actual or potential conflict of interest between any Loan Party and a Secured Party.

(j) Intellectual Property Report. Together with the Compliance Certificate delivered at the end of each calendar quarter, a report in form reasonably acceptable to Administrative Agent, listing any applications or registrations that any Loan Party or any of its Subsidiaries has made or filed in respect of any Patents, Copyrights or Trademarks since the last list was provided.

(k) Aging Reports; Other Reports and Information. Together with the monthly financial reports, reports as to the following, in form reasonably acceptable to Administrative Agent: accounts receivable and accounts payable aging and any other information related to the financial or business condition of any Loan Party as and when reasonably requested by Administrative Agent.

(l) Bank Account Statements. Together with the monthly financial statements delivered in accordance with subsection (a) above, a copy of the most recent account statement, with transaction detail, for each Deposit Account or Securities Account of a Loan Party or any of its Subsidiaries, or within three (3) days, upon Administrative Agent's request, evidence satisfactory to Administrative Agent of the balance maintained in any such Deposit Account or Securities Account.

(m) Product Related. Within three (3) Business Days of receipt, copies of all material correspondence, reports, documents and other filings with any Governmental Authority that would reasonably be expected to have a material adverse effect on any Governmental Approvals required for the manufacturing, marketing, testing or sale of Products or which would have a Material Adverse Effect.

(n) Royalty and Milestone Payments. Together with each Compliance Certificate, an updated schedule of reasonably expected Royalty and Milestone Payments, in substantially the same form as Schedule 4 hereto, to the extent any material change thereto.

Notwithstanding the foregoing, documents required to be delivered pursuant to this Section 6.2 may be delivered electronically and shall be deemed to have been delivered on the date on which such documents are filed

electronically through EDGAR and available on the Internet at www.sec.gov and a link thereto is provided to Administrative Agent, including by email. In lieu of delivering consolidating financial statements, Borrower Representative may deliver reports setting forth cash balance, revenue and such other information as Administrative Agent may reasonably request, for each non-Loan Party Subsidiary, provided that with respect to each such Subsidiary, revenue reports may be delivered quarterly until such date as such Subsidiary has material revenue (other than revenue arising from intercompany transactions).

6.3 Inventory; Returns. Keep all Inventory (other than Pre-Clinical and Clinical Trial Supplies which consist of Inventory) in good and marketable condition, free from material defects. Returns and allowances between a Loan Party and its Account Debtors shall follow such Loan Party's customary practices as they exist at the Closing Date. Borrower Representative shall promptly notify Administrative Agent of all returns, recoveries, disputes and claims that involve more than $500,000.

6.4 Taxes; Pensions. Timely file, and cause each of its Subsidiaries to timely file, all required federal, states and local tax returns (or file appropriate extensions therefor), except for state and local tax returns as to which a failure to file would not reasonably be expected to result in past due taxes or penalties in excess of Twenty-Five Thousand Dollars ($25,000), and timely pay, and require each of its Subsidiaries to timely pay, all foreign, federal, state and local Taxes owed by such Loan Party and each of its Subsidiaries, except for (i) deferred payment of any taxes contested pursuant to the terms of Section 5.9, and shall deliver to Administrative Agent, on reasonable demand, appropriate certificates attesting to such payments and (ii) any failure to timely pay or file Taxes in an amount, individually or in the aggregate, not exceeding Twenty-Five Thousand Dollars ($25,000), and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms.

6.5 Insurance.

(a) Keep, and cause each Subsidiary to keep, its business and the Collateral insured for risks and in amounts standard for companies in the Loan Parties' industry and location. Insurance policies shall be with financially sound and reputable insurance companies that are not Affiliates of any Loan Party.

(b) Ensure that proceeds payable under any property policy with respect to Collateral are, at Administrative Agent's option, payable to Collateral Trustee, for the ratable benefit of Lenders, on account of the Obligations. To that end, all property policies shall have a lender's loss payable endorsement showing Collateral Trustee as lender loss payable, all liability policies shall show, or have endorsements showing, Collateral Trustee as an additional insured, in each case, in form satisfactory to Administrative Agent and as set forth on Exhibit E.

(c) Notwithstanding the foregoing, (i) so long as the casualty event would not reasonably be expected to result in a Material Adverse Effect and no Event of Default has occurred and is continuing, the Loan Parties shall have the option of applying the net cash proceeds of any casualty policy up to $500,000, in the aggregate per fiscal year, toward the prompt replacement or repair of destroyed or damaged property or other assets useful to the business; provided that any such new, replaced or repaired property (A) shall be of better, equal or like value as the replaced or repaired Collateral and (B) shall be deemed Collateral in which Collateral Trustee has been granted a first priority security interest and (C) such proceeds shall be applied within 270 days following the receipt thereof and (ii) if the conditions set forth in clause (i) are not met, all such net cash proceeds shall, at the option of Administrative Agent, be payable to Collateral Trustee, for the ratable benefit of Lenders, on account of the Obligations; provided that it is understood and agreed that notwithstanding anything to the contrary contained herein or in any other Loan Document, in no event shall any prepayment premium or similar penalty apply to any prepayment required in accordance with the foregoing.

(d) At Administrative Agent's request, Borrower Representative shall deliver certified copies of insurance policies and evidence of all premium payments. The Borrower will cause each provider of any such insurance required under this Section 6.5 to agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to Collateral Trustee, that it will give Collateral Trustee thirty (30) days prior written notice before any such policy or policies shall be canceled (or ten (10) days' notice for cancellation for non-payment of premiums), or such other endorsement as Administrative Agent may reasonably approve.

(e) If any Loan Party fails to obtain insurance as required under this Section 6.5 or to pay any amount or furnish any required proof of payment upon Administrative Agent's request, and to the extent practicable, in consultation with the Borrowers, Collateral Trustee may make all or part of such payment or obtain such insurance policies required in this Section 6.5, and take any action under the policies as Administrative Agent deems prudent or may direct.

6.6 Deposit and Securities Accounts.

(a) Maintain Collateral Accounts only at the banks and other financial institutions identified in the Perfection Certificate or as disclosed pursuant to a notice timely delivered pursuant to subsection (b) below. Borrowers shall further maintain an ACH payment structure in favor of Administrative Agent, reasonably satisfactory to Administrative Agent.

(b) Provide Administrative Agent written notice in connection with the delivery of the next Compliance Certificate required to be delivered pursuant to Section 6.2(c) of the establishment of any Collateral Account at or with any bank, broker or other financial institution. Such notice shall identify the name, the address of each bank or other institution, the name in which the account is held, a description of the purpose of the account, and the complete account number therefor. For each Collateral Account (other than an Excluded Account) that any Loan Party at any time maintains, Loan Parties shall cause the applicable bank, broker or financial institution at or with which any Collateral Account is maintained to execute and deliver an Account Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect Collateral Trustee's Lien in such Collateral Account in accordance with the terms hereunder prior to depositing any material funds.

6.7 Intellectual Property.

(a) Use commercially reasonable efforts to protect, defend and maintain the validity and enforceability of its Intellectual Property material to its business; promptly (and in any event no later than concurrently with the delivery of the next Compliance Certificate required to be delivered pursuant to Section 6.2(c)) advise Administrative Agent in writing of material infringements or any other event that would reasonably be expected to materially and adversely affect the value of its Intellectual Property material to its business; not suffer any material claim of infringement that would reasonably be expected to have a Material Adverse Effect unless such claim is dismissed within thirty (30) days from initiation thereof or Borrower Representative has demonstrated to Administrative Agent's satisfaction that such proceedings are without merit and adequate reserves have been taken; and except for Permitted Transfers, not allow any Intellectual Property material to the Loan Parties' business to be abandoned, forfeited or dedicated to the public without Administrative Agent's written consent.

(b) Provide written notice to Administrative Agent at least ten (10) Business Days prior to any Loan Party entering or becoming bound by any Restricted License (other than off the shelf software and services that are commercially available to the public), and, at the request of the Administrative Agent, use commercially reasonable efforts to obtain, or cause such Loan Party to obtain, the consent of, or waiver in form satisfactory to Administrative Agent from any person whose consent or waiver is necessary for (i) any Restricted License to be deemed "Collateral" and for Collateral Trustee to have a security interest in it that might otherwise be restricted or prohibited by law or by the terms of any such Restricted License, and (ii) Collateral Trustee to have the ability in the event of a liquidation of any Collateral to dispose of such Restricted License together with other Collateral in accordance with Collateral Trustee's rights and remedies under this Agreement and the other Loan Documents.

6.8 Litigation Cooperation. From the Closing Date and continuing through the termination of this Agreement, make available to Administrative Agent, Collateral Trustee and any Lender, without expense to Administrative Agent, Collateral Trustee or such Lender, as applicable, during normal business hours and upon reasonable prior notice, each Loan Party and its officers, employees and agents and each Loan Party's books and records, subject to any applicable confidentiality obligations of Loan Parties, to the extent that Administrative Agent, Collateral Trustee or such Lender may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Administrative Agent, Collateral Trustee or such Lender with respect to any Collateral or relating to such Loan Party (excluding confidential or privileged attorney-client communications or materials that constitute confidential or privileged attorney-client communications).

6.9 Access to Collateral; Books and Records. Allow Administrative Agent, Collateral Trustee, or their respective agents, to inspect the Collateral and audit and copy such Loan Party's Books in accordance with Section 6.12. Such inspections or audits shall be conducted no more often than once every six (6) months unless an Event of Default has occurred and is continuing in which case such inspections and audits shall occur as often as Administrative Agent shall determine is necessary. The foregoing inspections and audits shall be at Borrowers' expense and the charge therefor shall represent the then-current standard charge of the Administrative Agent or Collateral Trustee, as applicable.

6.10 Joinder of Subsidiaries; MSC Subsidiary.

(a) No later than thirty (30) days (or such later period as Administrative Agent may agree in its sole and absolute discretion) after such time as a Loan Party or any of its Subsidiaries forms or acquires any direct or indirect Subsidiary after the Closing Date: (i) provide written notice to Administrative Agent together with certified copies of the Operating Documents for such Subsidiary, and (ii) except for any MSC Subsidiary or Foreign Subsidiary that is not required to be joined as a Loan Party pursuant to subsection (b) below, (A) take all such action as may be reasonably required by Administrative Agent to cause the applicable Subsidiary, to either: (x) provide a joinder to this Agreement pursuant to which such Subsidiary becomes a Loan Party hereunder, or (y) guarantee the Obligations and grant a security interest in and to the collateral of such Subsidiary (substantially as described on Exhibit B), in each case together with such Account Control Agreements and other documents, instruments and agreements reasonably requested by Administrative Agent, all in form and substance reasonably satisfactory to Administrative Agent (including being sufficient to grant Collateral Trustee a first priority Lien, subject to Permitted Liens on the assets of such Subsidiary), and (B) pledge all of the direct or beneficial Equity Interests in such Subsidiary constituting Collateral hereunder. Notwithstanding the foregoing, except as required to maintain compliance with subsection (b) below, no Foreign Subsidiary shall be required to be joined as a Loan Party in accordance with the foregoing.

(b) Borrowers shall not permit Subsidiaries which are not Loan Parties (other than the MSC Subsidiaries and the Foreign Subsidiaries), in the aggregate to maintain (i) cash and other assets with an aggregate value for all such Subsidiaries in excess of 10.0% of consolidated assets, (ii) revenue in excess of 10.0% of consolidated revenues for any twelve month period then ended, (iii) any Intellectual Property which is material to the business of Borrowers as a whole, or (iv) any contracts which are material to the business of Borrowers as a whole, without causing one or more of such Subsidiaries to enter into a joinder or guaranty in form satisfactory to Administrative Agent with respect to the Obligations as Administrative Agent may request within fifteen (15) Business Days (or such other period as Administrative Agent may agree in its sole and absolute discretion), such that compliance with clauses (i) through (iv) shall be restored.

(c) At any time that the MSC Subsidiary maintains assets, Borrowers shall cause the MSC Investment Conditions to be met.

6.11 Property Locations.

(a) Provide to Administrative Agent at least ten (10) Business Days (or such shorter period as Administrative Agent may agree in its sole and absolute discretion) prior written notice before adding any new offices or business or Collateral locations, including warehouses (unless such new offices or business or Collateral locations qualify as Excluded Locations).

(b) With respect to any Collateral located with a third party, including a bailee, datacenter or warehouse (other than Excluded Locations), Borrowers shall use commercially reasonable efforts to cause such third party to execute and deliver a Collateral Access Agreement for such location, including an acknowledgment from each of the third parties that it is holding or will hold such property, subject to Collateral Trustee's security interest.

(c) With respect to any Collateral located on leased premises (other than Excluded Locations), Borrowers shall use commercially reasonable efforts to cause such third party to execute and deliver a Collateral Access Agreement for such location.

6.12 Management Rights. Any representative of Administrative Agent shall have the right at reasonable times and intervals to meet with management and officers of Borrowers to discuss such books of account

and records. In addition, Administrative Agent shall be entitled at reasonable times and intervals to consult with and advise the management and officers of Borrowers concerning significant business issues affecting Borrowers. Such consultations shall not unreasonably interfere with any Loan Party's business operations.

6.13 Right to Invest. In connection with any Qualified Financings consummated after the Closing Date and prior to the repayment or satisfaction in full of the Loans, Borrower Representative agrees to use commercially reasonable efforts to provide Designated Holders or their respective assignees or nominees with the opportunity to invest in any such Qualified Financing if it is lawful to do so (or, if the Qualified Financing is an underwritten public offering pursuant to a registration statement under the Securities Act, to use commercially reasonable efforts to cause the underwriters for such offering to offer Designated Holders an allocation of securities in such offering), on the same terms, conditions and pricing afforded to other investors participating in such Qualified Financing; provided that the maximum aggregate investment amount by Designated Holders for all participation in Qualified Financings pursuant to this Section 6.13 shall be $5,000,000. The right to invest hereunder shall not entitle Designated Holders to any allocation in any public offering, provided that this sentence shall not negate Borrower Representative's obligation to use commercially reasonable efforts as set forth in the foregoing sentence. Borrower Representative shall provide written notice to Administrative Agent not later than the date upon which existing investors are notified of a Qualified Financing, and if a Designated Holder desires to exercise its right to participate in such Qualified Financing, Designated Holder shall cooperate to consummate its investment in such closing promptly upon receipt of documentation with respect thereto. In the event that any such notice contains confidential information, Designated Holder agrees to maintain the confidentiality of such information and not to use such information for any purposes other than to evaluate its participation in any Qualified Financing. Borrower Representative shall not take any action to avoid or seek to avoid the observance or performance of any of the obligations pursuant to this Section 6.13, but will at all times in good faith assist in the carrying out the same and take all such action as may be necessary or appropriate, but only to the extent permitted by law, to protect the rights of Designated Holders hereunder against impairment.

6.14 Further Assurances. Subject to the terms hereof and the other Loan Documents, execute any further instruments and take further action as Administrative Agent or Collateral Trustee reasonably request to perfect or continue Collateral Trustee's Lien in the Collateral or to effect the purposes of this Agreement.

7. NEGATIVE COVENANTS

No Loan Party shall, or shall cause or permit any of its Subsidiaries to, do any of the following without the prior written consent of the Required Lenders:

7.1 Dispositions. Convey, sell, lease, transfer, assign, or otherwise dispose of (collectively, "**Transfer**") all or any part of its business or property, except for Permitted Transfers.

7.2 Changes in Business, Management, Ownership, or Business Locations. (a) Engage in any business other than the businesses currently engaged in by such Person, as applicable, or reasonably related or incidental thereto; (b) cease doing business, or liquidate or dissolve except as permitted by Section 7.3; (c) fail to provide notice to Administrative Agent of any Key Person departing from or ceasing to be employed by a Loan Party within five (5) Business Days thereof; (d) permit or suffer a Change in Control; or (e) without at least ten (10) Business Days prior written notice to Administrative Agent (or such shorter period as Administrative Agent may agree in its sole and absolute discretion) (i) change its jurisdiction of organization, (ii) change its organizational structure or type, (iii) change its legal name, or (iv) change its organizational number (if any) assigned by its jurisdiction of organization.

7.3 Mergers or Acquisitions. Merge or consolidate with any other Person (except if concurrently with, and as a condition to the effectiveness of, the closing of such merger or consolidation, the Obligations (other than contingent indemnification obligations as to which no claim has been asserted or is known to exist and any other obligations which, by their terms, are to survive the termination of this Agreement) shall be repaid in full, in cash), or acquire all or substantially all of the capital stock or property of another Person or business line of another Person (including, without limitation, by the formation of any Subsidiary) or enter into any agreement to do any of the same; provided that (i) a Subsidiary may merge or consolidate into another Subsidiary or into a Loan Party that in any such merger or consolidation involving a Loan Party, such Loan Party shall be the surviving entity and (ii) a Subsidiary may liquidate or dissolve so long as all of the assets of such Subsidiary are transferred to a Borrower hereunder.

7.4 Indebtedness. Create, incur, assume, or be liable for any Indebtedness, other than Permitted Indebtedness.

7.5 Encumbrance. 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 otherwise permit any Collateral not to be subject to the first priority security interest granted herein, except in connection with Permitted Liens permitted to have priority over Collateral Trustee's Lien, or enter into any agreement, document, instrument or other arrangement (except with or in favor of Collateral Trustee) with any Person which directly or indirectly prohibits or has the effect of prohibiting any Loan Party or Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of such Loan Party's or Subsidiary's Intellectual Property, except for restrictions in the Ordinary Course of Business in connection with licenses of Intellectual Property constituting a Permitted Transfer with respect to the Intellectual Property subject to such license.

7.6 Maintenance of Collateral Accounts. Maintain any Collateral Account except pursuant to the terms of Section 6.6(b).

7.7 Distributions; Investments. (a) Pay any dividends or make any distribution or payment or redeem, retire or purchase any Equity Interests provided that (i) Borrower Representative may convert any of its convertible Equity Interests (including warrants) into other Equity Interests issued by Borrower Representative pursuant to the terms of such convertible securities or otherwise in exchange thereof, (ii) Borrower Representative may convert Subordinated Debt issued by Borrower Representative into Equity Interests issued by Borrower Representative pursuant to the terms of such Subordinated Debt and to the extent permitted under the terms of the applicable subordination or intercreditor agreement; (iii) Borrower Representative or any Subsidiary thereof may pay dividends solely in Equity Interests of Borrower Representative or such Subsidiary, as applicable; (iv) Borrower Representative may make cash payments in lieu of fractional shares; (v) any Subsidiary (directly or indirectly) may pay dividends to a Loan Party, (vi) Borrower Representative and each of its Subsidiaries may make cashless repurchases of Equity Interests in Borrower Representative or such Subsidiary deemed to occur upon exercise of stock options or warrants or similar rights if such Equity Interests represent a portion of the exercise price of such options or warrants or similar rights and (vii) Borrower Representative may repurchase the Equity Interests issued by Borrower Representative pursuant to stock repurchase agreements approved by Borrower Representative's Board so long as an Event of Default does not exist at the time of such repurchase and would not exist after giving effect to such repurchase, provided that the aggregate amount of all such repurchases does not exceed $500,000 per fiscal year; or (b) directly or indirectly make any Investment (including, without limitation, by the formation of any Subsidiary), other than Permitted Investments.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of a Loan Party, except for (a) transactions that are in the Ordinary Course of Business and on fair and reasonable terms that are no less favorable to such Person than would be obtained in an arm's length transaction with a non-affiliated Person; (b) bona fide rounds of Subordinated Debt or equity financing for capital raising purposes, (c) reasonable and customary director, officer and employee compensation and other customary benefits including retirement, health, stock option and other benefit plans and indemnification arrangements approved by Borrower Representative's Board, (d) transactions among Loan Parties, (e) transactions related to transfer pricing arrangements between and among Loan Parties and Foreign Subsidiaries in the Ordinary Course of Business and otherwise permitted hereunder; and (f) transactions permitted by Sections 7.4 (in case of items of "Permitted Indebtedness" that are expressly contemplated to be a transaction with an Affiliate) and 7.7.

7.9 Subordinated Debt; Payments of Royalty and Milestone Payments. (a) Make or permit any payment on any Subordinated Debt, except as permitted pursuant to the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject, (b) amend any provision in any document relating to the Subordinated Debt which would increase the amount thereof, provide for earlier or greater principal, interest, or other payments thereon, or adversely affect the subordination thereof to the Obligations, (c) make or permit payment in respect of any Royalty and Milestone Payments in excess of $500,000 per fiscal year except in accordance with Schedule 4, as the same may be updated from time to time, subject to Administrative Agent's reasonable review and approval, and (d) amend or modify any agreement giving rise to Royalty and Milestone Payments if as a result thereof, such payments would be increased or the due date thereof would be accelerated.

7.10 **Compliance**. Become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940, as amended, 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; take any action or fail to take any action (or suffer any other Person to do so), to the extent the same would cause the representations set forth in Section 5.11(c) to be untrue; fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur, if such occurrence would reasonably be expected to have a Material Adverse Effect; fail to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation would reasonably be expected to have a Material Adverse Effect; withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which would reasonably be expected to result in any material liability of a Loan Party or any of its Subsidiaries, including any material liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

8. EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an "**Event of Default**") under this Agreement:

8.1 **Payment Default**. Any Loan Party fails to pay any Obligations after such Obligations are due and payable (other than as a result of Administrative Agent's failure to debit such Loan Party's account from which Administrative Agent has authorization to debit and such Loan Party has sufficient funds on deposit therein on the date due, so long as, in case of such failure, payment is made within three (3) Business Days of the earlier of Administrative Agent's written notice or the date any Loan Party becomes aware of such failure).

8.2 **Covenant Default**.

(a) A Loan Party fails or neglects to perform any obligation in Section 3.3(b), Section 4.2, Section 6.2, 6.4 or 6.6, or violates any covenant in Section 7; or

(b) A Loan Party fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents to which it is a party, and as to any default (other than those specified in this Section 8) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within twenty (20) days after the occurrence thereof.

8.3 **Material Adverse Effect**. An event or circumstance has occurred which could be expected to have a Material Adverse Effect.

8.4 **Attachment; Levy; Restraint on Business**.

(a) (i) The service of process seeking to attach, by trustee or similar process, any material funds of a Loan Party or of any of its Subsidiaries, or (ii) a notice of Lien or levy is filed against the material assets of any Loan Party or any of its Subsidiaries by any Governmental Authority, and the same under clauses (i) and (ii) hereof are not, within twenty (20) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Loans shall be made during any twenty (20) day cure period; or

(b) (i) Any material portion of the assets of a Loan Party or any of its Subsidiaries is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents a Loan Party or any of its Subsidiaries from conducting all or any material part of its business.

8.5 **Insolvency**. (a) The Loan Parties and their Subsidiaries, as a whole, are unable to pay their debts (including trade debts) as they become due or otherwise becomes insolvent, the realizable value of the Loan Parties' assets is less than the aggregate sum of its liabilities; (b) a Loan Party or any of its Subsidiaries begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against a Loan Party or any of its Subsidiaries and is not dismissed or stayed within thirty (30) days (but no Loans shall be made while any of the conditions described in this Section 8.5 exist and/or until any Insolvency Proceeding is dismissed).

8.6 Other Agreements. There is, under any agreement to which a Loan Party or any of its Subsidiaries is a party with a third party or parties, (a) any default resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount individually or in the aggregate in excess of $500,000 (except if such third party is restricted from accelerating the maturity of such Indebtedness, including pursuant to the terms of a subordination or similar agreement entered into with respect to the Obligations); or (b) any breach or default by a Loan Party or a Subsidiary of such Loan Party, the result of which would have a Material Adverse Effect; provided, however, that the Event of Default under this Section 8.6 caused by the occurrence of a breach or default under such other agreement shall be cured or waived for purposes of this Agreement upon Administrative Agent receiving written notice from the party asserting such breach or default of such cure or waiver of the breach or default under such other agreement, if at the time of such cure or waiver under such other agreement (x) Administrative Agent has not declared an Event of Default under this Agreement and/or exercised any rights with respect thereto; (y) any such cure or waiver does not result in an Event of Default under any other provision of this Agreement or any Loan Document; and (z) in connection with any such cure or waiver under such other agreement, the terms of any agreement with such third party are not modified or amended in any manner which could in the good faith business judgment of Administrative Agent be materially less advantageous to the Loan Parties.

8.7 Judgments; Penalties. One or more fines, penalties or final judgments, orders or decrees for the payment of money in an amount, individually or in the aggregate, of at least $500,000 (or, to the extent covered by third party insurance that has accepted liability (subject to customary reservation of rights) by the applicable insurance carrier, up to $2,000,000) shall be rendered against a Loan Party or any of its Subsidiaries by any Governmental Authority, and the same are not, within ten (10) days after the entry, assessment or issuance thereof, vacated, or after execution thereof, stayed or bonded pending appeal, (provided that no Loans will be made prior to the vacation, stay, or bonding of such fine, penalty, judgment, order or decree).

8.8 Misrepresentations. Any Loan Party or any Person acting for such Loan Party makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Administrative Agent, Collateral Trustee or any Lender or to induce Administrative Agent, Collateral Trustee or any Lender to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made.

8.9 Subordinated Debt. Any Subordination Agreement governing any Subordinated Debt shall for any reason be revoked or invalidated or otherwise cease to be in full force and effect (except in accordance with its terms), any party thereto shall be in breach thereof or contest in any manner the validity or enforceability thereof or deny that it has any further obligation thereunder, or the Obligations shall for any reason not have the priority contemplated by this Agreement.

8.10 Governmental Approval. Any Governmental Approval shall have been revoked, rescinded, suspended, modified in an adverse manner or not renewed for a full term, and such revocation, rescission, suspension, modification or non-renewal has, or would have, a Material Adverse Effect.

8.11 Guaranty. Any guaranty of any Obligations terminates or ceases for any reason to be in full force and effect other than pursuant to the terms thereof.

9. COLLATERAL TRUSTEE'S RIGHTS AND REMEDIES

9.1 Acceleration. Upon the occurrence and during the continuation of an Event of Default, Administrative Agent, is entitled, without notice or demand, to declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations are immediately due and payable without any action by Administrative Agent), and to stop advancing money or extending credit for any Borrower's benefit under this

Agreement (and each Lender's Commitment shall be deemed terminated as long as an Event of Default has occurred and is continuing).

9.2 Rights. Upon the occurrence and during the continuation of an Event of Default, Collateral Trustee is entitled, at the direction of Administrative Agent, subject to the terms of the Collateral Trust Agreement, without notice or demand, to do any or all of the following, to the extent not prohibited by applicable law:

(a) verify the amount of, demand payment of and performance under, and collect any Accounts and General Intangibles, settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Administrative Agent may determine is advisable, and notify any Person owing a Loan Party money of Collateral Trustee's security interest in such funds;

(b) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral;

(c) ratably apply to the Obligations any amount held by Collateral Trustee owing to or for the credit or the account of a Loan Party;

(d) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral;

(e) deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Account Control Agreement or similar agreements providing control of any Collateral;

(f) demand and receive possession of any Loan Party's Books; and

(g) exercise all rights and remedies available to Collateral Trustee under the Loan Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof).

Loan Parties shall assemble the Collateral if Collateral Trustee requests and make it available as Collateral Trustee designates. Collateral Trustee may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Each Loan Party grants Collateral Trustee a license to enter and occupy any of its premises, without charge, to exercise any of Collateral Trustee's rights or remedies. Collateral Trustee is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, a Loan Party's labels, Patents, Copyrights, mask works, rights of use of any name, trade secrets, trade names, Trademarks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Collateral Trustee's exercise of its rights under this Section, a Loan Party's rights under all licenses and all franchise agreements inure to Collateral Trustee's benefit. If, after the acceleration of the Obligations, a Loan Party receives proceeds of Collateral, such Loan Party shall deliver such proceeds to Collateral Trustee, for the benefit of the Secured Parties, to be applied to the Obligations.

9.3 Power of Attorney. Each Loan Party hereby irrevocably appoints Collateral Trustee (and any of Collateral Trustee's partners, managers, officers, agents or employees) as its lawful attorney-in-fact, with full power of substitution, exercisable upon the occurrence and during the continuation of an Event of Default, to: (a) send requests for verification of Accounts or notify Account Debtors of Collateral Trustee's security interest and Liens in the Collateral; (b) endorse such Loan Party's name on any checks or other forms of payment or security; (c) sign such Loan Party's name on any invoice or bill of lading for any Account or drafts against Account Debtors schedules and assignments of Accounts, verifications of Accounts, and notices to Account Debtors; (d) settle and adjust disputes and claims about the Accounts directly with Account Debtors, for amounts and on terms Administrative Agent or Collateral Trustee determine reasonable; (e) make, settle, and adjust all claims under such Loan Party's insurance policies; (f) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; (g) transfer the Collateral into the name of Collateral Trustee or a third party as the Code permits; and (h) dispose of the Collateral. Each Loan Party further hereby (i) appoints Collateral Trustee (and any of Collateral Trustee's partners, managers,

officers, agents or employees) as its lawful attorney-in-fact, with full power of substitution, regardless of whether or not an Event of Default has occurred or is continuing to: (A) sign such Loan Party's name on any documents and other Security Instruments necessary to perfect or continue the perfection of, or maintain the priority of, Collateral Trustee's security interest in the Collateral, and (B) take any and all such actions as Collateral Trustee may reasonably determine to be necessary or advisable for the purpose of maintaining, preserving or protecting the Collateral or any of the rights, remedies, powers or privileges of Collateral Trustee under this Agreement or the other Loan Documents, and (ii) appoints Administrative Agent (and any of Administrative Agent's partners, managers, officers, agents or employees) as its lawful attorney-in-fact, with full power of substitution, regardless of whether or not an Event of Default has occurred and is continuing, to take all such actions which such Loan Party is required, but fails to do under the covenants and provisions of the Loan Documents. The foregoing appointments of Collateral Trustee and Administrative Agent as each Loan Party's attorney in fact, and all of Collateral Trustee's rights and powers, are coupled with an interest, are irrevocable until all Obligations (other than contingent indemnification obligations as to which no claim has been asserted or is known to exist and any other obligations which, by their terms, are to survive the termination of this Agreement) have been fully repaid, in cash, and otherwise fully performed and all commitments to make Loans hereunder have been terminated.

9.4 Protective Payments. If a Loan Party fails to obtain the insurance called for by Section 6.5 or fails to pay any premium thereon or fails to pay any other amount which such Loan Party is obligated to pay under this Agreement or any other Loan Document or which may be required to preserve the Collateral, Collateral Trustee may obtain such insurance or make such payment, and all amounts so paid by Collateral Trustee are Lender Expenses and immediately due and payable, bearing interest at the then highest rate applicable to the Loans, and secured by the Collateral. Collateral Trustee will make reasonable efforts to provide Borrower Representative with notice of Collateral Trustee obtaining such insurance at the time it is obtained or within a reasonable time thereafter. No payments by Collateral Trustee are deemed an agreement to make similar payments in the future or Collateral Trustee's waiver of any Event of Default.

9.5 Application of Payments and Proceeds Upon Default. If an Event of Default has occurred and is continuing, Collateral Trustee shall have the right to apply in any order any funds in its possession, whether payments, proceeds realized as the result of any collection of Accounts or other disposition of the Collateral, or otherwise, to the Obligations, for the benefit of the Secured Parties. Collateral Trustee shall pay any surplus to Borrowers by credit to the Deposit Account designated by Borrowers or as directed by a court of competent jurisdiction. Borrowers shall remain liable to Collateral Trustee and Lenders for any deficiency. If Collateral Trustee, as directed by Administrative Agent in Administrative Agent's good faith business judgment, directly or indirectly, enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Collateral Trustee may, at the direction of Administrative Agent, either reduce the Obligations by the principal amount of the purchase price or defer the reduction of the Obligations until the actual receipt by Collateral Trustee of cash or immediately available funds therefor.

9.6 Collateral Trustee's Liability for Collateral. Collateral Trustee shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person, except to the extent that any of the foregoing have been found by a final judgment of a court of competent jurisdiction to be the result of Collateral Trustee's gross negligence or willful misconduct. Loan Parties bear all risk of loss, damage or destruction of the Collateral.

9.7 No Waiver; Remedies Cumulative. Any failure by Administrative Agent, Collateral Trustee or any Lender, at any time or times, to require strict performance by each Loan Party of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of Administrative Agent, Collateral Trustee or any Lender thereafter to demand strict performance and compliance herewith or therewith. Collateral Trustee's rights and remedies under this Agreement and the other Loan Documents are cumulative. Collateral Trustee has all rights and remedies provided under the Code, by law, or in equity. Collateral Trustee or any Lender's exercise of one right or remedy is not an election and shall not preclude Collateral Trustee or any Lender from exercising any other remedy under this Agreement or other remedy available at law or in equity, and any waiver of any Event of Default is not a continuing waiver. Any delay in exercising any remedy is not a waiver, election, or acquiescence.

9.8 **Demand Waiver**. To the fullest extent permitted by appliable law, each Loan Party waives presentment, demand, notice of default or dishonor, notice of payment and nonpayment, release, compromise, settlement, extension, or renewal of accounts, documents, instruments or chattel paper.

9.9 **Shares**. Each Loan Party recognizes that Collateral Trustee may be unable to effect a public sale of any or all the Shares, by reason of certain prohibitions contained in federal securities laws and applicable state securities laws or otherwise, and may be compelled to resort to one or more private sales thereof to a restricted group of purchasers which will be obliged to agree, among other things, to acquire such securities for their own account for investment and not with a view to the distribution or resale thereof. Each Loan Party acknowledges and agrees that any such private sale may result in prices and other terms less favorable than if such sale were a public sale and, notwithstanding such circumstances, agrees that any such private sale shall be deemed to have been made in a commercially reasonable manner. Collateral Trustee shall be under no obligation to delay a sale of any of the Shares for the period of time necessary to permit the issuer thereof to register such securities for public sale under federal securities laws or under applicable state securities laws, even if such issuer would agree to do so.

10. NOTICES

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon confirmation of receipt, when sent by electronic mail transmission; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, or email address indicated below. Administrative Agent, Collateral Trustee, Lenders and Loan Parties may change their respective mailing or electronic mail addresses by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to Loan Parties:	**INOZYME PHARMA, INC.** 321 Summer Street, Suite 400, Boston, MA 02210 Attention: Sanjay S. Subramanian; Legal Notices Email: [**]
With a copy, not constituting notice, to:	**WILMER CUTLER PICKERING HALE AND DORR LLP** 7 World Trade Center 250 Greenwich Street New York, New York 10007 Attn: Brian Johnson, Esq. Email: Brian.Johnson@wilmerhale.com
If to Collateral Trustee:	**ANKURA TRUST COMPANY, LLC** 140 Sherman Street, Fourth Floor Fairfield, CT 06824 Attention: [**] Email: [**]
With a copy, not constituting notice, to:	**ROPES & GRAY LLP** 10250 Constellation Boulevard Los Angeles, CA 90067 Attn: [**] Email: [**]
If to Administrative Agent or Lenders:	**K2 HEALTHVENTURES LLC** 855 Boylston Street, 10th Floor Boston, MA 02116 *For Loan Requests, monthly reporting, Compliance Certificates, and other regular reporting deliverables*: Attention: [**] Email: [**] *For all other notices*: Attention: [**] Email: [**]
With a copy to (but not constituting notice, and excluding Loan Requests and regular reporting):	**SIDLEY AUSTIN LLP** 1001 Page Mill Rd., Bldg. 1 Palo Alto, CA 94304 Attention: [**] Email: [**]

11. CHOICE OF LAW, VENUE AND JURY TRIAL WAIVER

Except as otherwise expressly provided in any of the Loan Documents, this Agreement and the other Loan Documents shall be governed by, and construed in accordance with, the laws of the State of New York without regard to principles of conflicts of law. Each Loan Party hereby submits to the exclusive jurisdiction of the State and Federal courts in New York County, City of New York, New York; provided, however, that nothing in this Agreement shall be deemed to operate to preclude Collateral Trustee from bringing suit or taking other legal action in any other jurisdiction to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other court order in favor of Administrative Agent, Collateral Trustee or any Lender. Each Loan Party expressly submits and consents in advance to such jurisdiction in any action or suit commenced in any such court, and each Loan Party hereby waives any objection that it may have based upon lack of personal jurisdiction, improper venue, or forum non conveniens and hereby consents to the granting of such legal or equitable relief as is deemed appropriate by such

court. Each Loan Party hereby waives personal service of the summons, complaints, and other process issued in such action or suit and agrees that service of such summons, complaints, and other process may be made by registered or certified mail addressed to such Loan Party at the address set forth in, or subsequently provided by such Loan Party in accordance with, Section 10 and that service so made shall be deemed completed upon the earlier to occur of the applicable Loan Party's actual receipt thereof or three (3) Business Days after deposit in the U.S. mails, proper postage prepaid. Each Loan Party hereby expressly waives any claim to assert that the laws of any other jurisdiction govern this Agreement.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, EACH OF THE PARTIES HERETO WAIVES ITS RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE OTHER LOAN DOCUMENTS OR ANY TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR THE PARTIES TO ENTER INTO THIS AGREEMENT. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED IN THIS AGREEMENT OR ANYWHERE ELSE, EACH LOAN PARTY AGREES THAT IT SHALL NOT SEEK FROM ADMINISTRATIVE AGENT, COLLATERAL TRUSTEE OR ANY LENDER UNDER ANY THEORY OF LIABILITY (INCLUDING ANY THEORY IN TORTS), ANY SPECIAL, INDIRECT, CONSEQUENTIAL OR PUNITIVE DAMAGES. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

This Section 11 shall survive the termination of this Agreement.

12. GENERAL PROVISIONS

12.1 Termination Prior to Term Loan Maturity Date; Survival; Release of Collateral. All covenants, representations and warranties and grants of security interests made in this Agreement continue in full force until this Agreement has terminated pursuant to its terms and all Obligations (other than contingent indemnification obligations as to which no claim has been asserted or is known to exist and any other obligations which, by their terms, are to survive the termination of this Agreement) have been satisfied in full, in cash and all commitments to extend credit pursuant to this Agreement have terminated (such date, the "**Discharge Date**"). So long as Borrowers have satisfied the Obligations (other than contingent indemnification obligations as to which no claim has been asserted or is known to exist and any other obligations which, by their terms, are to survive the termination of this Agreement), this Agreement and any remaining commitments to extend credit may be terminated prior to the Term Loan Maturity Date by Borrowers by written notice of termination to Lenders. Those obligations that are expressly specified in this Agreement as surviving this Agreement's termination shall continue to survive notwithstanding this Agreement's termination. On the Discharge Date, Administrative Agent shall direct Collateral Trustee to deliver evidence of the release of Collateral which release shall occur substantially concurrently with the Discharge Date. Collateral Trustee hereby agrees that any Liens granted to Collateral Trustee by the Loan Parties on any Collateral shall be automatically released (a) in accordance with this Section 12.1, upon the satisfaction in full, in cash, of the Obligations and termination of this Agreement (other than contingent indemnification obligations as to which no claim has been asserted or is known to exist and any other obligations which, by their terms, are to survive the termination of this Agreement), (b) if such Collateral is sold, transferred or otherwise disposed of by a Loan Party pursuant to any sale, transfer or other disposition that is made in compliance with, and subject to the terms and condition of, this Agreement, or (c) if required to effect any sale, transfer or other disposition of such Collateral in connection with any exercise of remedies by Administrative Agent or Collateral Trustee pursuant to Section 9. Any such release shall not in any manner discharge, affect, or impair the Obligations or any Liens (other than those expressly being released) upon (or obligations of Loan Parties in respect of) all interests retained by Administrative Agent, the Lenders, or Collateral Trustee in Loan Parties or any of their Subsidiaries. Upon Borrower's reasonable request and at Borrower's sole cost and expense, Administrative Agent shall execute, deliver or authorize such documents as may be reasonably required to evidence any release described above.

12.2 Successors and Assigns.

(a) Successors and Assigns Generally. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. No Loan Party may assign this Agreement or any rights or obligations under it without Lenders' prior written consent (which may be granted or withheld in each Lender's discretion). Each

Lender has the right, without the consent of or notice to Loan Parties, to sell, transfer, assign, negotiate, or grant participation in all or any part of, or any interest in, such Lender's obligations, rights, and benefits under this Agreement and the other Loan Documents. Notwithstanding the foregoing, the Administrative Agent and Lenders shall not assign any interest in the Loan Documents to an entity which is a direct competitor of any Loan Party or a distressed debt fund.

(b) Assignment by Lenders. Each Lender may at any time assign to one or more Affiliates of such Lender or as otherwise permitted by subsection (a) above all or a portion of its rights and obligations under this Agreement (including all or a portion of its commitment and the Loans at the time owing to it), subject to any restrictions on such assignment set forth in the other Loan Documents. Each such Lender shall notify the Administrative Agent of such assignment and deliver to the Administrative Agent a copy of any assignment and assumption agreement entered into in connection thereto. Each Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender. Notwithstanding anything herein to the contrary, any pledge or assignment of all or a portion of the rights, or a security interest in such rights, of K2 HealthVentures LLC as a Lender made to an Affiliate of K2 HealthVentures LLC, shall only be made to K2 HealthVentures Equity Trust LLC.

(c) Register; Participant Register. Administrative Agent, acting solely for this purpose as an agent of the Loan Parties, shall maintain at one of its offices in the United States a register for the recordation of the names and addresses of the Lenders, and the Commitments of, and principal amounts (and stated interest) of the Term 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 the Loan Parties, Administrative Agent and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by the Loan Parties, any Lender and the Collateral Trustee at any reasonable time and from time to time upon reasonable prior notice. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Loan Parties, maintain a register on which it enters the name and address of each participant and the principal amounts (and stated interest) of each participant's interest in the Term Loans or other obligations under the Loan Documents (the "**Participant Register**"); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any participant or any information relating to a participant's interest in any commitments, loans or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

12.3 Indemnification. Each Loan Party agrees to indemnify, defend and hold Administrative Agent, Collateral Trustee and each Lender and their respective directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing Lender (each, an "**Indemnified Person**") harmless against: (i) all obligations, demands, claims, and liabilities (including such claims, costs, expenses, damages and liabilities based on liability in tort, including strict liability in tort) (collectively, "**Claims**") claimed or asserted by any other party in connection with the transactions contemplated by the Loan Documents; and (ii) all losses or reasonable and documented out-of-pocket expenses (including Lender Expenses) in any way suffered, incurred, or paid by such Indemnified Person as a result of, following from, consequential to, or arising from transactions among Administrative Agent, Collateral Trustee, Lenders and Loan Parties (including reasonable and documented out-of-pocket attorneys' fees and expenses), except for Claims and/or losses to the extent directly caused by such Indemnified Person's gross negligence or willful misconduct or any Claims and/or losses with respect to any actions among Indemnified Persons in each case, for the avoidance of doubt. This Section 12.3 shall survive until all statutes of limitation with respect to the Claims, losses, and expenses for which indemnity is given shall have run. This Section 12.3 shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

12.4 Borrower Liability. If any Person is joined to this Agreement as a Borrower, the following provisions shall apply: Each Borrower hereunder shall be jointly and severally obligated to repay all Loans made hereunder, regardless of which Borrower actually receives said Loan, as if each Borrower hereunder directly received

all Loans. Each Borrower waives (a) any suretyship defenses available to it under the Code or any other applicable law, and (b) any right to require Collateral Trustee to: (i) proceed against any Borrower or any other person; (ii) proceed against or exhaust any security; or (iii) pursue any other remedy. Collateral Trustee may exercise or not exercise any right or remedy it has against any Borrower or any security it holds (including the right to foreclose by judicial or non-judicial sale) without affecting any Borrower's liability. Notwithstanding any other provision of this Agreement or other related document, each Borrower irrevocably waives all rights that it may have at law or in equity (including, without limitation, any law subrogating Borrower to the rights of Collateral Trustee under this Agreement) to seek contribution, indemnification or any other form of reimbursement from any other Borrower, or any other Person now or hereafter primarily or secondarily liable for any of the Obligations, for any payment made by such Borrower with respect to the Obligations in connection with this Agreement or otherwise and all rights that it might have to benefit from, or to participate in, any security for the Obligations as a result of any payment made by a Borrower with respect to the Obligations in connection with this Agreement or otherwise. Any agreement providing for indemnification, reimbursement or any other arrangement prohibited under this Section shall be null and void. If any payment is made to a Borrower in contravention of this Section, such Borrower shall hold such payment in trust for Lenders and such payment shall be promptly delivered to Collateral Trustee, for the ratable benefit of Lenders, for application to the Obligations, whether matured or unmatured.

12.5 Time of Essence. Time is of the essence for the performance of all Obligations in this Agreement.

12.6 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.7 Correction of Loan Documents. Administrative Agent may correct patent errors and fill in any blanks in the Loan Documents consistent with the agreement of the parties; provided that, the Administrative Agent provide Borrowers with at least five (5) Business Days' prior written notice of such correction. In the event of any objection by Borrowers to such correction, such correction shall be made solely by an amendment signed by Administrative Agent and Borrowers.

12.8 Amendments in Writing; Waiver; Integration. No purported amendment or modification of any Loan Document, or waiver, discharge or termination of any obligation under any Loan Document, shall be effective except, pursuant to an agreement in writing by the parties thereto, and in case of this Agreement, pursuant to an agreement in writing entered into by Borrowers, Administrative Agent, the Required Lenders and Collateral Trustee, provided that Collateral Trustee's approval shall not be required for any amendment or supplement that has the effect solely of (i) adding or maintaining Collateral, securing additional Obligations that are otherwise permitted by the terms of this Agreement to be secured by the Collateral or preserving, perfecting or establishing the priority of the Liens thereon or the rights of Collateral Trustee therein; (ii) curing any ambiguity, defect or inconsistency; (iii) providing for the assumption of a Borrower's or Guarantor's Obligations under any Loan Document in the case of a merger or consolidation or sale of all or substantially all of the assets of a Borrower or Guarantor, as applicable; (iv) making any change that would provide any additional rights or benefits to the Administrative Agent, any Lender or Collateral Trustee or that does not adversely affect the legal rights under this Agreement or any other Loan Document of Collateral Trustee; or (v) to the extent the Collateral Trust Agreement provides that Collateral Trustee's approval is not required. It is agreed that any change (i) to the definition of "Designated Holder", (ii) the rights of a Designated Holder, or (iii) the final sentence of Section 12.2(b) (and any change to this Agreement that would modify the consent required pursuant to this sentence) shall require the consent of the Collateral Trustee. Without limiting the generality of the foregoing, no oral promise or statement, nor any action, inaction, delay, failure to require performance or course of conduct shall operate as, or evidence, an amendment, supplement or waiver or have any other effect on any Loan Document. Any waiver granted shall be limited to the specific circumstance expressly described in it, and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver. The Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations among the parties about the subject matter of the Loan Documents merge into the Loan Documents.

12.9 Counterparts; Electronic Execution of Documents. This Agreement and any other Loan Documents, except to the extent otherwise required pursuant to the terms thereof, may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an

original, and all taken together, constitute one Agreement. The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act. Delivery of an executed counterpart of a signature page of any Loan Document by electronic means including by email delivery of a ".pdf" format data file shall be effective as delivery of an original executed counterpart of such Loan Document.

12.10 Confidentiality; Publicity.

(a) In handling any confidential information of any Loan Party and its Subsidiaries, Administrative Agent, Collateral Trustee and each Lender agree to hold in confidence and not disclose such confidential information except as expressly provided herein, and shall exercise the same degree of care that it exercises for its own proprietary information, but disclosure of information may be made: (a) to its Subsidiaries or Affiliates; (b) to prospective transferees or purchasers of any interest in the Loans (provided, however, that any prospective transferee or purchaser shall have entered into an agreement containing provisions substantially the same as those in this Section 12.10 or shall otherwise by subject to bound by confidentiality terms no less restrictive than those of this Section 12.10); (c) as required by law, regulation, subpoena, or other order and in connection with reporting obligations applicable to Administrative Agent, Collateral Trustee or such Lender, including pursuant to the Exchange Act, (d) to Administrative Agent, Collateral Trustee or such Lender's regulators or as otherwise required in connection with any examination or audit; (e) as Administrative Agent, Collateral Trustee or such Lender determines is necessary or appropriate in connection with the exercise of remedies with respect to the Obligations; and (f) to third-party service providers of Administrative Agent, Collateral Trustee or such Lender so long as such service providers are bound by confidentiality terms not more permissive than the terms hereof. Confidential information does not include information that is either: (i) in the public domain or in Administrative Agent, Collateral Trustee or any Lender's possession when disclosed to Administrative Agent, Collateral Trustee or such Lender, as applicable, or becomes part of the public domain (other than as a result of its disclosure by Administrative Agent, Collateral Trustee or such Lender in violation of this Agreement) after disclosure to Administrative Agent, Collateral Trustee or such Lender, as applicable; or (ii) disclosed to Administrative Agent, Collateral Trustee or such Lender by a third party, if Administrative Agent, Collateral Trustee or such Lender, as applicable, does not know that the third party is prohibited from disclosing the information. The provisions of this paragraph shall survive the termination of this Agreement.

(b) No party hereto shall publicize or use another party's name or logo, or hyperlink to such other parties' website, describe the relationship of the parties or the transaction contemplated by this Agreement, in written and oral presentations, advertising, promotional and marketing materials, client lists, public relations materials or on its web site (together, the "**Publicity Materials**") without prior written notice to the party that is the subject of the proposed Publicity Materials (other than, for the avoidance of doubt, reports, proxy statements and other materials filed by Borrower Representative with the Securities and Exchange Commission or otherwise as required by applicable law), together with a draft (or, if Publicity Materials are not proposed to be delivered in written form, an outline of the content to be included) so as to provide such subject party a reasonable opportunity to review prior to publication, and each party agrees, in connection with any Publicity Materials proposed by such party to reasonably consider requested changes or corrections requested by the party that is the subject of such Publicity Materials in good faith, and upon request, to provide the final form prior to publication or other dissemination.

12.11 Borrower Representative. Each of the Borrowers hereby appoints Borrower Representative to act as its exclusive agent for all purposes under the Loan Documents (including, without limitation, with respect to all matters related to the borrowing and repayment of any Loan). Each of the Borrowers acknowledges and agrees that (a) Borrower Representative may execute such documents on behalf of any Borrower as Borrower Representative deems appropriate in its sole discretion and each Borrower shall be bound by and obligated by all of the terms of any such document executed by Borrower Representative on its behalf, (b) any notice or other communication delivered hereunder to Borrower Representative shall be deemed to have been delivered to each Borrower and (c) Administrative Agent, Collateral Trustee and any Lender shall accept (and shall be permitted to rely on) any document or agreement executed by Borrower Representative on behalf of Borrowers (or any of them). Each Borrower must act through the Borrower Representative for all purposes under this Agreement and the other Loan Documents. Notwithstanding anything contained herein to the contrary, to the extent any provision in this Agreement requires any Borrower to

interact in any manner with Administrative Agent, Collateral Trustee or any Lender, such Borrower shall do so through Borrower Representative.

12.12 Captions. The headings used in this Agreement are for convenience only and shall not affect the interpretation of this Agreement.

12.13 Construction of Agreement. The parties mutually acknowledge that they and their attorneys have participated in the preparation and negotiation of this Agreement. In cases of uncertainty this Agreement shall be construed without regard to which of the parties caused the uncertainty to exist.

12.14 Relationship. The relationship of the parties to this Agreement is determined solely by the provisions of this Agreement. The parties do not intend to create any agency, partnership, joint venture, trust, fiduciary or other relationship with duties or incidents different from those of parties to an arm's-length contract.

12.15 Third Parties. Nothing in this Agreement, whether express or implied, is intended to: (a) confer any benefits, rights or remedies under or by reason of this Agreement on any persons other than the express parties to it and their respective permitted successors and assigns; (b) relieve or discharge the obligation or liability of any person not an express party to this Agreement; or (c) give any person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

12.16 Appointment of Collateral Trustee.

(a) Each Lender hereby appoints Collateral Trustee to act on behalf of the Secured Parties as collateral agent under this Agreement and the other Loan Documents, and to hold and enforce any and all Liens on Collateral granted by any of the Loan Parties to secure any of the Obligations, all in accordance with the terms of the Collateral Trust Agreement. The provisions of this Section 12.16 are solely for the benefit of Collateral Trustee, Administrative Agent and Lenders and no Loan Party nor any other Person shall have any rights as a third party beneficiary of any of the provisions hereof. The Collateral Trustee shall not have any duties or responsibilities except for those expressly set forth in this Agreement and the other Loan Documents, together with such powers as are reasonably related thereto. The duties of the Collateral Trustee shall be mechanical and administrative in nature and Collateral Trustee shall not have, or be deemed to have, by reason of this Agreement, any other Loan Document or otherwise a fiduciary relationship in respect of any Lender. The Collateral Trustee may resign or be removed or replaced, and a successor Collateral Trustee may be appointed in accordance with the terms and subject to the conditions of the Collateral Trust Agreement.

(b) Each Lender hereby agrees that upon receipt of instruction from the Administrative Agent Collateral Trustee shall be entitled to take or refrain from taking such action, and shall be entitled to take all such actions set forth in the Collateral Trust Agreement.

(c) Neither Collateral Trustee nor any of its Affiliates nor any of their respective directors, officers, agents or employees shall be liable for any action taken or omitted to be taken by it or them under or in connection with this Agreement or the other Loan Documents, except for damages solely caused by its or their own gross negligence or willful misconduct as finally determined by a court of competent jurisdiction. Without limitation of the generality of the foregoing, Collateral Trustee: (i) may consult with legal counsel, independent chartered accountants and other experts and consultants selected by it and shall not be liable for any action taken or omitted to be taken in good faith by it in accordance with the advice of such counsel, accountants, experts or consultants; (ii) makes no warranty or representation to any Lender and shall not be responsible to any Lender for any statements, warranties or representations made in or in connection with this Agreement or the other Loan Documents; (iii) shall not have any duty to ascertain or to inquire as to the performance or observance of any of the terms, covenants or conditions of this Agreement or the other Loan Documents on the part of any Loan Party or to inspect the Collateral (including the books and records) of any Loan Party; (iv) shall not be responsible to any Lender for the due execution, legality, validity, enforceability, genuineness, sufficiency or value of this Agreement or the other Loan Documents or any other instrument or document furnished pursuant hereto or thereto; and (v) shall incur no liability under or in respect of this Agreement or the other Loan Documents by acting upon any notice, consent, certificate or other instrument or writing (which may be by email, telecopy, telegram, cable or telex) believed by it to be genuine and signed or sent by the proper party or parties.

12.17 Appointment of Administrative Agent.

(a) Each Lender hereby appoints Administrative Agent to act on behalf of Lenders as administrative agent under this Agreement and the other Loan Documents. The provisions of this Section 12.17 are solely for the benefit of Administrative Agent and Lenders and no Loan Party nor any other Person shall have any rights as a third party beneficiary of any of the provisions hereof. In performing its functions and duties under this Agreement, Administrative Agent does not assume and shall not be deemed to have assumed any obligation toward or relationship of agency or trust with or for any Loan Party or any other Person. Administrative Agent shall not have any duties or responsibilities except for those expressly set forth in this Agreement and the other Loan Documents, together with such powers as are reasonably related thereto. The duties of Administrative Agent shall be mechanical and administrative in nature and Administrative Agent shall not have, or be deemed to have, by reason of this Agreement, any other Loan Document or otherwise a fiduciary relationship in respect of any Lender.

(b) If Administrative Agent shall request instructions from Lenders with respect to any act or action (including failure to act) in connection with this Agreement or any other Loan Document, then Administrative Agent shall be entitled to refrain from such act or taking such action unless and until it shall have received instructions from the Required Lenders, and Administrative Agent shall incur no liability to any Person by reason of so refraining. Administrative Agent shall be fully justified in failing or refusing to take any action hereunder or under any other Loan Document for any reason. Without limiting the foregoing, no Lender shall have any right of action whatsoever against Administrative Agent as a result of Administrative Agent's acting or refraining from acting hereunder or under any other Loan Document in accordance with the instructions of Lenders.

(c) Administrative Agent may perform any and all of its duties and exercise its rights and powers hereunder by or through any one or more sub-agents appointed by Administrative Agent. Administrative Agent and any such sub-agent may perform any and all of its duties and exercise its rights and powers by or through their respective related parties. The exculpatory provisions of this Section 12.17 shall apply to any such sub-agent and to the related parties of such Administrative Agent and any such sub-agent. No Administrative Agent shall be responsible for the negligence or misconduct of any sub-agent except to the extent that a court of competent jurisdiction determines in a final and non-appealable judgment that such Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agents.

(d) Neither Administrative Agent nor any of its Affiliates nor any of their respective directors, officers, agents or employees shall be liable for any action taken or omitted to be taken by it or them under or in connection with this Agreement or the other Loan Documents, except for damages solely caused by its or their own gross negligence or willful misconduct as finally determined by a court of competent jurisdiction. Without limitation of the generality of the foregoing, Administrative Agent: (i) may consult with legal counsel, independent chartered accountants and other experts and consultants selected by it and shall not be liable for any action taken or omitted to be taken in good faith by it in accordance with the advice of such counsel, accountants, experts or consultants; (ii) makes no warranty or representation to any Lender and shall not be responsible to any Lender for any statements, warranties or representations made in or in connection with this Agreement or the other Loan Documents; (iii) shall not have any duty to ascertain or to inquire as to the performance or observance of any of the terms, covenants or conditions of this Agreement or the other Loan Documents on the part of any Loan Party or to inspect the Collateral (including the books and records) of any Loan Party; (iv) shall not be responsible to any Lender for the due execution, legality, validity, enforceability, genuineness, sufficiency or value of this Agreement or the other Loan Documents or any other instrument or document furnished pursuant hereto or thereto; and (v) shall incur no liability under or in respect of this Agreement or the other Loan Documents by acting upon any notice, consent, certificate or other instrument or writing (which may be by email, telecopy, telegram, cable or telex) believed by it to be genuine and signed or sent by the proper party or parties.

(e) With respect to its Commitments and Loans hereunder, Administrative Agent shall have the same rights and powers under this Agreement and the other Loan Documents as any other Lender and may exercise the same as though it were not Administrative Agent; and the term "Lender" or "Lenders" shall, unless otherwise expressly indicated, include Administrative Agent in its individual capacity (to the extent it holds any Obligations owing to Lenders or Commitments hereunder). Administrative Agent and each of its Affiliates may lend money to, invest in, and generally engage in any kind of business with, any Loan Party, any of their Affiliates and any Person who may do business with or own securities of any Loan Party or any such Affiliate, all as if Administrative Agent

was not Administrative Agent and without any duty to account therefor to Lenders. Administrative Agent and its Affiliates may accept fees and other consideration from any Loan Party for services in connection with this Agreement or otherwise without having to account for the same to Lenders.

(f) Each Lender acknowledges that it has, independently and without reliance upon Administrative Agent or any other Lender, made its own credit and financial analysis of the Loan Parties and its own decision to enter into this Agreement. Each Lender also acknowledges that it will, independently and without reliance upon Administrative Agent or any other Lender and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under this Agreement. Each Lender acknowledges the potential conflict of interest of each other Lender as a result of Lenders holding disproportionate interests in the Loans, and expressly consents to, and waives any claim based upon, such conflict of interest.

(g) Each Lender agrees to indemnify Administrative Agent (to the extent not reimbursed by Loan Parties and without limiting the obligations of Loan Parties hereunder), ratably according to its respective Pro Rata Share, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind or nature whatsoever which may be imposed on, incurred by, or asserted against Administrative Agent in any way relating to or arising out of this Agreement or any other Loan Document or any action taken or omitted by Administrative Agent in connection therewith; provided, however, that no Lender shall be liable for any portion of such liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements resulting solely from Administrative Agent's gross negligence or willful misconduct as finally determined by a court of competent jurisdiction. Without limiting the foregoing, each Lender agrees to reimburse Administrative Agent promptly upon demand for its ratable share of any out-of-pocket expenses (including reasonable and documented counsel fees) incurred by Administrative Agent in connection with the preparation, execution, delivery, administration, modification, amendment or enforcement (whether through negotiations, legal proceedings or otherwise) of, or legal advice in respect of rights or responsibilities under, this Agreement and each other Loan Document, to the extent that Administrative Agent is not reimbursed for such expenses by the Loan Parties.

(h) Administrative Agent may resign at any time by giving not less than thirty (30) days' prior written notice thereof to Lenders, Collateral Trustee and Borrower Representative. Upon any such resignation, Lenders shall have the right to appoint a successor Administrative Agent that may be the Collateral Agent. If no successor Administrative Agent shall have been so appointed by Lenders and shall have accepted such appointment within thirty (30) days after Administrative Agent's giving notice of resignation, then Administrative Agent may, on behalf of Lenders, appoint a successor Administrative Agent, which shall be a Lender or the Collateral Agent, if a Lender or Collateral Agent is willing to accept such appointment, or otherwise shall be a commercial bank or financial institution or a subsidiary of a commercial bank or financial institution if such commercial bank or financial institution has combined capital of at least $300,000,000. If no successor Administrative Agent has been appointed pursuant to the foregoing, by the 30th day after the date such notice of resignation was given by the resigning Administrative Agent, such resignation shall become effective and Lenders shall thereafter perform all the duties of Administrative Agent hereunder until such time, if any, as Lenders appoint a successor Administrative Agent as provided above. Upon the acceptance of any appointment as Administrative Agent hereunder by a successor Administrative Agent, such successor Administrative Agent shall succeed to and become vested with all the rights, powers, privileges and duties of the resigning Administrative Agent. Upon the earlier of the acceptance of any appointment as Administrative Agent hereunder by a successor Administrative Agent or the effective date of the resigning Administrative Agent's resignation, the resigning Administrative Agent shall be discharged from its duties and obligations under this Agreement and the other Loan Documents, except that any indemnity, expense reimbursement or other rights in favor of such resigning Administrative Agent shall continue. After any resigning Administrative Agent's resignation hereunder, the provisions of this Section 12.17 shall inure to its benefit as to any actions taken or omitted to be taken by it while it was Administrative Agent under this Agreement and the other Loan Documents. Notwithstanding the foregoing, as long as K2 HealthVentures LLC is a Lender pursuant to this Agreement, K2 HealthVentures LLC shall not resign as Administrative Agent unless a successor Administrative Agent is appointed concurrently with such resignation, which successor Administrative Agent shall have the wherewithal to perform, and shall succeed to and become vested with all the rights, powers, privileges and duties of the resigning Administrative Agent under this Agreement and the other Loan Documents.

(i) In addition to any rights now or hereafter granted under applicable law and not by way of limitation of any such rights, upon the occurrence and during the continuation of any Event of Default, with the prior written consent of Administrative Agent, each Lender and each holder of any Obligation is hereby authorized at any time or from time to time, without notice to any Loan Party or to any other Person, any such notice being hereby expressly waived, to set off and to appropriate and to apply any and all balances held by it at any of its offices for the account of any Loan Party or any Subsidiary of a Loan Party (regardless of whether such balances are then due to such Loan Party or such Subsidiary) and any other properties or assets any time held or owing by that Lender or that holder to or for the credit or for the account of any Loan Party or any Subsidiary of a Loan Party against and on account of any of the Obligations which are not paid when due. Any Lender or holder of any Obligation exercising a right to set off or otherwise receiving any payment on account of the Obligations in excess of its Pro Rata Share thereof in accordance with the terms of this Agreement relating to the priority of the repayment of the Obligations shall purchase for cash (and the other Lenders or holders shall sell) such participations in each such other Lender's or holder's Pro Rata Share of the Obligations as would be necessary to cause such Lender to share the amount so set off or otherwise received with each other Lender or holder in accordance with their respective Pro Rata Shares and in accordance with the terms of this Agreement relating to the priority of the repayment of the Obligations. Each Loan Party agrees, to the fullest extent permitted by law, that (i) any Lender or holder may exercise its right to set off with respect to amounts in excess of its Pro Rata Share of the Obligations and may sell participations in such amount so set off to other Lenders and holders and (ii) any Lender or holders so purchasing a participation in the Loans made or other Obligations held by other Lenders or holders may exercise all rights of set-off, bankers' Lien, counterclaim or similar rights with respect to such participation as fully as if such Lender or holder were a direct holder of the Loans and the other Obligations in the amount of such participation. Notwithstanding the foregoing, if all or any portion of the set-off amount or payment otherwise received is thereafter recovered from Lender that has exercised the right of set-off, the purchase of participations by that Lender shall be rescinded and the purchase price restored without interest.

(j) Nothing in this Agreement or the other Loan Documents shall be deemed to require Administrative Agent to advance funds on behalf of any Lender or to relieve any Lender from its obligation to fulfill its Commitments hereunder or to prejudice any rights that Borrowers may have against any Lender as a result of any default by such Lender hereunder. To the extent that Administrative Agent advances funds to Borrowers on behalf of any Lender and is not reimbursed therefor on the same Business Day as such advance is made, Administrative Agent shall be entitled to retain for its account all interest accrued on such advance until reimbursed by the applicable Lender.

(k) If Administrative Agent pays an amount to a Lender under this Agreement in the belief or expectation that a related payment has been or will be received by Administrative Agent from Borrowers and such related payment is not received thereby, then Administrative Agent will be entitled to recover such amount from such Lender on demand without set-off, counterclaim or deduction of any kind.

(l) If Administrative Agent determines at any time that any amount received thereby under this Agreement shall be returned to Borrowers or paid to any other Person pursuant to any insolvency law or otherwise, then, notwithstanding any other term or condition of this Agreement or any other Loan Document, Administrative Agent will not be required to distribute any portion thereof to any Lender. In addition, each Lender will repay to Administrative Agent on demand any portion of such amount that Administrative Agent has distributed to such Lender, together with interest at such rate, if any, as Administrative Agent is required to pay to Borrowers or such other Person, without set-off, counterclaim or deduction of any kind.

(m) Administrative Agent will use reasonable efforts to provide Lenders with any written notice of Event of Default received by Administrative Agent from, or delivered by Administrative Agent to, any Loan Party; provided, however, that Administrative Agent shall not be liable to any Lender for any failure to do so, except to the extent that such failure is attributable solely to Administrative Agent's gross negligence or willful misconduct as finally determined by a court of competent jurisdiction.

(n) Anything in this Agreement or any other Loan Document to the contrary notwithstanding, each Lender hereby agrees with each other Lender and with Administrative Agent that no Lender shall take any action to protect or enforce its rights arising out of this Agreement or any other Loan Document (including exercising any rights of set-off) without first obtaining the prior written consent of the Required Lenders, it being the intent of Lenders that any such action to protect or enforce rights under this Agreement and the other Loan Documents shall be taken in concert and at the direction or with the consent of Administrative Agent at the request of Required Lenders.

13. GUARANTY

13.1 Guaranty. Each Guarantor who has executed this Agreement as of the date hereof, together with each Loan Party who accedes to this Agreement as a Guarantor after the date hereof pursuant to Section 6.10 hereby, jointly and severally, unconditionally and irrevocably, guarantees the prompt and complete payment and performance by Borrowers and the other Loan Parties when due (whether at the stated maturity, by acceleration or otherwise) of the Obligations. In furtherance of the foregoing, and without limiting the generality thereof, each Guarantor agrees as follows:

(a) each Guarantor's liability hereunder shall be the immediate, direct, and primary obligation of such Guarantor and shall not be contingent upon any exercise or enforcement of any remedy of any Secured Party or that any Secured Party may have against a Borrower, or any other Guarantor or other Person liable in respect of the Obligations, or all or any portion of the Collateral;

(b) Administrative Agent, on behalf of Lenders, may enforce this guaranty notwithstanding the existence of any dispute between any Secured Party and any Loan Party with respect to the existence of any Event of Default; and

(c) notwithstanding anything in this Article 13 to the contrary, the Collateral Trustee shall be the only party with the right to enforce any of the Collateral or take other security.

13.2 Maximum Liability. Anything herein or in any other Loan Document to the contrary notwithstanding, the maximum liability of each Guarantor shall in no event exceed the amount which can be guaranteed by such Guarantor under applicable federal, state provincial or territorial laws relating to the insolvency of debtors (after giving effect to the right of contribution established in Section 13.5).

13.3 Termination. The guaranty pursuant to this Section 13 shall remain in full force and effect until the date the Obligations have been paid in full in cash, and all commitments to extend credit have been terminated.

13.4 Unconditional Nature of Guaranty. No payment made by a Borrower, Guarantor, any other guarantor or any other Person or received or collected by any Secured Party from a Borrower, Guarantor, any other guarantor or any other Person by virtue of any action or proceeding or any set-off or appropriation or application at any time or from time to time in reduction of or in payment of the Obligations shall be deemed to modify, reduce, release or otherwise affect the liability of any Guarantor hereunder which shall, notwithstanding any such payment (other than any payment made by such Guarantor in respect of the Obligations or any payment received or collected from such Guarantor in respect of the Obligations), remain liable for the Obligations up to the maximum liability of such Guarantor hereunder until the date the Obligations are paid in full in cash.

13.5 Right of Contribution

(a) If in connection with any payment made by any Guarantor hereunder any rights of contribution arise in favor of such Guarantor against one or more other Guarantors, such rights of contribution shall be subject to the terms and conditions of Section 13.6. The provisions of this Section 13.5 shall in no respect limit the obligations and liabilities of any Guarantor pursuant to the Loan Documents, and each Guarantor shall remain liable for the full amount guaranteed by such Guarantor hereunder.

(b) Notwithstanding any payment made by any Guarantor hereunder or any set-off or application of funds of any Guarantor by any Secured Party, no Guarantor shall be entitled to be subrogated to any of the rights of any Secured Party against any Loan Party or any collateral security or guarantee or right of offset held by any Secured Party for the payment of the Obligations, nor shall any Guarantor seek or be entitled to seek any contribution or reimbursement from any Loan Party in respect of payments made by such Guarantor hereunder, in each case, until the Termination Date. If any amount shall be paid to any Guarantor on account of such subrogation rights at any time prior to the Termination Date, such amount shall be held by such Guarantor in trust for the ratable benefit of the Secured Parties, shall be segregated from other funds of such Guarantor, and shall, forthwith upon receipt by such Guarantor, be turned over to Administrative Agent in the exact form received by such Guarantor (duly indorsed by

such Guarantor to Administrative Agent, if required), to be applied to the Obligations, irrespective of the occurrence or the continuance of any Event of Default.

13.6 Amendments, etc. with respect to the Obligations. Each Guarantor shall remain obligated hereunder notwithstanding that, without any reservation of rights against any Guarantor and without notice to or further assent by any Guarantor, any demand for payment of any of the Obligations made by any Secured Party may be rescinded and any of the Obligations continued, and the Obligations, or the liability of any other Person upon or for any part thereof, or any collateral security or guarantee therefor or right of offset with respect thereto, may, from time to time, in whole or in part, be renewed, extended, amended, modified, accelerated, compromised, waived, surrendered or released by any Secured Party, and this Agreement, the other Loan Documents and any other documents executed and delivered in connection therewith may be amended, modified, supplemented or terminated, in whole or in part, in accordance with their respective terms, and any collateral security, guarantee or right of offset at any time held by any Secured Party for the payment of the Obligations may be sold, exchanged, waived, surrendered or released. No Secured Party shall have any obligation to protect, secure, perfect or insure any Lien at any time held by it as security for the Obligations or for the guarantee pursuant to this Section 13 or any property subject thereto.

13.7 Guarantee Absolute and Unconditional; Guarantor Waivers; Guarantor Consent. Each Guarantor waives any and all notice of the creation, renewal, extension or accrual of any of the Obligations and notice of or proof of reliance by any Secured Party upon the guaranty contained in this Section 13 or acceptance of this guaranty. The Obligations shall conclusively be deemed to have been created, contracted or incurred, or renewed, extended, amended or waived, in reliance upon this guaranty. All dealings between Borrowers, Guarantors and any Secured Party shall be conclusively presumed to have been had or consummated in reliance upon this guaranty. Each Guarantor further waives:

(a) diligence, presentment, protest, demand for payment and notice of default or nonpayment to or upon any Borrower or any of the other Guarantors with respect to the Obligations;

(b) the defense of the statute of limitations in any action hereunder or for the collection or performance of the Obligations;

(c) any defense arising by reason of any lack of corporate or other authority or any other defense of any Borrower, such Guarantor or any other Person;

(d) any defense based upon errors or omissions by any Secured Party in the administration of the Obligations;

(e) any rights to set-offs and counterclaims;

(f) any defense based upon an election of remedies (including, if available, an election to proceed by nonjudicial foreclosure) which destroys or impairs the subrogation rights of such Guarantor or the right of such Guarantor to proceed against any Borrower or any other obligor of the Obligations for reimbursement; and

(g) without limiting the generality of the foregoing, to the fullest extent permitted by law, any defenses or benefits that may be derived from or afforded by applicable law that limit the liability of or exonerate guarantors or sureties, or which may conflict with the terms of this Agreement.

Each Guarantor understands and agrees that the guarantee contained in this Section 13 shall be construed as a continuing, absolute and unconditional guarantee of payment without regard to (i) the validity or enforceability of this Agreement or any other Loan Document, any of the Obligations or any other collateral security therefor or guaranty or right of offset with respect thereto at any time or from time to time held by any Secured Party, (ii) any defense, set-off or counterclaim (other than a defense of payment or performance) which may at any time be available to or be asserted by any Borrower or any other Person against any Secured Party, or (iii) any other circumstance whatsoever (with or without notice to or knowledge of any Loan Party) which constitutes, or might be construed to constitute, an equitable or legal discharge of any Borrower for the Obligations, or of such Guarantor under this guaranty, in bankruptcy or in any other instance, (iv) any Insolvency Proceeding with respect to any Loan Party or any other Person, (v) any amalgamation, merger, acquisition, consolidation or change in structure of any Loan Party or any other

Person, or any sale, lease, transfer or other disposition of any or all of the assets or Equity Interests of any Loan Party or any other Person, (vi) any assignment or other transfer, in whole or in part, of Secured Parties' interests in and rights under this Agreement or the other Loan Documents, including the right to receive payment of the Obligations, or any assignment or other transfer, in whole or in part, of any Secured Party's interests in and to any of the Collateral, (vii) any Secured Party's vote, claim, distribution, election, acceptance, action or inaction in any Insolvency Proceeding related to any of the Obligations, and (viii) any other guaranty, whether by such Guarantor or any other Person, of all or any part of the Obligations or any other indebtedness, obligations or liabilities of any Guarantor to Secured Parties. When making any demand hereunder or otherwise pursuing its rights and remedies hereunder against any Guarantor, Secured Parties may, but shall be under no obligation to, make a similar demand on or otherwise pursue such rights and remedies as it may have against any Loan Party or any other Person or against any collateral security or guarantee for the Obligations or any right of offset with respect thereto. Any failure by any Secured Party to make any such demand, to pursue such other rights or remedies or to collect any payments from any Loan Party or any other Person or to realize upon any such collateral security or guarantee or to exercise any such right of offset, or any release of any Loan Party or any other Person or any such collateral security, guarantee or right of offset, shall not relieve any Guarantor of any obligation or liability hereunder, and shall not impair or affect the rights and remedies, whether express, implied or available as a matter of law, of any Secured Party against any Guarantor. For the purposes hereof "demand" shall include the commencement and continuance of any legal proceedings.

13.8 Modifications of Obligations. Each Guarantor further unconditionally consents and agrees that, without notice to or further assent from any Guarantor: (a) the principal amount of the Obligations may be increased or decreased and additional indebtedness or obligations of a Borrower or any other Persons under the Loan Documents may be incurred, by one or more amendments, modifications, renewals or extensions of any Loan Document or otherwise; (b) the time, manner, place or terms of any payment under any Loan Document may be extended or changed, including by an increase or decrease in the interest rate on any Obligation or any fee or other amount payable under such Loan Document, by an amendment, modification or renewal of any Loan Document or otherwise; (c) the time for a Borrower's (or any other Loan Party's) performance of or compliance with any term, covenant or agreement on its part to be performed or observed under any Loan Document may be extended, or such performance or compliance waived, or failure in or departure from such performance or compliance consented to, all in such manner and upon such terms as the applicable Secured Party may deem proper; (d) in addition to the Collateral, Secured Parties may take and hold other security (legal or equitable) of any kind, at any time, as collateral for the Obligations, and may, from time to time, in whole or in part, exchange, sell, surrender, release, subordinate, modify, waive, rescind, compromise or extend such security and may permit or consent to any such action or the result of any such action, and may apply such security and direct the order or manner of sale thereof; (e) Secured Parties may discharge or release, in whole or in part, any other Guarantor or any other Loan Party or other Person liable for the payment and performance of all or any part of the Obligations, and may permit or consent to any such action or any result of such action, and shall not be obligated to demand or enforce payment upon any of the Collateral, nor shall any Secured Party be liable to any Guarantor for any failure to collect or enforce payment or performance of the Obligations from any Person or to realize upon the Collateral, and (f) Secured Parties may request and accept other guaranties of the Obligations and any other indebtedness, obligations or liabilities of a Borrower or any other Loan Party to any Secured Party and may, from time to time, in whole or in part, surrender, release, subordinate, modify, waive, rescind, compromise or extend any such guaranty and may permit or consent to any such action or the result of any such action; in each case (a) through (f), as the applicable Secured Parties may deem advisable, and without impairing, abridging, releasing or affecting this Agreement.

13.9 Reinstatement. The guaranty shall continue to be effective, or be reinstated, as the case may be, if at any time payment, or any part thereof, of any of the Obligations is rescinded or must otherwise be restored or returned by any Secured Party upon the insolvency, bankruptcy, dissolution, liquidation or reorganization of a Loan Party, or upon or as a result of the appointment of a receiver, intervenor or conservator of, or trustee or similar officer for, a Loan Party or any substantial part of its property, or otherwise, all as though such payments had not been made.

13.10 No Waiver by Course of Conduct; Cumulative Remedies. No Secured Party shall by any act (except in writing in accordance with Section 12.8), delay, indulgence, omission or otherwise be deemed to have waived any right or remedy hereunder or to have acquiesced in any Default or Event of Default, as applicable. No failure to exercise, nor any delay in exercising, on the part of any Secured Party, any right, power or privilege hereunder shall operate as a waiver thereof. No single or partial exercise of any right, power or privilege hereunder shall preclude any other or further exercise thereof or the exercise of any other right, power or privilege. A waiver by

any Secured Party of any right or remedy hereunder on any one occasion shall not be construed as a bar to any right or remedy which any Secured Party would otherwise have on any future occasion. The rights and remedies herein provided are cumulative, may be exercised singly or concurrently and are not exclusive of any other rights or remedies provided by law.

13.11 Enforcement Expenses; Indemnification. Each Guarantor agrees to pay or reimburse Secured Parties for all its costs and expenses incurred in collecting against such Guarantor under this guaranty or otherwise enforcing or preserving any rights under this Agreement and the other Loan Documents to which such Guarantor is a party, including, without limitation, the reasonable and documented out-of-pocket fees and disbursements of counsel; provided that no Guarantor shall be liable for indemnification of any expenses under this Section 13.11 to the extent such expenses arise as a result of (i) the acting in gross negligence or willful misconduct of a Secured Party or (ii) any claims and/or losses with respect to any actions among Secured Parties.

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the Closing Date.

BORROWER:

INOZYME PHARMA, INC.

By /s/ Sanjay S. Subramanian
Name: Sanjay S. Subramanian
Title: Chief Financial Officer and Treasurer

COLLATERAL TRUSTEE:

ANKURA TRUST COMPANY, LLC

By /s/ Beth Micena
Name: Beth Micena
Title: Senior Director

ADMINISTRATIVE AGENT:

K2 HEALTHVENTURES LLC

By /s/ Parag Shah
Name: Parag Shah
Title: Managing Director and Chief Executive Officer

LENDER:

K2 HEALTHVENTURES LLC

By /s/ Parag Shah
Name: Parag Shah
Title: Managing Director and Chief Executive Officer

EXHIBIT A

DEFINITIONS

As used in this Agreement, the following capitalized terms have the following meanings:

"**Account**" means any "account" as defined in the Code with such additions to such term as may hereafter be made, and includes, without limitation, all accounts receivable and other sums owing to a Loan Party.

"**Account Control Agreement**" means any control agreement entered into among the depository institution at which a Loan Party maintains a Deposit Account or the securities intermediary or commodity intermediary at which a Loan Party maintains a Securities Account or a Commodity Account, one or more Loan Parties, and Collateral Trustee pursuant to which Collateral Trustee, for the benefit of the Secured Parties, obtains control (within the meaning of the Code) over such Deposit Account, Securities Account, or Commodity Account.

"**Account Debtor**" means any "account debtor" as defined in the Code with such additions to such term as may hereafter be made.

"**Administrative Agent**" has the meaning set forth in the preamble.

"**Affiliate**" means, with respect to any Person, each other Person that owns or controls, directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person's senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person's managers and members.

"**Agreement**" has the meaning set forth in the preamble.

"**Amortization Date**" means September 1, 2025.

"**Anti-Terrorism Order**" means Executive Order No. 13,224 as of September 24, 2001, Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit or Support Terrorism, 66 U.S. Fed. Reg. 49,079 (2001), as amended.

"**Applicable Rate**" means a variable annual rate equal to the greater of (i) 7.85%, and (ii) the sum of (A) the Prime Rate, plus (B) 3.85%, provided that if the application of the foregoing would result in a rate higher than 9.60%, then the Applicable Rate shall be 9.60%

"**Automatic Payment Authorization**" means the Automatic Payment Authorization in substantially the form of Exhibit F.

"**Board**" means, with respect to any Person, the board of directors, board of managers, managers or other similar bodies or authorities performing similar governing functions for such Person.

"**Books**" are all of each applicable Loan Party's books and records including ledgers, federal and state tax returns, records regarding such Loan Party's assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

"**Borrower**" and "**Borrowers**" has the meaning set forth in the preamble.

"**Borrower Representative**" has the meaning set forth in the preamble.

"**Business Day**" means any day that is not a Saturday, Sunday or a day on which banking institutions in the City of New York or the Commonwealth of Massachusetts are authorized by law, regulation or executive order to remain closed.

"**Cash Equivalents**" means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (b) commercial paper maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor's Ratings Group or Moody's Investors Service, Inc.; (c) certificates of deposit issued by any bank with assets of at least $500,000,000 maturing no more than one year from the date of investment therein; and (d) money market funds at least ninety-five percent (95%) of the assets of which constitute Cash Equivalents of the kinds described in clauses (a) through (c) of this definition.

"**Change in Control**" means any of the following (or any combination of the following) whether arising from any single transaction event or series of related transactions or events that, individually or in the aggregate, result in: (a) [Reserved]; (b) any "person" or "group" (within the meaning of Section 13(d) and 14(d)(2) of the Exchange Act) becoming the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of a sufficient number of Equity Interests of Borrower Representative ordinarily entitled to vote in the election of directors, empowering such "person" or "group" to elect a majority of the members of the Board of Borrower Representative, who did not have such power before such transaction; (c) the Transfer of all or substantially all assets of Borrowers; or (d) Borrower Representative ceasing to own and control, free and clear of any Liens (other than Permitted Liens), directly or indirectly, all of the Equity Interests in each of its Subsidiaries or failing to have the power to direct or cause the direction of the management and policies of each such Subsidiary other than in connection with a transaction expressly permitted pursuant to this Agreement.

"**Claims**" has the meaning set forth in Section 12.3.

"**Closing Date**" has the meaning set forth in the preamble.

"**Code**" means the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the State of New York; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; provided further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Collateral Trustee's Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State of New York, the term "**Code**" shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

"**Collateral**" means any and all properties, rights and assets of each Loan Party described on Exhibit B, and any collateral securing the Obligations pursuant to any Guaranty or pursuant to any other Loan Document.

"**Collateral Access Agreement**" means an agreement with respect to a Loan Party's leased location or bailee location, in each case in form and substance reasonably satisfactory to Administrative Agent and Collateral Trustee.

"**Collateral Account**" means any Deposit Account, Securities Account, or Commodity Account of a Loan Party.

"**Collateral Trust Agreement**" means that certain Collateral Trust Agreement, dated as of the Closing Date, between Collateral Trustee and Administrative Agent, as amended, restated, supplemented or otherwise modified from time to time.

"**Collateral Trustee**" has the meaning set forth in the preamble.

"**Commitment**" means, as to any Lender, the aggregate principal amount of Loans committed to be made by such Lender, as set forth on Schedule 1 hereto.

"**Commodity Account**" means any "commodity account" as defined in the Code with such additions to such term as may hereafter be made.

"**Common Stock**" means the Common Stock of Borrower Representative, par value $0.0001 per share

"**Compliance Certificate**" means that certain certificate in the form attached hereto as Exhibit D.

"**Contingent Obligation**" means, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation, in each case, directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"**Conversion Amount**" has the meaning set forth in Section 2.2(e)(i).

"**Conversion Election Notice**" means a notice in the form attached hereto as Exhibit H.

"**Conversion Price**" means $6.21, provided that in the event that on or after the Closing Date, a stock split, stock combination, reclassification, payment of stock dividend, recapitalization or other similar transaction of such character that the shares of Common Stock shall be changed into or become exchangeable for a larger or smaller number of shares is consummated (each, a "**Stock Event**"), the Conversion Price shall be proportionately increased or decreased as necessary to reflect the proportionate change in shares of Common Stock issued and outstanding as a result of such Stock Event.

"**Conversion Shares**" has the meaning set forth in Section 2.2(e)(i).

"**Copyrights**" means any and all copyright rights, copyright applications, copyright registrations and like protections of a Person in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

"**Default**" means any circumstance, event or condition that, with the giving of any notice, the passage of time, or both, would be an Event of Default.

"**Default Rate**" has the meaning set forth in Section 2.3(b).

"**Deposit Account**" means any "deposit account" as defined in the Code with such additions to such term as may hereafter be made, and includes any checking account, savings account or certificate of deposit.

"**Designated Holder**" means a Lender or any Affiliate designated by a Lender in the Conversion Election Notice or with respect to any exercise right to invest pursuant to Section 6.13 hereto, provided that the Designated Holder for K2 HealthVentures LLC and any successor, transferee or assignee thereof as Lender, which is an Affiliate of K2 HealthVentures LLC, shall be K2 HealthVentures Equity Trust LLC.

"**Dollars**," "**dollars**" or use of the sign "**$**" means only lawful money of the United States and not any other currency, regardless of whether that currency uses the "$" sign to denote its currency or may be readily converted into lawful money of the United States.

"Domestic Subsidiary" means any Subsidiary that is organized under the laws of the United States or any state or territory thereof.

"**Equipment**" means all "equipment" as defined in the Code with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

"**Equity Interests**" means, with respect to any Person, any of the shares of capital stock of (or other ownership, membership or profit interests in) such Person, any of the warrants, options or other rights for the purchase or acquisition from such Person of shares of capital stock of (or other ownership, membership or profit interests in) such Person, any of the securities convertible into or exchangeable for shares of capital stock of (or other ownership, membership or profit interests in) such Person or warrants, rights or options for the purchase or acquisition from such Person of such shares (or such other interests), and any of the other ownership, membership or profit interests in such Person (including partnership, member or trust interests therein), whether voting or nonvoting, and whether or not such shares, warrants, options, rights or other interests are outstanding on any date of determination.

"**ERISA**" means the Employee Retirement Income Security Act of 1974, and its regulations.

"**Event of Default**" has the meaning set forth in Section 8.

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

"**Excluded Locations**" means the following locations where Collateral may be located from time to time: (a) locations where mobile office equipment (e.g. laptops, mobile phones and the like) may be located with employees in the Ordinary Course of Business, (b) locations where promotional, marketing and advertising materials may be located, (c) locations of items in transit, (d) locations operated by third parties where Pre-Clinical and Clinical Trial Supplies are located, and (e) other locations where, in the aggregate for all such locations, less than $[**] of Collateral is located.

"**Excluded Account**" means any Collateral Account (a) used exclusively for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of such Loan Party's employees, provided that the aggregate balance in such accounts does not exceed the reasonable estimates of the amount necessary to fund the next 2 payroll periods, (b) used exclusively to maintain cash collateral subject to a Permitted Lien, (c) used exclusively to maintain funds in trust for another Person, in each case, which are identified on the Perfection Certificate (or from time to time, with respect to such Collateral Accounts opened after the Closing Date, on the then-next Compliance Certificate delivered) and (d) or such other Collateral Accounts as may be approved for exclusion on a case by case basis by Administrative Agent.

"**Excluded Assets**" has the meaning set forth on Exhibit B hereto.

"**FDA**" means the U.S. Food and Drug Administration or any successor thereto.

"**Federal Reserve Board**" means the Board of Governors of the Federal Reserve System, or any successor thereto.

"**Fee Letter**" means that certain letter agreement, dated as of the date hereof, by and among Borrowers, Administrative Agent and Lenders, as amended, restated, supplemented or otherwise modified from time to time.

"**First Tranche Availability Period**" means the date commencing on the Closing Date and ending on (and inclusive of) March 31, 2023.

"**First Tranche Term Loan Commitment**" means, as to any Lender, the aggregate principal amount of First Tranche Term Loans committed to be made by such Lender, as set forth on Schedule 1 hereto.

"**First Tranche Term Loans**" has the meaning set forth in Section 2.2(a).

"**Foreign Subsidiary**" means any Subsidiary that is not a Domestic Subsidiary.

"**Fourth Tranche Term Loan**" has the meaning set forth in Section 2.2(a).

"**Fourth Tranche Term Loan Amount**" means, as to any Lender, the aggregate principal amount of Fourth Tranche Term Loans which may be made by such Lender, subject to the terms of Section 2.2(a), as set forth on Schedule 1 hereto.

"**Funding Date**" means any date on which a Loan is made to or for the account of a Borrower which shall be a Business Day.

"**GAAP**" means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession, which are applicable to the circumstances as of the date of determination, provided, however, that if there occurs after the Closing Date any change in GAAP that affects in any respect the calculation of any covenant or threshold in this Agreement, Lenders and Borrower Representative shall negotiate in good faith amendments to the provisions of this Agreement that relate to the calculation of such covenant or threshold with the intent of having the respective positions of Lender and Borrowers after such change in GAAP conform as nearly as possible to their respective positions as of the Closing Date, and, until any such amendments have been agreed upon, such covenants and thresholds shall be calculated as if no such change in GAAP has occurred.

"**General Intangibles**" means all "general intangibles" as defined in the Code in effect on the Closing Date with such additions to such term as may hereafter be made, and includes without limitation, all Intellectual Property, claims, income and other tax refunds, security and other deposits, payment intangibles, contract rights, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

"**Governmental Approval**" means any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority, including for the testing, manufacturing, marketing and sales of its Product.

"**Governmental Authority**" means any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

"**Guarantor**" has the meaning set forth in the preamble.

"**Guaranty**" means any guarantee of all or any part of the Obligations, including pursuant to Section 13 hereof, as the same may from time to time be amended, restated, modified or otherwise supplemented.

"**Indebtedness**" means, without duplication, (a) indebtedness for borrowed money or the deferred price of property or services, (b) any reimbursement and other obligations for surety bonds and letters of credit, (c) obligations evidenced by notes, bonds, debentures or similar instruments, (d) capital lease obligations, (e) Contingent Obligations, and (f) obligations in respect of Royalty and Milestone Payments.

"**Indemnified Person**" has the meaning set forth in Section 12.3.

"**Insolvency Proceeding**" means any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"**Intellectual Property**" means, with respect to any Loan Party (or, as applicable, any of its Subsidiaries), all of such Loan Party's or Subsidiary's right, title, and interest in and to the following:

(a) its Copyrights, Trademarks and Patents;

(b) any and all trade secrets and trade secret rights, including, without limitation, any rights to unpatented inventions, know-how, operating manuals;

(c) any and all source code;

(d) any and all design rights which may be available to such Person;

(e) any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and

(f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents.

"**Inventory**" means all "inventory" as defined in the Code in effect on the Closing Date with such additions to such term as may hereafter be made.

"**Investment**" means any beneficial ownership interest in any Person (including stock, partnership interest or other securities or Equity Interests), and any loan, advance or capital contribution to any Person, or the acquisition of all or substantially all of the assets or properties of another Person.

"**Key Person**" means the Chief Executive Officer, President and Chief Financial Officer of Borrower Representative.

"**Lender**" has the meaning set forth in the preamble.

"**Lender Expenses**" means all reasonable and documented audit fees and expenses, costs, and expenses (including reasonable and documented out-of-pocket attorneys' fees and expenses) of Administrative Agent or Lenders for preparing, amending, negotiating, administering, defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred with respect to a Loan Party in connection with this Agreement, including all reasonable and documented out-of-pocket costs, expenses and other amounts required to be paid by any Lender or the Administrative Agent in accordance with the Collateral Trust Agreement.

"**Lien**" means a claim, mortgage, deed of trust, levy, charge, pledge, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

"**Loan Documents**" means, collectively, this Agreement and any schedules, exhibits, certificates, notices, and any other documents related to this Agreement, the Fee Letter, the Collateral Trust Agreement, the Automatic Payment Authorization, the Account Control Agreements, the Collateral Access Agreements, any Subordination Agreement, any note, or notes or guaranties executed by a Loan Party, and any other present or future agreement by a Loan Party with or for the benefit of Collateral Trustee or any Lender in connection with this Agreement, all as amended, modified, supplemented, extended or restated from time to time.

"**Loan Party**" or "**Loan Parties**" has the meaning set forth in the preamble.

"**Loan Request**" means a request for a Loan pursuant to this Agreement in substantially the form attached hereto as Exhibit C.

"**Loans**" means, collectively, the Term Loans, and any other loan from time to time made under this Agreement, and "**Loan**" means any of the foregoing.

"**Margin Stock**" has the meaning set forth in Section 5.11(b).

"**Material Adverse Effect**" means (a) a material impairment in the perfection or priority of the Lien in the Collateral pursuant to the Loan Documents to which the Loan Parties are a party or in the value of the Collateral; or (b) a material adverse effect upon: (i) the business, operations, properties, assets or financial condition of the Loan Parties taken as a whole; (ii) the prospect of repayment of any part of the Obligations when due; or (iii) the ability to enforce any rights or remedies with respect to any Obligations, in each case, as reasonably determined by Administrative Agent.

"**Maximum Rate**" has the meaning set forth in Section 2.3(d) hereof.

"**MSC Investment Conditions**" means that, as of any date of determination, Borrowers, in the aggregate, maintain Unrestricted Cash in an amount equal to or greater than the lesser of (i) 120% of the aggregate outstanding Obligations, or (ii) 100% of the consolidated cash of Borrowers and their Subsidiaries.

"**MSC Subsidiary**" means any wholly-owned Subsidiary incorporated in the Commonwealth of Massachusetts or the State of Delaware for the purpose of holding Investments as a Massachusetts security corporation under 830 CMR 63.38B.1 of the Massachusetts tax code and applicable regulations (as the same may be amended, modified or replaced from time to time), and identified as such to Administrative Agent from time to time.

"**Obligations**" means all of Borrowers' and each other Loan Party's obligations to pay the Loans when due, including principal, interest, fees, Lender Expenses, the fees pursuant to the Fee Letter and any other amounts due to be paid by a Loan Party in connection with this Agreement or the other Loan Documents to which it is a party, and each Loan Party's obligation to perform its duties under the Loan Documents, and any other debts, liabilities and other amounts any Loan Party owes to any Secured Party at any time, whether under the Loan Documents or otherwise, including, without limitation, interest or Lender Expenses accruing after Insolvency Proceedings begin (whether or not allowed), and any debts, liabilities, or obligations of any Loan Party assigned to any Lender, which shall be treated as secured or administrative expenses in the Insolvency Proceedings to the extent permitted by applicable law.

"**OFAC**" has the meaning set forth in Section 5.11(c).

"**Operating Documents**" means, for any Person, such Person's formation documents, as certified by the Secretary of State (or equivalent agency) of such Person's jurisdiction of formation, organization or incorporation on a date that is no earlier than thirty (30) days prior to the Closing Date and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement or operating agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments, restatements and modifications thereto.

"**Ordinary Course of Business**" means, in respect of any transaction involving any Person, the ordinary course of such Person's business as conducted by any such Person in accordance with (a) the usual and customary customs and practices in the kind of business in which such Person is engaged, and (b) the past practice and operations of such Person, and in each case, undertaken by such Person in good faith and not for purposes of evading any covenant or restriction in any Loan Document.

"**Patents**" means all patents, patent applications and like protections of a Person including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same and all rights therein provided by international treaties or conventions.

"**Payment Date**" means the first calendar day of each month.

"**Perfection Certificate**" has the meaning set forth in Section 5.1.

"**Permitted Indebtedness**" means:

(a) each Loan Party's Indebtedness under this Agreement and the other Loan Documents;

(b) Indebtedness existing on the Closing Date and shown on the Perfection Certificate, provided that (i) to the extent the amount of such type of Indebtedness is limited pursuant to a clause of this defined term, amounts existing on the Closing Date or any permitted refinancing thereof shall count towards such limit, (ii) to the extent such Indebtedness is required to be repaid on the Closing Date, in accordance with a payoff letter delivered as a condition to closing, such Indebtedness shall not constitute Permitted Indebtedness after such repayment, and (iii) to the extent any such Indebtedness is required to be made subject to the terms of a Subordination Agreement as of the Closing Date or thereafter, pursuant to the terms of this Agreement, such Indebtedness shall be permitted only to the extent the applicable Subordination Agreement, as may be amended, restated or replaced, is in effect;

(c) Subordinated Debt;

(d) unsecured Indebtedness to trade creditors incurred in the Ordinary Course of Business;

(e) Indebtedness incurred as a result of endorsing negotiable instruments received in the Ordinary Course of Business;

(f) Indebtedness secured by Liens permitted under clauses (c) or (h) of the definition of "Permitted Liens" hereunder;

(g) Indebtedness consisting of Royalty and Milestone Payments as set forth on Schedule 4, as the same may from time to time be updated, subject to Administrative Agent's review and approval in its reasonable discretion;

(h) intercompany Indebtedness permitted as a Permitted Investment;

(i) [Reserved];

(j) Indebtedness in respect of (i) surety and appeal bonds, performance bonds, bid bonds, appeal bonds, completion guarantees and similar obligations and (ii) customary indemnification obligations to purchasers in connection with Transfers not prohibited by Section 7.1;

(k) reimbursement obligations arising from letters of credit issued by financial institutions in the Ordinary Course of Business, on behalf of Borrower; provided that the aggregate amount of such obligations shall not exceed $[**];

(l) Indebtedness relating to insurance premium financing arrangements in the Ordinary Course of Business in an aggregate amount at any time not to exceed the premiums owed under such policy;

(m) Indebtedness incurred in connection with cash management services, including corporate credit cards, incurred in the Ordinary Course of Business, in an aggregate amount not to exceed $[**] at any time;

(n) workers' compensation claims, payment obligations in connection with health, disability or other types of social security benefits, unemployment or other insurance obligations, reclamation and statutory obligations, in each case incurred in the Ordinary Course of Business;

(o) hedging arrangements with financial institutions entered into in the Ordinary Course of Business and not for speculative purposes;

(p) Indebtedness of any Subsidiary (that is not a Loan Party) to Borrower or any Guarantor in an aggregate principal amount not to exceed $[**] or any other Subsidiary and Contingent Obligations of any Subsidiary (that is not a Loan Party) with respect to obligations of any other Subsidiary (provided that the primary obligations are not prohibited hereby);

(q) Indebtedness not otherwise permitted pursuant to this defined term, in an aggregate amount outstanding not to exceed $[**]; and

(r) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness described in clause (b) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon a Borrower or any of its Subsidiaries, as the case may be.

"**Permitted Investments**" means:

(a) Investments (including, without limitation, Subsidiaries) existing on the Closing Date and shown on the Perfection Certificate;

(b) (i) Investments consisting of Cash Equivalents, and (ii) any Investments permitted by Borrower Representative's investment policy, as amended from time to time, provided that such investment policy (and any such amendment thereto) has been approved in writing by Lenders;

(c) Investments consisting of repurchases of Borrower Representative's Equity Interests from current and former employees, officers and directors of Borrower Representative to the extent permitted under Section 7.7;

(d) (i) Investments among Loan Parties, (ii) Investments among Subsidiaries that are not Loan Parties, (iii) Investments by Subsidiaries which are not Loan Parties in Loan Parties, (iv) Investments in Subsidiaries which are not Loan Parties, in the case of this clause (iv) in an aggregate amount per fiscal year not to exceed $[**], provided that for purposes of the foregoing limitation, amounts paid under transfer pricing arrangements or cost plus agreements shall be disregarded, as long as the effect thereof is to fund operating expenses of the non-Loan Party Subsidiary for prior or up to the then-next quarterly periods;

(e) Investments not to exceed $[**] outstanding in the aggregate at any time consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the Ordinary Course of Business, and (ii) loans not involving the net transfer of cash proceeds to employees, officers or directors relating to the purchase of Equity Interests of Borrower Representative pursuant to employee stock purchase plans or other similar agreements approved by Borrower Representative's Board;

(f) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the Ordinary Course of Business;

(g) Investments consisting of Deposit Accounts in which Collateral Trustee has a perfected security interest, to the extent required by Section 6.6 hereof;

(h) Investments in any MSC Subsidiary, so long as no Event of Default has occurred and is continuing at the time of such Investment or would result immediately from such Investment, provided that the MSC Investment Conditions are satisfied;

(i) Investments not otherwise permitted pursuant to this defined term, in an aggregate amount not to exceed $[**] per fiscal year;

(j) Investments consisting of accounts receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the Ordinary Course of Business; provided that this subsection (j) shall not apply to Investments of a Loan Party in any Subsidiary;

(k) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the Ordinary Course of Business;

(l) Investments consisting of Permitted Transfers;

(m) Investments in joint ventures or strategic alliances in the Ordinary Course of Business consisting of the licensing of Intellectual Property as permitted hereunder, and the providing of technical support; provided that any cash Investments by Borrowers or Subsidiaries, collectively, for all Investments pursuant to this clause (m) do not exceed $[**] in the aggregate in any fiscal year;

(n) the formation or acquisition of Subsidiaries after the Closing Date, subject to compliance with Section 6.10;

(o) Investments consisting of the conversion or settlement of any convertible securities of any Loan Party or any of their Subsidiaries or otherwise in exchange therefor (not involving the payment of cash other than nominal payments for fractional shares); and

(p) Investments consisting of pre-paid expenses, negotiable instruments held for collection or deposit, security deposits with utilities, landlords to secure office space, and other like Persons, and deposits in connection with workers' compensation and similar deposits, in each case made in the Ordinary Course of Business.

"**Permitted Liens**" means:

(a) Liens arising under this Agreement and the other Loan Documents;

(b) Liens existing on the Closing Date and shown on the Perfection Certificate, provided that (i) to the extent the amount of Indebtedness secured by such type of Lien is limited pursuant to a clause of this defined term, amounts existing on the Closing Date or any permitted refinancing thereof shall count towards such limit, (ii) to the extent the Indebtedness secured by such a Lien is required to be repaid on the Closing Date, in accordance with a payoff letter delivered as a condition to closing, such Lien shall not constitute Permitted Lien after the repayment of the associated Indebtedness, and (iii) to the extent any such Lien is required to be made subject to the terms of a Subordination Agreement as of the Closing Date or thereafter, pursuant to the terms of this Agreement, such Lien shall be permitted only to the extent the applicable Subordination Agreement is in effect;

(c) purchase money Liens (i) on Equipment acquired or held by a Loan Party or Subsidiary thereof incurred for financing the acquisition of the Equipment, or (ii) existing on Equipment when acquired, if the Lien is confined to the property and improvements and the proceeds of the Equipment, in each case, securing no more than $[**] in the aggregate amount outstanding;

(d) Liens for taxes, fees, assessments or other government charges or levies, either (i) not yet delinquent or (ii) being contested in good faith and for which such Loan Party or Subsidiary maintains adequate reserves on its books;

(e) leases or subleases of real property granted in the Ordinary Course of Business of such Person, and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the Ordinary Course of Business of such Person;

(f) Liens of materialmen, mechanics, carriers, warehousemen, landlords, suppliers, or other Persons that are possessory in nature arising in the Ordinary Course of Business so long as such Liens attach only to Inventory, secure liabilities and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(g) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the Ordinary Course of Business (other than Liens imposed by ERISA);

(h) deposits or pledges of cash to secure bids, tenders, contracts (other than contracts for the payment of money) surety and appeal bonds and other obligations of a like nature arising in the Ordinary Course of Business, in an aggregate amount not exceeding $[**] at any time;

(i) Liens arising from attachments or judgments, orders, or decrees in circumstances not constituting an Event of Default;

(j) Liens in favor of other financial institutions arising in connection with a Deposit Account or Securities Account of a Loan Party or Subsidiary thereof held at such institutions, provided that Collateral Trustee has a perfected security interest in such Deposit Account, or the securities maintained therein and Collateral Trustee has received an Account Control Agreement with respect thereto to the extent required pursuant to Section 6.6 of this Agreement;

(k) licenses of Intellectual Property which constitute a Permitted Transfer;

(l) Liens in favor of customs and revenue authorities in the Ordinary Course of Business, to secure payment of customs duties in connection with the importation of goods; provided, however, the aggregate amount of such payments so secured at any given time shall not exceed $[**] and such Liens shall be restricted to the goods imported in connection with which such payments;

(m) deposits to secure the performance of leases entered into in the Ordinary Course of Business and not representing an obligation for borrowed money so long as (i) each such deposit is made at the commencement of a lease or its renewal when there is no underlying default under such lease and (ii) the aggregate amount of all such outstanding deposits does not exceed $[**];

(n) Liens granted in the Ordinary Course of Business on the unearned portion of the premium and on the proceeds of the financed insurance in connection with the financing of insurance premiums securing Indebtedness permitted by clause (l) of the definition of "Permitted Indebtedness";

(o) Liens granted in the Ordinary Course of Business in connection with hedging arrangements permitted by clause (o) of the definition of "Permitted Indebtedness";

(p) Liens solely on cash collateral maintained in a separate Collateral Account identified as such to Administrative Agent pledged to secure Indebtedness in respect of corporate credit cards permitted pursuant to clause (m) of the definition of "Permitted Indebtedness";

(q) Liens on cash collateral in an amount not to exceed [**]% of the total permitted Indebtedness in respect of letters of credit, maintained in a separate Collateral Account identified as such to Administrative Agent to secure letters of credit;

(r) easements, reservations, rights of way, restrictions and other similar encumbrances on real property imposed by applicable laws and encumbrances consisting of zoning or building restrictions, easements, licenses, restrictions on the use of property, minor imperfections or irregularities in title thereto and other similar Liens affecting any Loan Party's owned real property which, in the aggregate, are not material, and which do not in any case materially detract from the value of the property subject thereto or interfere with the ordinary conduct of the business of any of the Loan Parties;

(s) Liens arising from the filing of any precautionary financing statement on operating leases covering the leased property, to the extent such operating leases are permitted under this Agreement;

(t) other Liens securing Indebtedness in an amount not to exceed $[**], to the extent incurred in the Ordinary Course of Business and limited to specific assets that are the subject of or related to the agreement or other arrangement giving rise to such Lien; and

(u) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in clause (b), but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase.

"**Permitted Locations**" means, collectively, the following locations where Collateral may be located from time to time: (a) locations identified in the Perfection Certificate, (b) locations with respect to which Borrowers have complied with the requirements of Section 6.11, and (c) the Excluded Locations.

"**Permitted Transfers**" means

(a) Transfers or sales of Inventory by a Loan Party or any of its Subsidiaries in the Ordinary Course of Business;

(b) non-exclusive licenses and similar arrangements for the use of Intellectual Property of a Loan Party or any of its Subsidiaries in the Ordinary Course of Business, and licenses that could not result in a legal transfer of title of the licensed property but that may be exclusive with respect to territory only as to specific geographical regions outside of the United States and/or Europe, and so long as after giving effect to such license, Borrowers and their Subsidiaries retain sufficient rights to use the subject Intellectual Property so as to enable them to continue to conduct their business in the Ordinary Course of Business and without material impairment of the value of the subject Intellectual Property;

(c) dispositions of worn-out, obsolete or surplus Equipment or Equipment that is otherwise no longer used or useful in the business, in each case, in the Ordinary Course of Business that is, in the reasonable judgment of such Loan Party or applicable Subsidiary, no longer economically practicable to maintain or useful;

(d) Transfers consisting of the granting of Permitted Liens and the making of Permitted Investments;

(e) the use or transfer of money or Cash Equivalents for the payment of expenses in the Ordinary Course of Business and in a manner that is not prohibited by the Loan Documents;

(f) involuntary Dispositions and mandated destruction of such Pre-Clinical and Clinical Trial Supplies;

(g) the lapse, abandonment, cancellation or other disposition of Intellectual Property that is not material to any Loan Party's business or operations and in the good faith judgment of the Loan Parties, is no longer economically practicable or commercially desirable to maintain or useful in the conduct of the business of the Loan Parties;

(h) Transfers of Accounts in connection with the compromise, settlement or collection thereof;

(i) Transfers resulting from casualty events, subject to Section 6.5;

(j) (i) Transfers among Loan Parties, (ii) Transfers among Subsidiaries that are not Loan Parties, (iii) Transfers from Subsidiaries that are not Loan Parties to Loan Parties and (iv) Transfers to Subsidiaries which are not Loan Parties in an amount that, together with Permitted Investments to such Subsidiaries, does not exceed the limit specified for such Investments in clause (d) of the defined term "Permitted Investments"; and

(k) other Transfers (i) of assets having a fair market value of not more than $[**] per fiscal year of Borrower Representative or (ii) where (A) the consideration paid in connection therewith shall be cash or Cash Equivalents paid contemporaneously with consummation of the transaction and shall be in an amount not less than the fair market value of the property disposed of, (2) no Event of Default has occurred and is continuing both immediately prior to and after giving effect to such Disposition, and (3) the fair market value

of all of the assets sold or otherwise disposed of by the Loan Parties and their Subsidiaries in all such transactions occurring during the term of this Agreement in reliance on this clause (k)(ii) shall not exceed $[**] during any fiscal year of the Borrower.

"**Person**" means any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"**Pre-Clinical and Clinical Trial Supplies**" means materials for use in Borrowers' product(s), other raw materials, finished product and concomitant materials; in each case, intended for use and used in Borrowers' and their Subsidiaries' pre-clinical and clinical trials.

"**Prime Rate**" means, at any time, the rate of interest noted in The Wall Street Journal, Money Rates section, as the "Prime Rate". In the event that The Wall Street Journal quotes more than one rate, or a range of rates, as the Prime Rate, then the Prime Rate shall mean the average of the quoted rates. In the event that The Wall Street Journal ceases to publish a Prime Rate, then the Prime Rate shall be the average of the three (3) largest U.S. money center commercial banks, as determined by Lenders.

"**Pro Rata Share**" means, with respect to any Lender and as of any date of determination, the percentage obtained by dividing (i) the aggregate Commitments of such Lender by (ii) the aggregate Commitments of all Lenders provided, that to the extent any Commitment has expired or been terminated, with respect to such Commitment, the applicable outstanding balance of the Loans made pursuant to such Commitment held by such Lender and all the Lenders, respectively, shall be used in lieu of the amount of such Commitment, provided further, that with respect to all matters relating to a particular Loan, the Commitment or outstanding balance of the applicable Loan, shall be used in lieu of the aggregate Commitment or outstanding balance of all Loans in the foregoing calculation. "Ratable" and related terms shall mean, determined by reference to such Lender's Pro Rata Share.

"**Products**" means any products manufactured, sold, developed, tested or marketed by a Loan Party or any of its Subsidiaries.

"**Qualified Financing**" means any offering of common stock, convertible preferred stock or other equity securities (or instruments exercisable for, or convertible into, shares of common stock, convertible preferred stock or other equity securities) of Borrower Representative consummated after the Closing Date for the principal purpose of raising capital that is broadly marketed or offered to multiple investors. For the avoidance of doubt, the issuance of securities (i) under any equity incentive plan of the Borrower Representative, (ii) under any at-the-market offering program of the Borrower Representative or (iii) by the Borrower Representative as consideration for mergers, acquisitions, other business combinations, joint ventures or strategic alliances which are not used primarily for capital raising purposes shall not constitute a Qualified Financing.

"**Registered Organization**" means any "registered organization" as defined in the Code with such additions to such term as may hereafter be made.

"**Required Lenders**" means, as of any date of determination, Lenders holding more than 50% of the sum of aggregate principal amount of all Loans outstanding and the aggregate amount of all unfunded commitments to make Loans, at such date of determination.

"**Requirement of Law**" means as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

"**Responsible Officer**" means with respect to any Person, any of the Chief Executive Officer, President or Chief Financial Officer of such Person. Unless the context otherwise requires, each reference to a Responsible Officer herein shall be a reference to a Responsible Officer of Borrower Representative.

"**Restricted License**" means any material in-bound license or other similar material agreement (other than ordinary course customer contracts, off the shelf software licenses, licenses that are commercially available to the public, and open source licenses) pursuant to which a Loan Party or Subsidiary is a licensee with respect to the licensing of Intellectual Property material to a Loan Party's business (a) that validly prohibits or otherwise restricts such Loan Party or Subsidiary from granting a security interest in its interest in such license or agreement or in any other property, or (b) for which a default under, or termination of which, could reasonably be expected to interfere with Collateral Trustee's right to sell any material portion of Collateral; provided that a license or other such agreement that permits the assignment of the applicable Loan Party's rights thereunder in connection with a sale of all or substantially all the assets of such Loan Party shall not constitute a "Restricted License". For the avoidance of doubt, restrictions on assignment shall not in and of itself cause a license to be deemed a Restricted Licenses as long as such restriction on assignment is not reasonably expected to interfere with Collateral Trustee's ability to sell material assets of the Company (other than the rights under the license).

"**Royalty and Milestone Payments**" means milestone payments, royalty payments, upfront payments and other similar payments pursuant to research and development, licensing, collaboration or development agreements or similar agreements.

"**SEC**" has the meaning set forth in Section 2.2(e)(iii).

"**Second Tranche Availability Period**" means the period commencing on the later of (i) April 1, 2023 and (ii) the date the Second Tranche Milestone is achieved, and ending on (and inclusive of) June 30, 2023.

"**Second Tranche Milestone**" means that Borrowers shall have [**].

"**Second Tranche Term Loan**" has the meaning set forth in Section 2.2(a).

"**Second Tranche Term Loan Commitment**" means, as to any Lender, the aggregate principal amount of Second Tranche Term Loans committed to be made by such Lender, as set forth on Schedule 1 hereto.

"**Secured Party**" means (i) any of Collateral Trustee, Administrative Agent or either of their successor and assigns, and (ii) Lenders.

"**Securities Account**" means any "securities account" as defined in the Code with such additions to such term as may hereafter be made.

"**Securities Act**" means the Securities Act of 1933, as amended.

"**Security Instrument**" means any security agreement, assignment, pledge agreement, financing or other similar statement or notice, continuation statement, other agreement or instrument, or any amendment or supplement to any thereof, creating, governing or providing for, evidencing or perfecting any security interest or Lien.

"**Shares**" means all of the issued and outstanding Equity Interests owned or held of record by Borrower or other Loan Party in each of its Subsidiaries.

"**Subordinated Debt**" means Indebtedness on terms and to holders satisfactory to Administrative Agent and incurred by a Loan Party that is subordinated in writing to all of the Obligations, pursuant to a Subordination Agreement.

"**Subordination Agreement**" means any subordination agreement in form and substance satisfactory to Administrative Agent entered into from time to time with respect to Subordinated Debt.

"**Subsidiary**" means, with respect to any Person, any corporation, partnership, limited liability company or joint venture in which (i) any general partnership interest or (ii) more than fifty percent (50%) of the stock, limited liability company interest, joint venture interest or other Equity Interest which by the terms thereof has the ordinary voting power to elect the Board of that Person, at the time as of which any determination is being made, is owned or

controlled by such Person, directly or indirectly. Unless the context otherwise requires, each reference to a Subsidiary herein shall be a reference to a Subsidiary of Borrower Representative.

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

"**Termination Date**" means the date that the Obligations shall have been paid in full in cash, and any commitment of a Lender to extend credit to a Borrower shall have been terminated.

"**Term Loan**" and "**Term Loans**" each, have the meaning set forth in Section 2.2 hereof.

"**Term Loan Maturity Date**" means August 1, 2026.

"**Third Tranche Availability Period**" means the period commencing on the later of (i) July 1, 2023 and (ii) the date the Third Tranche Milestone is achieved, and ending on (and inclusive of) December 15, 2023.

"**Third Tranche Milestone**" means the achievement of each of the following conditions, no later than the end date of the Third Tranche Availability Period:

(a) the Second Tranche Milestone shall have been achieved,

(b) a Borrower shall have [**], and

(c) Borrowers shall have received net cash proceeds (not including proceeds from conversion or cancellation of Indebtedness) of at least $[**] from the issuance of Equity Interests or from upfront and milestone payments from licensing or collaboration transactions entered into after the Closing Date.

"**Third Tranche Term Loan**" has the meaning set forth in Section 2.2(a).

"**Third Tranche Term Loan Commitment**" means, as to any Lender, the aggregate principal amount of Third Tranche Term Loans committed to be made by such Lender, as set forth on Schedule 1 hereto, subject to the adjustment as set forth in Section 2.2(a)(ii).

"**Trademarks**" means any trademark and servicemark rights of a Person, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business connected with and symbolized by such trademarks.

"**Transfer**" means defined in Section 7.1.

"**Unrestricted Cash**" means, as of any date of determination, the aggregate amount of unrestricted cash held by Borrowers in Collateral Accounts subject to an Account Control Agreement in favor of Collateral Trustee.

"**Voting Stock**" means, with respect to any Person, all classes of Equity Interests issued by such Person the holders of which are ordinarily, in the absence of contingencies, entitled to vote for the election of directors or managers (or Persons performing similar functions) of such Person, even though the right so to vote has been suspended by the happening of such a contingency.

SCHEDULE 1
COMMITMENTS

LENDER	FIRST TRANCHE TERM LOAN COMMITMENT	SECOND TRANCHE TERM LOAN COMMITMENT[1]	THIRD TRANCHE TERM LOAN COMMITMENT	FOURTH TRANCHE TERM LOAN AMOUNT[2]	TOTAL COMMITMENTS
K2 HEALTHVENTURES LLC	$25,000,000	$7,500,000	$12,500,000	$25,000,000	$70,000,000

[1] Unused amounts under the Second Tranche Term Loan Commitment may be carried forward to increase the Third Tranche Term Loan Commitment; See Section 2.2(a).

[2] Subject to discretionary approval by Lenders

Exhibit 10.2

Certain identified information has been marked in the exhibit because it is both (i) not material and (ii) would likely cause competitive harm to the Company, if publicly disclosed.
Double asterisks denote omissions.

INOZYME PHARMA, INC. CONFIDENTIAL

YALE UNIVERSITY

CORPORATE SPONSORED RESEARCH AGREEMENT

This RESEARCH AGREEMENT (this "**Agreement**") is entered into as of January 6, 2017 (the "**Effective Date**"), by and between **Yale University**, a non-profit corporation organized and existing under and by virtue of a special charter granted by the General Assembly of the Colony and State of Connecticut (the "**University**"), and **Inozyme Pharma, LLC**, a Delaware limited liability company, having its principal offices at 240 Bluff View Drive, Guilford, Connecticut 06347 (the "**Sponsor**").

W I T N E S S E T H :

WHEREAS, in pursuit of its educational purposes, which include research and training, the University undertakes scholarly, research, and experimental activities in a variety of academic disciplines including the biology of the modulation of inorganic pyrophosphate and calcification by ectonucleotide pyrophosphatase/phosphodiesterases ("**ENPPs**"); and

WHEREAS, the Sponsor wishes to fund and desires that the University undertake a research program in the field of ENPPs, as described more fully in Exhibit A, attached hereto; and

WHEREAS, in furtherance of its scholarly, research, and instructional interests, the University is willing to undertake such research upon the terms and conditions set forth below; and

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, the parties hereto agree as follows:

1. Scope of Research. During the term of this Agreement, the University shall use reasonable efforts to perform the research program described in Exhibit A, attached hereto and incorporated herein (the "**Research**") using the levels of diligence, care and skill applicable to academic research typically conducted at the University. Notwithstanding the foregoing, the University makes no warranties or representations regarding its ability to achieve, nor shall it be bound hereby to accomplish, any particular research objective or results.

2. Personnel.

(a) The Research shall be performed by and under the supervision and direction of Dr. Demetrios Braddock, while employed by the University, who shall be designated the Principal Investigator (the "**Principal Investigator**") together with such additional personnel as may be assigned by the University and who are employees or agents of the University. If Dr. Braddock ceases to be available to act as Principal Investigator, the University shall give Sponsor written notice of any proposed change in the Principal Investigator, subject to Sponsor's approval, which the Sponsor may withhold in its sole discretion. In case a replacement Principal Investigator cannot be found who is acceptable to the University and the Sponsor, then the Sponsor may terminate the Term (as defined herein) on 30 days' notice to the University.

(b) It is understood that the University and the personnel performing the Research hereunder may be involved in other activities and projects which entail pre-existing commitments to other sponsors. The University will use reasonable efforts to avoid conflicts with the terms of this Agreement; however, it is agreed that unless provided to the contrary herein, this Agreement is subject to the University's pre-existing commitments to such other sponsors. [**].

3. University Policies and Procedures. All Research conducted hereunder shall be performed in accordance with established University policies and procedures, including, but not limited to, policies and procedures applicable to research involving human subjects, laboratory animals, and conflicts of interest.

4. Reimbursement of Costs.

(a) The Sponsor shall reimburse the University for all direct and indirect costs incurred by the University in connection with the Research, in accordance with the budget set forth as Exhibit B, in the amount of [**] Dollars ($[**]), attached hereto and which hereby is incorporated herein; provided, however, that the University may submit to Sponsor at any time, and Sponsor may at its discretion approve in writing, a revised budget or budgets requesting additional funds. Indirect costs shall be equal to the facilities and administration rate for indirect costs negotiated between the University and the Federal Government.

(b) The Sponsor shall make quarterly advance payments to the University to fund estimated reimbursable costs, as determined in advance by Yale in good faith, it being understood that Yale's estimate is not a guarantee of actual reimbursable costs for the applicable quarter. All checks shall be made payable to Yale University, shall include reference to the Principal Investigator, and shall be sent to:

Yale University
Office of Sponsored Projects
P.O. Box 1873
New Haven, CT 06508-1873
Contacting email: [**]

Or wired to:

[**]
Reference: Demetrios Braddock, Principal Investigator; [**]

5. Research Reports. The University shall furnish to Sponsor during the term of this Agreement periodic informal reports regarding the progress of the Research. A final report setting forth the significant research findings shall be prepared by the University and submitted to Sponsor within a reasonable period following the expiration of the Term or the effective date of early termination. The University shall hold such reports in confidence subject to its rights under Section 6. The Sponsor shall hold such reports in confidence pursuant to Section 7.

6. Publication.

(a) Part of the University's mission is to publish and disseminate research results developed under sponsored research projects. Consistent with this Agreement, University, the Principal Investigator and other University employees and/or students may disseminate or publish the results of the Research without prior approval by the Sponsor. The University shall provide the Sponsor with a copy of any proposed publication 45 days in advance of submission to third parties. The Sponsor shall determine whether any of its Confidential Information is included in the proposed publication. The Sponsor may reasonably require that any of its Confidential Information be removed from the proposed publication. The Sponsor may reasonably require that submission of the proposed publication to third parties and publication be W I delayed to permit the filing of patent applications. The Sponsor shall make such determinations within forty-five (45) days of receipt of the proposed publication. Submission of the proposed publication shall not be delayed more than ninety (90) days after receipt of the proposed publication by the Sponsor. The Sponsor at its election shall be entitled to receive an acknowledgment of its sponsorship of the Research in any such publication.

(b) The University shall have the final authority to determine the scope and content of any publications or presentations made by its students and employees in accordance with the limitations of this section.

7. Confidential Information.

(a) Confidential Information consists of information that has been reduced to writing and marked "Confidential," or, if disclosed orally, has been reduced to writing and marked "Confidential" within [**] of oral disclosure. Subject to the following exceptions, all Confidential Information of either party disclosed by or on behalf of it to the other party in connection with the Research hereunder will be treated by such other party as confidential throughout the term hereof or for [**] from the time of disclosure, whichever is longer. Each party will use reasonable efforts to safeguard the confidentiality of the other Party's Confidential Information, and will require its employees, agents, students and associates to adhere to such obligation of confidentiality. The following shall be exceptions to confidentiality:

(i) Information that is now in the public domain or subsequently enters the public domain through no fault of the receiving party;

(ii) Information that is presently known or becomes known to the receiving party from its own independent sources;

(iii) Information that the receiving party receives from any third party not under any obligation to keep such information confidential;

(iv) Information that is required to be disclosed by law.

(v) Information that is developed independently by persons who had no direct or indirect access to the information.

Neither party will use any Confidential Information of the other party provided under this Agreement for any purpose other than carrying out the Research and performing the parties' respective obligations under this Agreement.

(b) Neither party shall knowingly convey Confidential Information that is subject to federal export control restrictions under the EAR or the ITAR without first so disclosing to the other party and providing the other party the opportunity to decline receiving such information.

(c) Notwithstanding the foregoing in this Article 7, the Sponsor may disclose or release the results of the Research in connection with obtaining necessary regulatory approvals by a governmental authority for any ENPP product or ENPP product candidate of the Sponsor that is the subject of any license agreement between the University and the Sponsor pertaining, in part or in whole to such ENPP products or ENPP product candidates (a "**Regulatory Disclosure**") to the extent that such Regulatory Disclosure is necessary or appropriate in the Sponsor's judgment to obtain such approvals [**].

(d) [**] under this Section 7.

8. Intellectual Property.

(a) **Definition of Invention.** "**Invention**" shall mean any discovery, concept or idea, whether or not patentable, first conceived, discovered or first reduced to practice in whole or in part in performance of this Agreement. For purposes of this Agreement, "Invention" shall also include any software written, created, and utilized in performance of this Agreement.

(b) **Ownership of Inventions.** The University shall be entitled to ownership of any Invention first conceived or discovered solely by its employees, students, or agents in the performance of the Research ("**University Inventions**"). Sponsor shall own any Inventions first conceived or discovered solely by Sponsor's employees or agents ("**Sponsor Inventions**"). Inventions first conceived or discovered jointly by University employees, students or agents and Sponsor employees or agents in the performance of the Research shall be owned jointly ("**Joint Inventions**").

(c) **Disclosure and Right to Patent Inventions.** The University and Sponsor shall promptly disclose to each other in writing any Invention first conceived or discovered in the performance of the Research [**], and reported to the University's Office of Co-operative Research ("OCR") if a University Invention or Joint Invention or Sponsor's Intellectual Property Authority ("**IPA**") if the Invention is a Joint Invention (see Article 11 "Notices"), respectively. Such disclosure shall be considered Confidential Information. The University may elect to file and prosecute a patent application on any University Invention described in any such Invention disclosure. Should the University elect not to do so it will so notify the Sponsor and the Sponsor may at its own cost file and prosecute any such patent application on behalf of the University. The Sponsor shall have the sole right to file and prosecute a patent application on any Sponsor Invention and Joint Invention. If Sponsor elects not to file or to prosecute an application for a Joint Invention or if after filing such an application, Sponsor elects not to prosecute such application, then in any such case Sponsor shall notify the University promptly and, if University elects to file and prosecute such an application on a Joint Invention, Sponsor shall not grant rights to such Joint Invention to any third party without University's prior written permission. [**].

(d) **[**] & Option.**

i. [**], the Sponsor shall have [**]; *provided, however,* that [**].

ii. Option. For each University Invention or University's interest in a Joint Invention that, at the time the University makes written disclosure thereof to the Sponsor, [**], the Sponsor will have the option, for a period of three (3) months from the date of such disclosure to Sponsor, to elect to negotiate for a royalty-bearing, exclusive or non-exclusive, world-wide license to

University's rights in such Invention, including the right to sublicense, to make, have made, use, lease, sell, import and export products embodying or produced through the use of such Invention (the "**Option**"). In the event that the parties are unable to reach agreement on the terms of the license described above in this Section 8(d)(ii) for such Invention after three (3) months of good faith negotiations, and the parties therefore do not execute such license, the University may enter into an agreement relating to such Invention with any third party [**].

(e) **New License.** Any license to Sponsor as provided herein [**] will be granted by a separate license agreement signed by the parties which shall include at least the following terms and conditions: (a) an appropriate field of use; (b) mutually agreeable license fees and royalties; (c) mutually agreeable minimum royalties and/or other requirements of due diligence to develop and effectively commercialize the Invention; (d) reimbursement of University's cost of patent filing, prosecution and maintenance; (e) retention by University of a royalty-free right, sublicensable to its research partners, to use the Invention for teaching, research, or other educational or academic purposes; and (f) indemnification of the University.

(f) **Data.** University will retain ownership of the data arising out of the Research that University generates. Subject to other provisions of this Agreement, including those pertaining to Confidential Information and intellectual property, Sponsor will have access to the data and may use such data in connection with its internal research, subject to the applicable confidentiality provisions of this Agreement.

(g) **Tangible Research Property.** University shall retain ownership of property that is developed solely by University's employees, students, and agents, including, but not limited

to, prototypes, biogenic materials, samples, lab notebooks graphs, maps, drawings, and documents created or acquired under this Agreement (collectively, "**Tangible Research Property**"), except the University shall not retain ownership of any such Tangible Research Property that is a deliverable under this Agreement. [**]. University shall retain the right to use and distribute copies of all deliverables for educational and/or research purposes.

(h) **Copyrightable material.** As between University and Sponsor, University shall own all right, title and interest in and to any and all copyrights and copyrightable materials, including data and excluding software, that is created solely by University employees, students or agents in performance of this Agreement (collectively "**University Copyrights**"). As between University and Sponsor, Sponsor shall own all right, title and interest in and to any and all copyrights and copyrightable materials, including data, created solely by Sponsor employees or agents in performance of this Agreement (collectively, "**Sponsor Copyrights**"). As between University and Sponsor, University and Sponsor shall jointly own all right, title and interest in and to any and all copyrights and copyrightable materials, including data, created jointly by University employees, students, or agents and Sponsor employees or agents in performance of this Agreement (collectively, "**Joint Copyrights**"). University shall have the sole right to determine the disposition of University Copyrights, provided that Sponsor shall have option rights, in accordance with Section 8, in computer software and databases developed and delivered under the Statement of Work.

(i) **Background IP.** Neither party shall, by virtue of this Agreement, acquire rights to Inventions, copyrights, technical information, or tangible property concurrently created or acquired outside of this Agreement or that are owned by the other party prior to entering into this

Agreement, including any background technology required to practice Inventions. Such rights may or may not be available for licensing.

9. Ownership of Property. Title to any equipment purchased or created in the performance of the work funded under this Agreement shall vest in the University.

10. Term and Termination.

(a) This Agreement shall be effective for the term January 6, 2017 through January 6, 2020 (the "**Term**"), and may be extended thereafter by mutual agreement of the parties in writing; provided, however, that the termination of this Agreement shall not relieve either party of any obligation of such party accrued prior to such termination hereunder. In particular, the provisions hereof relating to rights in patents and ownership of property shall survive such termination.

(b) Notwithstanding the foregoing, this Agreement may be terminated by either party at any time upon 180 days advance written notice to the other party; *provided, however,* that Sponsor may also terminate this Agreement pursuant to Section 2(a). Upon receipt of notice of early termination by Sponsor, the University shall use reasonable efforts promptly to limit or terminate any outstanding commitments prior to the effective termination date. All allowable costs associated with such termination and up through the date of termination, shall be reimbursed by Sponsor, including non-cancelable commitments, such as, where applicable, committed salary and benefits [**] for personnel shall be non-cancelable commitments. In case of such termination, such amounts for such non-cancellable obligations shall be the limits of the Sponsor's liability for payments to the University hereunder.

(c) If Sponsor breaches its obligation of payment and fails to remedy such breach within thirty (30) days after receipt of notice in writing of such breach, then if such payment

breach is not remedied in such thirty (30) day period, the University may, in addition to any other remedies that the University may have at law or in equity, terminate this Agreement by sending written notice of termination to Sponsor. Termination for material breaches will be effective from the date of notice to Sponsor and does not affect any of University's other rights under this Agreement.

11. Notices. Any notices given under this Agreement shall be in writing and shall be deemed delivered when sent by first-class mail, postage prepaid, addressed to the parties as follows (or at such other addresses as the parties may notify each other in writing):

The University

Yale University
Office of Sponsored Projects (OSP)
25 Science Park - 3rd Floor
P.O. Box 208327
New Haven, CT 06520-88327
ATTN: [**]
Contract Manager

Yale University
Office of Cooperative Research
433 Temple Street
New Haven, CT 06511
ATTN: Managing Director

Sponsor

Inozyme Pharma, LLC
[**]
ATTN: Chief Executive Officer
[**]

[**]

provided, however, that Invention Disclosures shall be addressed to the parties as follows:

Yale University

Yale University Office of Cooperative Research
Attn: Director of Intellectual Property
433 Temple Street
New Haven, CT, 06511
P: [**]
E: [**]
CC: [**]

Sponsor IPA

[**]

12. **Use of Name.** Neither party shall employ or use the name of the other party in any promotional materials or advertising without the prior express written permission of the other party.

13. **Relationship of the Parties.** The relationship of Sponsor and the University established by this Agreement is that of independent contractors. Nothing in this Agreement shall be construed to create a relationship of employment or agency, nor shall either party's employees, servants, agents, or representatives be considered the employees, servants, agents, or representatives of the other. Nothing in this Agreement shall be construed to constitute the parties as partners or joint venturers, or allow either of the parties to create or assume any obligation on behalf of the other party.

14. **Indemnification.** The following indemnification obligation applies only to the extent of Sponsor's use of the Research or any University intellectual property or Research Results. The Sponsor shall therefore defend, indemnify and hold harmless University, the Principal Investigator, in his capacity as such, and any of University's faculty, students, employees, trustees, officers, affiliates, and agents (hereinafter referred to collectively as the if "**Indemnified Persons**") from and against any and all liability, claims, lawsuits, losses, damages, costs or expenses (including attorneys' fees), which the Indemnified Persons may hereafter incur, or be required to pay, unless determined with finality by a court of competent jurisdiction to result solely from an Indemnified Person's gross negligence or willful misconduct. University shall notify Sponsor upon learning of the institution or threatened institution of any such liability, claims, lawsuits, losses, damages, costs and expenses and University shall cooperate with Sponsor in every proper way in the defense or settlement thereof at Sponsor's

request and expense. Sponsor shall not dispose or settle any claim admitting liability on the part of the University without University's prior written consent.

15. NO WARRANTIES. THE UNIVERSITY MAKES NO WARRANTIES EITHER EXPRESS OR IMPLIED, AS TO ANY MATTER, INCLUDING, WITHOUT LIMITATION, THE RESULTS OF THE RESEARCH OR ANY INVENTIONS OR PRODUCT, TANGIBLE OR INTANGIBLE, CONCEIVED, DISCOVERED, OR DEVELOPED UNDER THIS AGREEMENT; OR THE OWNERSHIP, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH RESULTS OR OF ANY SUCH INVENTION OR PRODUCT. Neither party shall be liable for any indirect, consequential, lost profits, or other damages suffered by the other party or by any Licensee or any others resulting from the use of the research results, including any Invention, program, or product.

16. Export Controls. The University complies with all applicable laws and, regulations, including, where applicable, federal export control regulations. Many of the University employees (faculty and staff) and students are residents of foreign countries, including individuals who may work on this contract and/or have access to information conveyed to the University pursuant hereto. The University does not screen its employees or students based on nationality. In most situations, the University relies on the fundamental research exclusion from export control laws, but makes no representation as to whether Sponsor's conveyance of information or material to the University pursuant hereto would be covered by the export control laws. Each party agrees that before knowingly providing the other with export-controlled materials or data, it will provide written notice, including a description of the

materials or data, and, if known, the appropriate ECCN or MCL designation. No such materials or data shall knowingly be shared without prior written approval.

17. Force Majeure. The University shall not be liable for any failure to perform as required by this Agreement, to the extent such failure to perform is caused by any reason beyond the University's control, or by reason of any of the following: labor disturbances or disputes of any kind, accidents, failure of any required governmental approval, civil disorders, acts of aggression, acts of God, energy or other conservation measures, failure of utilities, mechanical breakdowns, material shortages, disease, or similar occurrences.

18. Assignment. Neither the University nor the Sponsor shall assign this Agreement to any other person without the prior written consent of the other, and any purported assignment without such consent shall be void [**].

19. Severability. In the event that a court of competent jurisdiction holds any provision of this Agreement to be invalid, such holding shall have no effect on the remaining provisions of this Agreement, and they shall continue in full force and effect.

20. Entire Agreement: Amendments. This Agreement and the Exhibits hereto contain the entire agreement between the parties. No amendments or modifications to this Agreement shall be effective unless made in writing and signed by authorized representatives of both parties.

21. Similar Research. Nothing in this Agreement shall be construed to limit the freedom of the University or of its researchers who are not participants under this Agreement, from engaging in similar research made under other grants, contracts or agreements with parties other than the Sponsor.

22. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Connecticut.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized officers or representatives.

YALE UNIVERSITY

By /s/ Jeffrey E. McGuinness

Title Associate Director

Date January 10, 2017

INOZYME PHARMA, LLC

By /s/ Axel Bolte

Title Chief Executive Officer

Date January 10, 2017

Read and acknowledged:

Principal Investigator

/s/ Demetrios Braddock
Demetrios Braddock, MD PhD

Date 01/09/2017

YALE UNIVERSITY

AMENDMENT NO. 1 TO

CORPORATE SPONSORED RESEARCH AGREEMENT

This AMENDMENT NO. 1 TO CORPORATE SPONSORED RESEARCH AGREEMENT, dated as of February 19, 2019 (this "**Amendment**"), by and between Yale University, a non-profit corporation organized and existing under and by virtue of a special charter granted by the General Assembly of the Colony and State of Connecticut (the "**University**"), and **Inozyme Pharma, Inc.**, a Delaware corporation, having its principal offices at 280 Summer Street, Floor 5, Boston, Massachusetts 02210 (the "**Sponsor**"), amends the RESEARCH AGREEMENT, entered into as of January 6, 2017 (the "**Agreement**"), by and between the University and the Sponsor.

W I T N E S S E T H:

WHEREAS, the Sponsor has funded a research program in the field of ENPPS.

WHEREAS, the Sponsor now wishes to continue to fund for an extended period (years 3-5) research programs in the field of expertise of the Principal Investigator, as described more fully in Exhibit A, attached to this Amendment; and

WHEREAS, the Sponsor wishes to allow for a broader research program and to amend the the budget for the research to take place during the Extended Term (as defined herein) as provided in the Agreement, and the University is willing to agree to such modifications and to undertake such research upon the terms and conditions set forth below and in the Agreement;

NOW, **THEREFORE**, in consideration of the premises and the mutual covenants herein contained, the parties hereto agree as follows:

1. Scope of Research. Upon the effectiveness of this Amendment, the Agreement is hereby amended such that during the Extended Term, the University shall use reasonable efforts to perform the research program described in **Exhibit A**, attached hereto and incorporated herein and incorporated in the Agreement to allow for expansion of the original Research, and otherwise in accordance with the terms and limitations provided in the Agreement. The Research provided for in this Amendment shall be in lieu of the portion of the Research for the third year of the Term as provided in the Agreement and shall also extend for the Extended Term. Any additional research requested by Sponsor that is supplemental to the research

selected by the Principal Investigator – relating to ENPPs within the amended program described in Exhibit A attached hereto, shall be the subject of a separately negotiated financial agreement between the University and Sponsor.

2. Reimbursement of Costs. The Agreement is hereby amended such that the Sponsor shall reimburse the University for all direct and indirect costs incurred by the University in connection with the Extended Research, in accordance with the budget set forth as **Exhibit B** hereto (the "**Extended Budget**"**),** in the amount of [**] Dollars ($[**]), attached hereto and which hereby is incorporated herein and incorporated in the Agreement. The first year of the Extended Budget shall be in lieu of $[**] of Total Grant Budget for Year 3 as shown in the budget attached as Exhibit B to the Agreement. Nothing in this Amendment modifies the Total Grant Budget shown for each of Year 1 and Year 2 in the Agreement. Once the parties execute and deliver this Amendment, the Total Grant Budget and Extended Budget under the Agreement, as amended by this Amendment, will be:

Year 1		$[**]
Year 2		$[**]
Year 3		$[**]
Year 4		$[**]
Year 5		$[**]
Total	$	2,409,708

Indirect costs for the Extended Budget shall be as shown in the Extended Budget.

3. Amendment to Term. The first sentence of Section 10(a) of the Agreement is hereby amended by deleting the words "January 6, 2020" and substituting in lieu thereof "December 31, 2021". The period of the New Research shall be referred to as the "Extended Term."

4. Defined Terms. Capitalized terms used in this Amendment and defined in the introductory paragraph of, or recitals to, this Amendment shall have the respective meanings provided therein. Capitalized terms used in this Amendment and not defined in this Amendment shall have the respective meanings provided in the Agreement except as otherwise expressly provided herein.

---

5. Effectiveness. This Amendment shall become effective as of the date first set forth above once this Amendment or counterparts hereof shall have been executed and delivered by University and the Sponsor.

6. Confirmation of Original Agreement.

(a) Except as amended by this Amendment, the Agreement shall remain in füll force and effect in accordance with its terms. From and after the date this Amendment becomes effective, any reference in the Agreement to the "Agreement", the "Research" or the "Term" shall be deemed a reference to the Agreement, as amended hereby, the Research, as defined hereby, or the Extended Term, as defined hereby, respectively.

7. Governing Law. This Amendment shall be governed by and construed in accordance with the laws of the State of Connecticut.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized officers or representatives.

YALE UNIVERSITY		**INOZYME PHARMA, INC.**	
By	/s/ James Cresswell	By	*/s/ Henric Bjarke*
Title	Sr. Contract Manager	Title	COO
Date:	February 19, 2019	Date:	2/22/2019

Read and acknowledged:

Principal Investigator

/s/ Demetrios Braddock

Demetrios Braddock, MD PhD

Date: February 19th, 2019

Exhibit B: Extended Budget

Amendment No. 1 to Corporate Sponsored Research Agreement

	Year 3	Year 4	Year 5	Total
Total Direct Costs	[**]	[**]	[**]	**[**]**
Indirect Rage	[**]	[**]	[**]	[**]
Total Indirect Costs	[**]	[**]	[**]	**[**]**
Total Grant Budget	**[**]**	**[**]**	**[**]**	**[**]**

Exhibit B: Budget

	Year 1	Year 2	Year 3	Total
YALE TOTAL DIRECT COSTS - Grant	**$ [**]**	**$ [**]**	**$ [**]**	**[**]**
Total Indirects	**$ [**]**	**$ [**]**	**$ [**]**	**[**]**
Total Grant Budget	**$ [**]**	**$ [**]**	**$ [**]**	**[**]**

Second Amendment to Corporate Sponsored Research Agreement

This Second Amendment (the "**Amendment**"), effective as of December 31, 2021 (the "**Amendment Effective Date**"), is entered into by and Inozyme Pharma, Inc., a Delaware corporation, having its principal offices at 321 Summer Street, Suite 400, Boston, MA 02210 ("**Inozyme**") and Yale University, a non-profit corporation organized and existing under and by virtue of a special charter granted by the General Assembly of the Colony and State of Connecticut, (**"Yale"**), and is made to that certain Research Agreement with an Effective Date of January 6, 2017, as amended by a First Amendment effective February 19, 2019 (the "**Agreement**").

Whereas, the Parties desire to modify the terms of the Agreement to extend the term thereof on a no-cost basis as set forth herein.

Now Therefore, the Parties agree as follows:

1.1 All capitalized terms used in this Amendment but not defined herein shall have the meaning given such term in the Agreement.

1.2 The first sentence of Section 10(a) of the Agreement is hereby amended by deleting the words "December 31, 2021" and substituting in lieu thereof "June 30, 2022."

1.3 Except as amended by this Amendment, the Agreement shall remain in full force and effect according to its terms.

1.4 This Amendment may be executed in two counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

In Witness Whereof, the Parties hereto have caused this Amendment to be executed by their respective duly authorized officers as of the Amendment Effective Date.

Yale University	**Inozyme Pharma, Inc.**
By: /s/ James Cresswell	By: /s/ Axel Bolte
Name: James Cresswell	Name: Axel Bolte
Title: Sr. Contract Manager	Title: CEO

THIRD AMENDMENT TO CORPORATE SPONSORED RESEARCH AGREEMENT

This Third Amendment (the "**Amendment**"), effective as of May 31, 2022 (the "**Third Amendment Effective Date**"), is entered into by and Inozyme Pharma, Inc., a Delaware corporation, having its principal offices at 321 Summer Street, Suite 400, Boston, MA 02210 ("**Sponsor**") and Yale University, a non-profit corporation organized and existing under and by virtue of a special charter granted by the General Assembly of the Colony and State of Connecticut, (**"University"**), and is made to that certain Research Agreement with an Effective Date of January 6, 2017, as amended by a First Amendment effective February 19, 2019 and a Second Amendment effective December 31, 2021 (the "**Agreement**").

Whereas, the Parties desire to modify the terms of the Agreement to extend the term and to provide additional funding as described herein in support of experiments associated with investigating [**].

Now Therefore, the Parties agree as follows:

(a) All capitalized terms used in this Amendment but not defined herein shall have the meaning given such term in the Agreement.

(b) Section 8(d)(ii) of the Agreement is hereby amended by addition of the following at the end of the Section:

(i)Notwithstanding the foregoing in this Section 8(d)(ii), Inventions that are: (i) related to (a) [**] and/or (b) the use of such [**] and (ii) not otherwise already subject to a license from University to Sponsor, including a license under the License Agreement (Yale Ref. [**])) (such inventions ((i) and (ii)), "[**] Inventions") shall not be subject to the Option granted herein. Sponsor shall not seek or require the disclosure of any future [**] Inventions from University.

(ii)Sponsor hereby acknowledges that University has disclosed to Sponsor the [**] Inventions set forth on Exhibit 8(d)(ii)(2) ("Existing [**] Inventions"). Further, Sponsor hereby acknowledges and agrees that its Options to such Existing [**] Inventions have expired without exercise.

(iii)University represents that, to the actual knowledge of Yale Ventures (fka Yale Office of Cooperative Research; "Yale Ventures"), the [**] Inventions set forth on Exhibit 8(d)(ii)(2) are all of the patentable [**] Inventions that have arisen under this Agreement that have been reported to Yale Ventures as of the Third Amendment Effective Date.

(c) The first sentence of Section 10(a) of the Agreement is hereby amended by deleting the words "June 30, 2022" and substituting in lieu thereof "April 30, 2023."

(d) Exhibit A is hereby modified to include the additional components of the Research identified in Exhibit A-1, attached hereto and incorporated herein.

(e) The Extended Budget of the Agreement is hereby modified to include the following:

Funds for the performance of Research as set forth in Exhibit A-1 (for the time period beginning on the Third Amendment Effective Date and ending on April 30, 2023)	
Total Direct Costs	[**]
Indirect Rate	[**]
Indirect Costs	[**]
Total Budget	**[**]**

For clarity, the total funding under the Agreement, inclusive of the original Budget and the Extended Budget, is $2,549,708.00, of which University acknowledges that $2,409,708 has already been paid by Sponsor and received by University as of the Third Amendment Effective Date.

(f) Except as amended by this Amendment, the Agreement shall remain in full force and effect according to its terms.

(g) This Amendment may be executed in two counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

In Witness Whereof, the Parties hereto have caused this Amendment to be executed by their respective duly authorized officers as of the Third Amendment Effective Date.

YALE UNIVERSITY

By: /s/ James Cresswell
Name: James Cresswell, JD
Title: Senior Contract Manager

By: /s/ Josh Geballe
Name: Josh Geballe, MBA
Title: Managing Director, Yale Ventures

Read and acknowledged

By: /s/ Demetrios Braddock
Dr. Demetrios Braddock, Yale Faculty

INOZYME PHARMA, INC.

By: /s/ Henric Bjarke
Name: Henric Bjarke
Title: COO

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Axel Bolte, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: August 15, 2022

By: /s/ Axel Bolte

Axel Bolte
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Sanjay Subramanian, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: August 15, 2022

By: /s/ Sanjay Subramanian

Sanjay Subramanian
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 32.1

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

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

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

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

Date: August 15, 2022

By: /s/ Axel Bolte

Axel Bolte
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

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

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

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

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

Date: August 15, 2022

By: /s/ Sanjay Subramanian

Sanjay Subramanian
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)