

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

FORM 10-Q

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

For the quarterly period ended September 30, 2021

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: 001-39094

PHATHOM PHARMACEUTICALS, INC.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

**100 Campus Drive, Suite 102
Florham Park, New Jersey**
(Address of principal executive offices)

82-4151574
(I.R.S. Employer
Identification No.)

07932
(Zip Code)

Registrant's telephone number, including area code: (877) 742-8466

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.0001 par value per share	PHAT	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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Emerging growth company	<input checked="" type="checkbox"/>		

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 November 3, 2021, the registrant had 31,414,827 shares of common stock (\$0.0001 par value) outstanding.

TABLE OF CONTENTS

PART I. FINANCIAL INFORMATION

Item 1	Financial Statements (unaudited)	F-1
	Balance Sheets	F-1
	Statements of Operations and Comprehensive Loss	F-2
	Statements of Stockholders' Equity	F-3
	Statements of Cash Flows	F-5
	Notes to Unaudited Financial Statements	F-6
Item 2	Management's Discussion and Analysis of Financial Condition and Results of Operations	20
Item 3	Quantitative and Qualitative Disclosures About Market Risk	31
Item 4	Controls and Procedures	32

PART II. OTHER INFORMATION

Item 1	Legal Proceedings	33
Item 1A	Risk Factors	33
Item 2	Unregistered Sales of Equity Securities and Use of Proceeds	33
Item 3	Defaults Upon Senior Securities	33
Item 4	Mine Safety Disclosures	33
Item 5	Other Information	33
Item 6	Exhibits	34
	Signatures	35

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (unaudited)

PHATHOM PHARMACEUTICALS, INC.
Balance Sheets
(Unaudited)
(in thousands, except share and par value amounts)

	September 30, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 224,618	\$ 287,496
Prepaid expenses and other current assets (including related party amounts of \$0 and \$82, respectively)	695	3,872
Total current assets	225,313	291,368
Property, plant and equipment, net	692	986
Operating lease right-of-use assets	2,031	2,373
Other long-term assets	341	384
Total assets	<u>\$ 228,377</u>	<u>\$ 295,111</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable (including related party amounts of \$311 and \$173, respectively)	\$ 5,582	\$ 16,782
Accrued clinical trial expenses	10,491	19,997
Accrued expenses (including related party amounts of \$1,847 and \$734, respectively)	11,040	10,606
Accrued interest	214	312
Current portion of long-term debt	—	7,353
Operating lease liabilities, current	484	474
Total current liabilities	27,811	55,524
Long-term debt, net of discount	88,305	39,634
Operating lease liabilities	1,280	1,557
Other long-term liabilities	7,500	4,125
Total liabilities	124,896	100,840
Commitments and contingencies (Note 4)		
Stockholders' equity:		
Preferred stock, \$0.0001 par value; authorized shares - 40,000,000 at September 30, 2021 and December 31, 2020 ; no shares issued and outstanding at September 30, 2021 and December 31, 2020	-	-
Common stock, \$0.0001 par value; authorized shares — 400,000,000; issued shares — 31,414,827 and 31,262,769 at September 30, 2021 and December 31, 2020, respectively; outstanding shares — 30,047,428 and 28,516,010 at September 30, 2021 and December 31, 2020, respectively	3	3
Additional paid-in capital	597,022	579,755
Accumulated deficit	(493,544)	(385,487)
Total stockholders' equity	103,481	194,271
Total liabilities and stockholders' equity	<u>\$ 228,377</u>	<u>\$ 295,111</u>

See accompanying notes.

PHATHOM PHARMACEUTICALS, INC.
Statements of Operations and Comprehensive Loss
(Unaudited)
(in thousands, except share and per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Operating expenses:				
Research and development (includes related party amounts of \$849, \$1,023, \$2,695, and \$1,676, respectively)	\$ 16,608	\$ 25,770	\$ 58,786	\$ 56,494
General and administrative (includes related party amounts of \$0, \$62, \$16, and \$139, respectively)	16,529	7,060	43,254	16,732
Total operating expenses	<u>33,137</u>	<u>32,830</u>	<u>102,040</u>	<u>73,226</u>
Loss from operations	<u>(33,137)</u>	<u>(32,830)</u>	<u>(102,040)</u>	<u>(73,226)</u>
Other income (expense):				
Interest income	8	15	35	1,075
Interest expense	(1,485)	(1,286)	(4,013)	(3,286)
Change in fair value of warrant liabilities	—	—	—	95
Other income (expense)	(2,048)	(4)	(2,039)	(5)
Total other income (expense)	<u>(3,525)</u>	<u>(1,275)</u>	<u>(6,017)</u>	<u>(2,121)</u>
Net loss and comprehensive loss	<u>\$ (36,662)</u>	<u>\$ (34,105)</u>	<u>\$ (108,057)</u>	<u>\$ (75,347)</u>
Net loss per share, basic and diluted	<u>\$ (0.98)</u>	<u>\$ (1.02)</u>	<u>\$ (2.94)</u>	<u>\$ (2.29)</u>
Weighted-average shares of common stock outstanding, basic and diluted	<u>37,299,351</u>	<u>33,366,237</u>	<u>36,748,492</u>	<u>32,946,128</u>

See accompanying notes

PHATHOM PHARMACEUTICALS, INC.
Statements of Stockholders' Equity
(Unaudited)
(in thousands, except share amounts)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance at December 31, 2020	28,516,010	\$ 3	\$ 579,755	\$ (385,487)	\$ 194,271
Issuance of common stock from exercise of stock options	36,998	—	412	—	412
401(k) matching contribution	8,356	—	323	—	323
Vesting of restricted shares	301,656	—	—	—	—
Stock-based compensation	—	—	3,818	—	3,818
ESPP shares issued	13,490	—	358	—	358
Net loss	—	—	—	(34,843)	(34,843)
Balance at March 31, 2021	28,876,510	\$ 3	\$ 584,666	\$ (420,330)	\$ 164,339
Issuance of common stock from exercise of stock options	8,000	—	104	—	104
Vesting of restricted shares	301,659	—	—	—	—
Stock-based compensation	—	—	4,237	—	4,237
Net loss	—	—	—	(36,552)	(36,552)
Balance at June 30, 2021	29,186,169	\$ 3	\$ 589,007	\$ (456,882)	\$ 132,128
Issuance of common stock from exercise of stock options	50,073	—	1,265	—	1,265
401(k) matching contribution	18,394	—	580	—	580
Vesting of restricted shares	776,045	—	—	—	—
Stock-based compensation	—	—	4,419	—	4,419
ESPP shares issued	16,747	—	461	—	461
Issuance of warrants	—	—	1,290	—	1,290
Net loss	—	—	—	(36,662)	(36,662)
Balance at September 30, 2021	30,047,428	\$ 3	\$ 597,022	\$ (493,544)	\$ 103,481

PHATHOM PHARMACEUTICALS, INC.
Statements of Stockholders' Equity
(Unaudited)
(in thousands, except share amounts)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance at December 31, 2019	24,728,258	\$ 2	\$ 484,372	\$ (256,419)	\$ 227,955
Conversion of Lender Warrants into equity	—	—	318	—	318
Vesting of restricted shares	425,295	—	—	—	—
Stock-based compensation	—	—	563	—	563
Net loss	—	—	—	(20,141)	(20,141)
Balance at March 31, 2020	25,153,553	\$ 2	\$ 485,253	\$ (276,560)	\$ 208,695
Vesting of restricted shares	460,859	1	—	—	1
Stock-based compensation	—	—	828	—	828
Net loss	—	—	—	(21,101)	(21,101)
Balance at June 30, 2020	25,614,412	\$ 3	\$ 486,081	\$ (297,661)	\$ 188,423
Vesting of restricted shares	301,681	—	—	—	—
Stock-based compensation	—	—	2,070	—	2,070
Net loss	—	—	—	(34,105)	(34,105)
Balance at September 30, 2020	25,916,093	\$ 3	\$ 488,151	\$ (331,766)	\$ 156,388

See accompanying notes.

PHATHOM PHARMACEUTICALS, INC.
Statements of Cash Flows
(Unaudited)
(in thousands)

	Nine Months Ended September 30,	
	2021	2020
Cash flows from operating activities		
Net loss	\$ (108,057)	\$ (75,347)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	386	217
Stock-based compensation	12,474	3,461
Issuance of PIK interest debt	130	—
Amortization of debt discount	3,088	904
Change in fair value of warrant liabilities	—	(95)
Other	722	158
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets (includes the change in related party amounts of \$82, and \$0, respectively)	3,177	11,034
Accounts payable and accrued expenses (includes the change in related party amounts of \$1,251 and \$238, respectively)	(9,629)	7,661
Accrued clinical trial expenses	(9,506)	10,845
Accrued interest	(98)	146
Operating right-of-use asset and lease liabilities	75	(272)
Other long-term assets	43	(200)
Net cash used in operating activities	<u>(107,195)</u>	<u>(41,488)</u>
Cash flows from investing activities		
Cash paid for property, plant and equipment	(228)	(916)
Net cash used in investing activities	<u>(228)</u>	<u>(916)</u>
Cash flows from financing activities		
Proceeds from issuance of common stock from exercise of stock options	1,781	—
Repayment of long-term debt	(54,125)	—
Net proceeds from issuance of long-term debt	96,889	25,000
Net cash provided by financing activities	44,545	25,000
Net (decrease) in cash and cash equivalents	(62,878)	(17,404)
Cash and cash equivalents – beginning of period	287,496	243,765
Cash and cash equivalents – end of period	<u>\$ 224,618</u>	<u>\$ 226,361</u>
Supplemental disclosure of cash flow information		
Interest paid	\$ 2,920	\$ 2,235
Supplemental disclosure of noncash investing and financing activities		
Issuance of common stock warrants in connection with long-term debt	\$ 1,290	\$ —
Property and equipment purchases included in accounts payable and accrued liabilities	\$ 9	\$ 39
Final interest payment fee	\$ 7,500	\$ 2,063
Settlement of ESPP liability in common stock	\$ 819	\$ —
Settlement of 401(k) liability in common stock	\$ 903	\$ —
Operating lease liabilities arising from obtaining right-of-use assets	\$ —	\$ 1,396
Conversion of Lender Warrants into equity	\$ —	\$ 318

See accompanying notes.

PHATHOM PHARMACEUTICALS, INC.
Notes to Unaudited Financial Statements

1. Organization, Basis of Presentation and Summary of Significant Accounting Policies

Organization

Phathom Pharmaceuticals, Inc. (the “Company” or “Phathom”) was incorporated in the state of Delaware in January 2018 under the name North Bridge IV, Inc. On March 13, 2019, the Company changed its name to Phathom Pharmaceuticals, Inc. and merged with YamadaCo IIA, Inc. (“YamadaCo”), a Delaware corporation formed in September 2017, with Phathom being the surviving entity (the “Merger”). All activities of YamadaCo prior to 2018 related to formation and were insignificant. The Company is a late clinical-stage biopharmaceutical company focused on developing and commercializing novel treatments for gastrointestinal diseases.

Basis of Presentation

The Company’s financial statements are prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). The Company and YamadaCo were entities under the common control of Frazier Life Sciences IX, L.P. (“Frazier”) as a result of, among other things, Frazier’s: (i) ownership of a majority of the outstanding capital stock of both companies, (ii) financing of both companies, (iii) control of the board of directors of both companies, and (iv) management of both companies. Both the Company and YamadaCo were formed for the purpose of identifying potential assets around which to form an operating company. All intercompany accounts and transactions have been eliminated.

Interim results may not be indicative of the results that may be expected for the full year. In the opinion of management, these unaudited financial statements include all normal and recurring adjustments considered necessary for a fair presentation of these interim unaudited financial statements.

Certain prior year amounts have been reclassified to conform to the current year’s presentation.

Liquidity and Capital Resources

From inception to September 30, 2021, the Company has devoted substantially all of its efforts to organizing and staffing the Company, business planning, raising capital, in-licensing its initial product candidate, vonoprazan, meeting with regulatory authorities, preparing for and managing the Phase 3 clinical trials of vonoprazan, building a commercial organization in preparation for a potential product launch following successful development and approval, and providing other general and administrative support for these operations. The Company has a limited operating history, has never generated any revenue, and the sales and income potential of its business is unproven. The Company has incurred net losses and negative cash flows from operating activities since its inception and expects to continue to incur net losses into the foreseeable future as it continues the development and preparation for commercialization of vonoprazan. From inception to September 30, 2021, the Company has funded its operations through the issuance of convertible promissory notes, commercial bank debt and the sale of 10,997,630 shares of common stock for net proceeds of approximately \$191.5 million in its 2019 IPO and the sale of 250,000 shares of common stock for net proceeds of approximately \$88.6 million in its December 2020 follow-on public offering.

The accompanying financial statements have been prepared assuming the Company will continue as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business, and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or amounts and classification of liabilities that may result from the outcome of this uncertainty. Management is required to perform a two-step analysis over the Company’s ability to continue as a going concern. Management must first evaluate whether there are conditions and events that raise substantial doubt about the Company’s ability to continue as a going concern (Step 1). If management concludes that substantial doubt is raised, management is also required to consider whether its plans alleviate that doubt (Step 2).

Management believes that it has sufficient working capital on hand to fund operations through at least the next twelve months from the date these financial statements were available to be issued. There can be no assurance that the Company will be successful in acquiring additional funding (if needed), that the Company’s projections of its future working capital needs will prove accurate, or that any additional funding would be sufficient to continue operations in future years.

Use of Estimates

The preparation of the Company's financial statements requires it to make estimates and assumptions that impact the reported amounts of assets, liabilities and expenses and the disclosure of contingent assets and liabilities in the Company's financial statements and accompanying notes. The most significant estimates in the Company's financial statements relate to accruals for research and development expenses, and the valuation of convertible promissory notes, warrant liabilities and various other equity instruments. Although these estimates are based on the Company's knowledge of current events and actions it may undertake in the future, actual results could differ materially from those estimates and assumptions.

Fair Value Measurements

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

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

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

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

The carrying amounts of the Company's financial instruments, including cash and cash equivalents, are classified within the Level 1 designation discussed above, while prepaid and other current assets, accounts payable, and accrued liabilities, approximate fair value due to their short maturities. Warrant liabilities and convertible promissory notes were recorded at fair value on a recurring basis.

The Company has no financial assets measured at fair value on a recurring basis. None of the Company's non-financial assets or liabilities are recorded at fair value on a non-recurring basis. No transfers between levels have occurred during the periods presented.

The warrant liabilities consisted of warrants (the "Lender Warrants") issued in connection with the loan and security agreement with Silicon Valley Bank (the "SVB Term Loan") for commercial bank debt (see Note 6). The Lender Warrants were accounted for as liabilities as they contained a holder put right under which the lenders could have required the Company to pay cash in exchange for the Lender Warrants. The fair value of the Lender Warrants was estimated on the date of grant using the Black-Scholes option-pricing model with an expected term equal to the remaining contractual term of the warrants. The Company estimates its expected stock volatility based on the historical volatility of a set of peer companies, which are publicly traded, and expects to continue to do so until it has adequate historical data regarding the volatility of its own publicly-traded stock price. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. The Company uses an expected dividend yield of zero based on the fact that the Company has never paid cash dividends and does not expect to pay cash dividends in the foreseeable future. When the Company drew down the Term Loan B under the SVB Term Loan in March 2020 (see Note 6), the Lenders' put right expired, and the Company recorded a final fair value adjustment and reclassified the Lender Warrants balance of \$0.3 million to additional paid-in-capital.

The following table provides a reconciliation of all liabilities measured at fair value using Level 3 significant unobservable inputs (in thousands):

	Warrant Liabilities
Balance at December 31, 2019	413
Change in fair value	(95)
Reclassification of Lender Warrants into equity (Note 6)	(318)
Balance at September 30, 2020	\$ —

Cash and Cash Equivalents

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

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts and management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held.

Property, Plant, and Equipment, Net

Property, plant and equipment are recorded at cost, less accumulated depreciation. Depreciation expense is recognized using the straight-line method over the useful life of the asset. Computer equipment and related software are depreciated over two to three years. Furniture and fixtures are depreciated over three years. Leasehold improvements are amortized over the lesser of the lease term or the estimated useful lives of the related assets. Expenditures for repairs and maintenance of assets are charged to expense as incurred. Upon retirement or sale, the cost and related accumulated depreciation of assets disposed of are removed from the accounts and any resulting gain or loss is included in loss from operations.

Impairment of Long-Lived Assets

The Company reviews long-lived assets, including property, plant and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. An impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition are less than the carrying amount. The impairment loss, if recognized, would be based on the excess of the carrying value of the impaired asset over its respective fair value. No impairment losses have been recorded through September 30, 2021.

Leases

At the inception of a contractual arrangement, the Company determines whether the contract contains a lease by assessing whether there is an identified asset and whether the contract conveys the right to control the use of the identified asset in exchange for consideration over a period of time. If both criteria are met, the Company records the associated lease liability and corresponding right-of-use asset upon commencement of the lease using the implicit rate or a discount rate based on a credit-adjusted secured borrowing rate commensurate with the term of the lease. The Company additionally evaluates leases at their inception to determine if they are to be accounted for as an operating lease or a finance lease. A lease is accounted for as a finance lease if it meets one of the following five criteria: the lease has a purchase option that is reasonably certain of being exercised, the present value of the future cash flows is substantially all of the fair market value of the underlying asset, the lease term is for a significant portion of the remaining economic life of the underlying asset, the title to the underlying asset transfers at the end of the lease term, or if the underlying asset is of such a specialized nature that it is expected to have no alternative uses to the lessor at the end of the term. Leases that do not meet the finance lease criteria are accounted for as an operating lease. Operating lease assets represent a right to use an underlying asset for the lease term and operating lease liabilities represent an obligation to make lease payments arising from the lease. Operating lease liabilities with a term greater than one year and their corresponding right-of-use assets are recognized on the balance sheet at the commencement date of the lease based on the present value of lease payments over the expected lease term. Certain adjustments to the right-of-use asset may be required for items such as initial direct costs paid or incentives received. As the Company's leases do not typically provide an implicit rate, the Company utilizes the appropriate incremental borrowing rate, determined as the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term and in a similar economic environment. Lease cost is recognized on a straight-line basis over the lease term and variable lease payments are recognized as operating expenses in the period in which the obligation for those payments is incurred. Variable lease payments primarily include common area maintenance, utilities, real estate taxes, insurance, and other operating costs that are passed on from the lessor in proportion to the space leased by the Company. The Company has elected the practical expedient to not separate between lease and non-lease components.

Research and Development Expenses and Accruals

All research and development costs are expensed in the period incurred and consist primarily of salaries, payroll taxes, employee benefits, stock-based compensation charges for those individuals involved in research and development efforts, external research and development costs incurred under agreements with contract research organizations and consultants to conduct and support the Company's ongoing clinical trials of vonoprazan, and costs related to manufacturing vonoprazan for clinical trials.

The Company has entered into various research and development contracts with clinical research organizations, clinical manufacturing organizations and other companies. Payments for these activities are based on the terms of the individual agreements, which may differ from the pattern of costs incurred, and payments made in advance of or after performance are reflected in the accompanying balance sheets as prepaid expenses or accrued liabilities, respectively. The Company records accruals for estimated costs incurred for ongoing research and development activities. When evaluating the adequacy of the accrued liabilities, the Company analyzes progress of the services, including the phase or completion of events, invoices received and contracted costs. Significant judgments and estimates may be made in determining the prepaid or accrued balances at the end of any reporting period. Actual results could differ from the Company's estimates.

In-Process Research and Development

The Company evaluates whether acquired intangible assets are a business under applicable accounting standards. Additionally, the Company evaluates whether the acquired assets have a future alternative use. Intangible assets that do not have future alternative use are considered acquired in-process research and development. When the acquired in-process research and development assets are not part of a business combination, the value of the consideration paid is expensed on the acquisition date. Future costs to develop these assets are recorded to research and development expense as they are incurred.

General and Administrative Expenses

General and administrative expenses consist of salaries, stock-based compensation, facilities and third-party expenses. General and administrative expenses are associated with the activities of the executive, finance, accounting, information technology, legal, medical affairs and human resource functions.

Stock-Based Compensation

Stock-based compensation expense represents the cost of the grant date fair value of equity awards recognized over the requisite service period of the awards (generally the vesting period) on a straight-line basis with forfeitures recognized as they occur.

The Company also maintains an employee stock purchase program ("ESPP") under which it issues shares. The Company estimates the fair value of stock options and shares that will be issued under the ESPP using the Black-Scholes valuation model, which requires the use of estimates. The Company recognizes stock-based compensation cost for shares that it will issue under the ESPP on a straight-line basis over the requisite service period of the award.

Income Taxes

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

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

The Company records uncertain tax positions on the basis of a two-step process whereby (i) management determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (ii) for those tax positions that meet the more-likely-than-not recognition threshold, management recognizes the largest amount of tax benefit that is more than 50 percent likely to be realized upon ultimate settlement with the related tax authority. The Company recognizes interest and penalties related to unrecognized tax benefits within income tax expense. Any accrued interest and penalties are included within the related tax liability.

Comprehensive Loss

Comprehensive loss is defined as a change in equity during a period from transactions and other events and circumstances from non-owner sources. The Company's comprehensive loss was the same as its reported net loss for all periods presented.

Segment Reporting

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker in making decisions on how to allocate resources and assess performance. The Company views its operations and manages its business as one operating segment.

Net Loss Per Share

Basic net loss per share is computed by dividing the net loss by the weighted-average number of common shares outstanding for the period, without consideration for potentially dilutive securities. The Company included 7,588,000 shares of common stock under its warrant (the "Takeda Warrant") issued to Takeda Pharmaceutical Company Limited ("Takeda") in connection with a May 2019 license agreement (see Note 4) in the calculation of basic weighted-average common shares outstanding from the time it became exercisable at the Company's IPO because the Takeda Warrant is exercisable for little consideration. For the three and nine months ended September 30, 2021, the Company has excluded weighted-average unvested shares of 1,666,535 and 2,173,246, respectively, from the weighted-average number of common shares outstanding, compared to 3,186,269 and 3,606,378, respectively for the same periods in 2020. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of common shares and dilutive common stock equivalents outstanding for the period determined using the treasury-stock and if-converted methods. Dilutive common stock equivalents are comprised of unvested common stock, options and warrants. For all periods presented, there is no difference in the number of shares used to calculate basic and diluted shares outstanding as inclusion of the potentially dilutive securities (warrants, stock options, and common shares subject to repurchase) would be antidilutive.

Recently Adopted Accounting Standards

In December 2019, the FASB issued ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"), which simplifies the accounting for income taxes. ASU 2019-12 is effective for annual reporting periods, and interim periods within those annual periods, beginning after December 15, 2020 on a prospective basis, and early adoption is permitted. The Company adopted this guidance effective January 1, 2021, and the adoption did not have a material impact on the Company's financial statements.

Recently Issued Accounting Pronouncements

The Company assesses the adoption impacts of recently issued accounting standards by the Financial Accounting Standards Board or other standard setting bodies on the Company's financial statements as well as material updates to previous assessments, if any, from the Company's Annual Report on Form 10-K for the year ended December 31, 2020. There were no new material accounting standards issued in the first three quarters of 2021 that impacted the Company.

2. Balance Sheet Details

Property, Plant and Equipment, net

Property, plant and equipment, net, consist of the following (in thousands):

	September 30, 2021	December 31, 2020
Computer equipment and software	\$ 587	\$ 516
Furniture and fixtures	763	747
Leasehold improvements	59	54
	1,409	1,317
Less: accumulated depreciation and amortization	(717)	(331)
Total property, plant and equipment, net	<u>\$ 692</u>	<u>\$ 986</u>

Depreciation and amortization expense for the three months ended September 30, 2021 and 2020, was approximately \$130,000 and \$88,000, respectively. Depreciation and amortization expense for the nine months ended September 30, 2021 and 2020, was approximately \$386,000 and \$217,000, respectively. No property, plant or equipment was disposed of during the nine months ended September 30, 2021 or the year ended December 31, 2020.

Accrued Expenses

Accrued expenses consist of the following (in thousands):

	September 30, 2021	December 31, 2020
Accrued research and development expenses	\$ 4,363	\$ 4,864
Accrued compensation expenses	4,762	4,587
Accrued professional & consulting expenses	1,885	1,123
Accrued other	30	32
Total accrued expenses	<u>\$ 11,040</u>	<u>\$ 10,606</u>

3. Related Party Transactions

Frazier is a principal stockholder of the Company. The Company has conducted operations within office space controlled by Frazier and Frazier allocated a portion of the costs associated with this office space to the Company. In addition, Frazier paid for various goods and services, such as employee wages, insurance and expense reimbursements and various administrative services associated with the operations of the Company and charged the Company for those expenses. As of September 30, 2021 and December 31, 2020, the Company had outstanding accounts payable and accrued expenses due to Frazier in the amount of \$0 and \$35,000, respectively, related to these shared operating expenses. For the three months ended September 30, 2021 and 2020, the Company incurred \$0 and \$62,000, respectively, of shared operating expenses. For the nine months ended September 30, 2021 and 2020, the Company incurred \$16,000 and \$0.1 million, respectively, of shared operating expenses. In addition to the shared operating expenses, the Company issued convertible promissory notes to Frazier during 2018 and 2019.

Frazier is a principal stockholder in PCI Pharma Services ("PCI"). In the third quarter of 2019, the Company engaged PCI for clinical manufacturing services. As of September 30, 2021 and December 31, 2020, the Company had \$1.5 million and \$0.4 million, respectively, outstanding accounts payable and accrued expenses related to these manufacturing services. For the three months ended September 30, 2021 and 2020, the Company incurred \$0.6 million and \$0.9 million, respectively, of expenses related to services performed by PCI. For the nine months ended September 30, 2021 and 2020, the Company incurred \$2.2 million and \$1.5 million, respectively, of expenses related to services performed by PCI.

Takeda became a common stockholder of the Company in connection with the May 2019 license agreement (see Note 4). In conjunction with this license, Takeda provides proprietary supplies for the Company's ongoing clinical development of vonoprazan in addition to the exclusive license for the commercialization of vonoprazan in the United States, Canada and Europe. As of September 30, 2021 and December 31, 2020, the Company had \$22,000 and \$22,000, respectively, in outstanding accounts payable and accrued expenses related to these supply services. The Company did not have any such expenses incurred for the three and nine months ended September 30, 2021 and 2020 related to services performed by Takeda.

On May 5, 2020, the Company entered into a Commercial Supply Agreement (the "Commercial Supply Agreement") with Takeda, pursuant to which Takeda will supply commercial quantities of vonoprazan bulk drug product or drug substance. Pursuant to the Commercial Supply Agreement, Takeda has agreed to supply the Company with and the Company has agreed to purchase from Takeda certain quantities of vonoprazan bulk drug product or drug substance according to approved specifications at a fixed price per batch of bulk drug product or per kilogram of drug substance in order to commercialize vonoprazan in accordance with the Takeda License. Unless terminated earlier, the term of the Commercial Supply Agreement extends for a period of two years from the date the Company places an order for bulk drug product or drug substance for the first commercial launch of vonoprazan in any jurisdiction in the licensed territory, provided that this two-year period will expire no later than December 31, 2023. The Commercial Supply Agreement will terminate immediately upon the termination of the Takeda License in accordance with its terms. As of September 30, 2021 and December 31, 2020, the Company had \$0.4 million and \$0.2 million, respectively, in outstanding accounts payable and accrued expenses related to these product costs. For the nine months ended September 30, 2021 and 2020, the Company incurred \$0.4 million and \$0.1 million, respectively related to the Commercial Supply Agreement. The Company has a remaining minimum purchase obligation of approximately \$1.8 million related to this agreement.

In connection with the Takeda License, the Company entered into a temporary services agreement (the "Temporary Services Agreement") with Takeda on November 24, 2020. Pursuant to the Temporary Services Agreement, Takeda agreed to provide or procure the provision of services related to the ongoing clinical development of vonoprazan. The Temporary Services Agreement will terminate immediately upon termination of the Takeda License in accordance with its terms. As of September 30, 2021 and December 31, 2020, the Company had \$0.3 million and \$0.2 million, respectively, in outstanding accounts payable and accrued expenses related to these temporary services.

4. Commitments and Contingencies

License Agreement

On May 7, 2019, the Company entered into a license agreement with Takeda pursuant to which it was granted an exclusive license to commercialize vonoprazan fumarate in the United States, Canada and Europe (the "Takeda License"). The Company also has the right to sublicense its rights under the agreement, subject to certain conditions. The agreement will remain in effect, on a country-by-country and product-by-product basis, until the later of (i) the expiration of the last to expire valid patent claim covering vonoprazan fumarate alone or in combination with at least one other therapeutically active ingredient, (ii) the expiration of the applicable regulatory exclusivity and (iii) 15 years from the date of first commercial sale, unless earlier terminated. The Company may terminate the Takeda License upon six months' written notice. The Company and Takeda may terminate the Takeda License in the case of the other party's insolvency or material uncured breach. Takeda may terminate the Takeda License if the Company challenges, or assists in challenging, licensed patents.

In consideration of the Takeda License, the Company (i) paid Takeda \$25.0 million in cash, (ii) issued Takeda 1,084,000 shares of its common stock at a fair value of \$5.9 million, (iii) issued the Takeda Warrant to purchase 7,588,000 shares of its common stock at an exercise price of \$0.00004613 per share at an initial fair value of \$47.9 million, and (iv) issued a right to receive an additional common stock warrant (the "Takeda Warrant Right") should Takeda's fully-diluted ownership of the Company represent less than a certain specified percentage of the fully-diluted capitalization, including shares issuable upon conversion of then outstanding convertible promissory notes, calculated immediately before the closing of the Company's IPO, with a nominal initial fair value due to the low probability of issuance. The Takeda Warrant Right expired without effect since no fair value had been allocated to it upon completion of the IPO, and no additional warrant was issued. In addition, the Company is obligated to pay Takeda up to an aggregate of \$250.0 million in sales milestones upon the achievement of specified levels of product sales, and a low double-digit royalty rate on aggregate net sales of licensed products, subject to certain adjustments. The Company incurred \$0.1 million of transaction costs in connection with the Takeda License. The Takeda Warrant has an exercise price of \$0.00004613 per share, expires on May 7, 2029 and became exercisable upon the consummation of the IPO. Following the October 11, 2019 increase in the Company's authorized shares of common stock to 50,000,000, the Company recorded a non-cash charge related to the final fair value adjustment of the Takeda Warrants and reclassified the full balance of \$144.2 million from warrant liabilities to additional paid-in capital.

Purchase Commitments

In December 2020, the Company entered into a supply agreement with Sandoz pursuant to which Sandoz will supply commercial quantities of amoxicillin capsules and clarithromycin tablets, package these antibiotics with vonoprazan, and provide in finished convenience packs. The supply agreement commits the Company to a minimum purchase obligation of approximately \$3.8 million in the first 24-month period following the launch of the final product. The Company has not incurred any expenses under the agreement during the nine months ended September 30, 2021.

Contingencies

In the event the Company becomes subject to claims or suits arising in the ordinary course of business, the Company would accrue a liability for such matters when it is probable that future expenditures will be made and such expenditures can be reasonably estimated.

5. Lease Commitments

As of September 30, 2021, the Company had operating leases for office space in both Buffalo Grove, Illinois and Florham Park, New Jersey, with remaining lease terms of 3.6 years and 3.9 years, respectively. Both operating leases contain an option to extend the term for one additional five year period, which was not considered in the determination of the right-of-use asset or lease liability as the Company did not consider it reasonably certain that it would exercise such options.

The total rent expense for the three months ended September 30, 2021 and 2020 was approximately \$0.2 million and \$0.2 million, respectively. The total rent expense for the nine months ended September 30, 2021 and 2020 was approximately \$0.6 million and \$0.4 million, respectively.

The following table summarizes supplemental balance sheet information related to the operating leases as of September 30, 2021 and December 31, 2020.

	September 30, 2021	December 31, 2020
Assets:		
Operating lease right-of-use assets	2,031	2,373
Total right-of-use assets	<u>\$ 2,031</u>	<u>\$ 2,373</u>
Liabilities:		
Operating lease liabilities, current	484	474
Operating lease liabilities, non-current	1,280	1,557
Total operating lease liabilities	<u>\$ 1,764</u>	<u>\$ 2,031</u>

As of September 30, 2021, the future minimum annual lease payments under the operating leases were as follows (in thousands):

2021	123
2022	503
2023	516
2024	529
Thereafter	342
Total minimum lease payments	<u>\$ 2,013</u>
Less: amount representing interest	(249)
Present value of operating lease liabilities	1,764
Less: operating lease liabilities, current	(484)
Operating lease liabilities	<u>\$ 1,280</u>
Weighted-average remaining lease term (in years)	3.81
Weighted-average incremental borrowing rate	7.25%

Operating cash flows for the nine months ended September 30, 2021 included \$0.5 million in cash payments for operating leases, \$0.1 million of which were prepaid lease payments. Operating cash flows for the nine months ended September 30, 2020 included \$0.8 million in cash payments for operating leases, \$0.6 million of which were prepaid lease payments.

6. Debt

Total debt consists of the following (in thousands):

	September 30, 2021
Long-term debt, current portion	\$ —
Long-term debt, non-current portion	100,130
Unamortized debt discount	(11,825)
Long-term debt, net of debt discount	<u>\$ 88,305</u>

On September 17, 2021, (the "Closing Date"), the Company entered into a Loan and Security Agreement (the "Loan Agreement") with Hercules Capital, Inc., in its capacity as administrative agent and collateral agent and as a lender (in such capacity, the "Agent" or "Hercules") and the other financial institutions that from time to time become parties to the Loan Agreement as lenders (collectively, the "Lenders").

The Loan Agreement provides for term loans in an aggregate principal amount of up to \$200.0 million (the “Term Loan”) under multiple tranches. The tranches consist of (i) a first tranche consisting of term loans in an aggregate principal amount of \$100.0 million, all of which was funded to the Company on the Closing Date (the “First Advance”), (ii) a second tranche consisting of up to an additional \$50.0 million, which will become available to the Company upon achievement of the protocol-specified primary efficacy endpoints in the Company’s Phase 3 trial studying vonoprazan for the healing and maintenance of healing of erosive esophagitis with acceptable safety data, such that the results support the submission of a New Drug Application (“NDA”) or supplemental NDA without the need to conduct another Phase 3 study and will be available, if specified conditions are met, through December 15, 2022, (iii) a third tranche consisting of an additional \$25.0 million, which will become available to the Company upon the achievement of (a) FDA approval of the Company’s NDA for vonoprazan and amoxicillin, or its New Drug Application for vonoprazan, amoxicillin and clarithromycin, in each case for an indication relating to the treatment of *H. pylori* with an approved indication on the claim that is generally consistent with that sought in the Company’s NDA submission; and (b) filing of the Company’s NDA or supplemental NDA for vonoprazan for indications relating to the healing and maintenance of healing of erosive esophagitis (milestones (a) and (b), together, the “Second Performance Milestone”), and will be available, if specified conditions are met, through September 30, 2023, and (iv) a fourth tranche consisting of up to an additional \$25.0 million, which will be available, if specified conditions are met, through March 31, 2024, upon achievement of the Second Performance Milestone.

The Company paid a \$1.25 million facility charge in connection with closing of the Loan Agreement and would need to pay 0.5% of any advances made under the third and fourth tranches.

The Term Loan will mature on October 1, 2026 (the “Maturity Date”). The Term Loan bears (i) cash interest at a variable annual rate equal to the greater of (a) 5.50% and (b) the Prime Rate (as reported in the Wall Street Journal) plus 2.25% (the “Interest Rate”) and (ii) payment-in-kind interest at a per annum rate of interest equal to 3.35%. Phathom may make payments of interest only through October 1, 2024, which may be extended to October 1, 2025, upon the achievement of the Second Performance Milestone on or prior to September 30, 2024 and the condition that no default or event of default exists, and which is further extendable to October 1, 2026, subject to FDA approval of the Company’s NDA (or supplemental NDA) for vonoprazan for an indication relating to the healing and maintenance of healing of erosive esophagitis with an approved indication on the label that is generally consistent with that sought in the Company’s NDA submission (or supplemental NDA submission) (the “Third Performance Milestone”) on or prior to September 30, 2025 and no default or event of default exists (the “interest only period”). After the interest-only period, the principal balance and related interest will be required to be repaid in equal monthly installments and continuing until the Maturity Date.

In addition, the Company is obligated to pay a final payment fee of 7.50% of the original principal amount of amounts actually advanced under the Term Loan (each a “Term Loan Advance” and together, the “Term Loan Advances”). As of September 30, 2021, the aggregate final payment fee for the first Term Loan Advance of \$7.5 million has been recorded as an other long-term liability.

The Company may elect to prepay all or a portion of the Term Loan Advances prior to maturity, subject to a prepayment fee of up to 1.25% of the then outstanding principal balance of the Term Loan Advances being prepaid. After repayment, no Term Loan amounts may be borrowed again.

As collateral for the obligations, the Company has granted to Hercules a senior security interest in all of Company’s right, title, and interest in, to and under substantially all of Company’s property, inclusive of intellectual property.

The Loan Agreement contains customary closing fees, prepayment fees and provisions, events of default, and representations, warranties and covenants, including a financial covenant requiring Phathom to maintain certain levels of cash subject to a control agreement in favor of the Agent (minus accounts payable not paid within 120 days of invoice) (“Qualified Cash”), and commencing on May 15, 2023, trailing three-month net product revenue from the sale of vonoprazan and products containing vonoprazan. The revenue covenant will be waived at any time in which the Company maintains Qualified Cash equal to at least 60.0% (prior to the Third Performance Milestone), and 35% (following the Third Performance Milestone) of the total outstanding Term Loan principal amount, or the Company’s market capitalization is at least \$900.0 million. Upon the occurrence of an event of default, subject to any specified cure periods, all amounts owed by the Company may be declared immediately due and payable by Hercules, as collateral agent. As of September 30, 2021, the Company was in compliance with all applicable covenants under the Loan Agreement.

In connection with the entry into the Loan Agreement, the Company issued to Hercules a warrant (the “Warrant”) to purchase a number of shares of the Company’s common stock equal to 2.5% of the aggregate amount of the Term Loan advances funded, and will issue to Hercules additional warrants when future Term Loan advances are funded. On the Closing Date, the Company issued a Warrant for 74,782 shares of common stock. The Warrant will be exercisable for a period of seven years from the date of issuance at a per-share exercise price equal to \$33.43, which was the closing price of the Company’s common stock on September 16, 2021. The Warrant is exercisable any time until September 17, 2028 and had an initial fair value of approximately \$1.3 million.

The initial \$1.3 million fair value of the Warrant, the \$7.5 million final interest payment fee and \$3.1 million of debt issuance costs have been recorded as debt discount and are being amortized to interest expense using the effective interest method over the term of the Term Loan.

Future minimum principal and interest payments under the Term Loan, including the final payment fee, as of September 30, 2021 are as follows (in thousands):

Year ending December 31:	
2021	1,625
2022	5,720
2023	5,918
2024	21,040
2025	50,912
2026	62,705
Total principal and interest payments	147,920
Less interest, PIK interest and final payment fee	(47,920)
Total term loan aggregate principal amount	<u>\$ 100,000</u>

Prior to the Loan Agreement with Hercules, the Company had a loan with SVB and approximately \$54.3 million of the proceeds from the First Advance was used to satisfy in full and retire the Company's indebtedness under the SVB Term Loan with SVB.

The SVB Term Loan originated on May 14, 2019, when the Company entered into a loan and security agreement with SVB, as administrative and collateral agent, and lenders including SVB and WestRiver Innovation Lending Fund VIII, L.P. The Company borrowed \$25.0 million ("Term Loan A") at the inception of the Loan Agreement and an additional \$25.0 million ("Term Loan B") on March 16, 2020.

The SVB Term Loan bore interest at a floating rate of the higher of the Wall Street Journal Prime rate plus 1.75% or 7.25%. Under the original SVB Term Loan, the monthly payments consisted of interest-only through May 31, 2021. On March 11, 2020, the Company entered into the first amendment and on March 11, 2021, the Company entered into the second amendment (together the "Amendments") to the SVB Term Loan. Pursuant to the Amendments, the interest-only payment period was initially extended through July 31, 2021, and was further extended until December 31, 2021, after the Company received positive data from its Phase 3 clinical trial in *H. pylori* infection sufficient to file an NDA with the FDA. The interest-only payment period could have been further extended until November 30, 2022, if the Company would receive positive data from its Phase 3 clinical trial in erosive esophagitis for vonoprazan sufficient to file an NDA with the FDA. Subsequent to the interest-only period, the SVB Term Loan would have been payable in equal monthly installments of principal, plus accrued and unpaid interest through the maturity date of May 1, 2024.

In addition, the Company was obligated to pay a final payment fee of 8.25% of the original principal amount of the SVB Term Loan. The aggregate final payment fee for the Term Loan of \$4.1 million was recorded as an other long-term liability.

The Company could have elected to prepay all or a portion of the SVB Term Loan prior to maturity, subject to a prepayment fee of up to 2.0% of the then outstanding principal balance and payment of a pro rata portion of the final payment fee. After repayment, no Term Loan amounts could have been borrowed again.

The borrowings under the SVB Term Loan were collateralized by substantially all of the Company's assets. The SVB Term Loan included affirmative and negative covenants. The affirmative covenants included, among others, covenants requiring the Company to maintain its legal existence and governmental approvals, deliver certain financial reports, maintain insurance coverage and satisfy certain requirements regarding its operating accounts. The negative covenants included, among others, limitations on the Company's ability to incur additional indebtedness and liens, merge with other companies or consummate certain changes of control, acquire other companies, engage in new lines of business, make certain investments, pay dividends, transfer or dispose of assets, amend certain material agreements or enter into various specified transactions. The SVB Term Loan also contained customary events of default, including bankruptcy, the failure to make payments when due, and a material adverse change. Upon the occurrence of an event of default, subject to any specified cure periods, all amounts owed by the Company would have begun to bear interest at a rate that is 4.00% above the rate effective immediately before the event of default and could have been declared immediately due and payable by SVB, as collateral agent.

In connection with the SVB Term Loan, the Company issued Lender Warrants to purchase stock of the Company, which expire ten years from the date of issuance. Upon completion of the IPO in 2019, the Lender Warrants became exercisable for 16,446 shares of common stock. The Lender Warrants included a put option pursuant to which, in the event that the Company did not draw down Term Loan B on or before March 31, 2020, the warrant holders could have required that the Company repurchase the warrants for a total aggregate repurchase price of \$0.5 million. Upon the Term Loan B draw in March 2020, the Lender Warrants became exercisable and the put option related to the Lender Warrants expired. Accordingly, the Company recorded a final fair value adjustment and reclassified the Lender Warrants balance of \$0.3 million to additional paid-in-capital.

The initial \$0.4 million fair value of the Lender Warrants, the \$4.1 million final payment fee and \$0.2 million of debt issuance costs were recorded as debt discount and amortized to interest expense using the effective interest method over the term of the Term Loans prior to the retirement of the debt. Upon retirement of the debt any remaining unamortized amounts were recorded as an expense to Other income (expense).

During the three and nine months ended September 30, 2021, the Company recognized \$1.5 million and \$4.0 million, respectively of interest expense, including amortization of the debt discount in connection with the Hercules Loan Agreement and SVB Term Loan, compared to \$1.3 million and \$3.3 million, respectively, for the same periods in 2020. As of September 30, 2021, the Company had an outstanding loan balance of \$100.1 million and accrued interest of \$0.2 million.

7. Stockholders' Equity

Common Stock

In March 2019, subsequent to the Merger, the Company sold 1,491,072 shares of the Company's common stock to Frazier.

In March 2019, the founders granted the Company a repurchase right for the 3,373,408 shares of common stock originally purchased in 2018. The Company has the right, but not the obligation, to repurchase unvested shares in the event the founder's relationship with the Company is terminated, subject to certain limitations, at the original purchase price of the stock. The repurchase right lapsed for 843,352 shares in March 2019 and the repurchase right for the remaining 2,530,056 shares lapses in equal monthly amounts over the following 48-month period ending in March 2023. The fair value of the founder shares at the date the repurchase right was granted is being recognized as stock-based compensation expense on a straight-line basis over the vesting period. As of September 30, 2021, 474,385 shares of common stock were subject to repurchase by the Company and the associated repurchase liability was not significant. The amount of recognized and unrecognized stock-based compensation related to the founder stock was immaterial for all periods presented.

In May 2019, the Company issued Takeda 1,084,000 shares of common stock in connection with the Takeda License.

For the period from January 1, 2019 to May 6, 2019, the Company issued 2,524,852 shares of common stock to various employees and consultants of the Company for aggregate proceeds of approximately \$1,000. Upon issuance, these shares were subject to a repurchase option by the Company at the original purchase price of the shares. The repurchase rights generally lapse as to 25% of the shares on the first anniversary of the vesting commencement date, and the repurchase right lapses as to 1/48th of the shares each one-month period thereafter, subject to the purchaser remaining continuously an employee, consultant or director of the Company. In November 2019, the Company repurchased 17,560 shares at the original purchase price for an aggregate purchase price of \$5.20. As of September 30, 2021, 893,014 shares remain available for repurchase by the Company and the associated repurchase liability was not significant.

On October 29, 2019, upon completion of the IPO, the Company sold 10,997,630 shares of common stock, which included the exercise in full by the underwriters of their option to purchase 1,434,473 additional shares at a public offering price of \$19.00 per share. The net proceeds were approximately \$191.5 million, after deducting underwriting discounts, commissions and offering costs.

On December 16, 2020, the Company completed an underwritten public offering, in which it sold 2,250,000 shares of its common stock at a price of \$42.00 per share for total gross proceeds of \$94.5 million. The net purchase price after deducting underwriting discounts and commissions was \$39.48 per share, which generated net proceeds of \$88.8 million. The Company incurred an additional \$0.2 million of offering expenses in connection with this public offering.

In November 2020 the Company entered into an Open Market Sale Agreement (the "Sales Agreement") with Jefferies LLC (the "Sales Agent"), under which it may, from time to time, sell shares of its common stock having an aggregate offering price of up to \$125.0 million through the Sales Agent (the "ATM Offering"). Pursuant to the Sales Agreement, the Company will pay the Sales Agent a commission for its services in acting as an agent in the sale of common stock in an amount equal to 3% of the gross sales price per share sold. No shares were sold under the ATM Offering as of September 30, 2021.

A summary of the Company's unvested shares is as follows:

Balance at December 31, 2020	2,746,759
Share vesting	(1,379,360)
Balance at September 30, 2021	<u>1,367,399</u>

For accounting purposes, unvested shares of common stock are considered issued, but not outstanding until they vest.

Common stock reserved for future issuance consists of the following:

	September 30, 2021
Common stock warrants	7,679,228
Stock options and performance-based units outstanding	4,434,366
Shares available for issuance under the 2019 Incentive Plan	1,931,919
Shares available for issuance under the ESPP Plan	842,036
Balance at September 30, 2021	<u>14,887,549</u>

Preferred Stock

The Company is authorized to issue up to 40 million shares of preferred stock. As of September 30, 2021, and December 31, 2020, there were no shares of preferred stock issued or outstanding.

Equity Incentive Plan

The Company's 2019 Equity Incentive Plan (the "Existing Incentive Plan") provides 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 to eligible recipients, including employees, directors or consultants of the Company. The Company had 2,231,739 shares of common stock authorized for issuance under the Existing Incentive Plan, of which, 1,400,528 stock options and 16,260 restricted stock awards were granted in 2019. As a result of the adoption of the 2019 Incentive Award Plan (the "2019 Plan") in October 2019, no further shares are available for issuance under the Existing Incentive Plan.

2019 Incentive Award Plan

In October 2019, the board of directors adopted, and the Company's stockholders approved the 2019 Plan, which became effective in connection with the IPO. Under the 2019 Plan, the Company may grant stock options, stock appreciation rights, restricted stock, restricted stock units and other awards to individuals who are then employees, officers, non-employee directors or consultants of the Company or its subsidiaries. The number of shares initially available for issuance will be increased by (i) the number of shares subject to stock options or similar awards granted under the Existing Incentive Plan that expire or otherwise terminate without having been exercised in full after the effective date of the 2019 Plan and unvested shares issued pursuant to awards granted under the Existing Incentive Plan that are forfeited to or repurchased by the Company after the effective date of the 2019 Plan, with the maximum number of shares to be added to the 2019 Plan pursuant to clause (i) above equal to 1,416,788 shares, and (ii) an annual increase on January 1 of each calendar year beginning in 2020 and ending in 2029, equal to the lesser of (a) 5% of the shares of common stock outstanding on the final day of the immediately preceding calendar year and (b) such smaller number of shares as determined by the board of directors. As of September 30, 2021, 1,931,919 shares of common stock remain available for issuance, which includes 1,568,250 stock options and 130,050 performance-based units granted during the nine months ended September 30, 2021 as well as the annual increases of 1,250,511 and 1,158,580 shares that were authorized on January 1, 2021 and 2020.

Performance-based Units

During 2020, the Company granted 220,000 performance-based stock units ("PSU") whereby vesting depends upon the approval by the FDA of vonoprazan for *H. pylori* and then, or concurrent with, erosive esophagitis. In 2021, the Company granted an additional 130,050 PSUs to employees. As of September 30, 2021, the PSU milestones had not been achieved. As of September 30, 2021, no related compensation cost had been recognized. The following table summarizes PSU activity under the 2019 Incentive Award Plan during the nine months ended September 30, 2021.

	Number of Stock Units	Weighted- Average Grant Date Fair Value Per Share
Unvested balance at December 31, 2020	220,000	\$ 32.48
Granted	130,050	\$ 37.65
Vested	—	\$ —
Forfeited	(10,000)	\$ 29.43
Unvested balance at September 30, 2021	<u>340,050</u>	<u>\$ 34.55</u>

As of September 30, 2021, there was approximately \$10.9 million of related unrecognized compensation cost, which will begin to be recognized when vesting is probable.

Employee Stock Purchase Plan

In October 2019, the board of directors adopted, and the Company's stockholders approved, the Employee Stock Purchase Plan (the "ESPP"), which became effective in connection with the IPO. The ESPP permits participants to purchase common stock through payroll deductions of up to 20% of their eligible compensation, which includes a participant's gross base compensation for services to the Company, including overtime payments and excluding sales commissions, incentive compensation, bonuses, expense reimbursements, fringe benefits and other special payments. A total of 270,000 shares of common stock was initially reserved for issuance under the ESPP. In addition, the number of shares available for issuance under the ESPP will be annually increased on January 1 of each calendar year beginning in 2020 and ending in 2029, by an amount equal to the lesser of: (i) 1% of the shares outstanding on the final day of the immediately preceding calendar year and (ii) such smaller number of shares as is determined by the board of directors. As of September 30, 2021, 842,036 shares of common stock remain available for issuance, which includes the 30,237 shares sold to employees during the nine months ended September 30, 2021 as well as the annual increases of 312,628 and 289,645 shares that were authorized on January 1, 2021 and 2020 respectively.

The ESPP is considered a compensatory plan, and the Company recorded related stock-based compensation of \$0.1 and \$0.3 million and for the three and nine months ended September 30, 2021. The weighted-average assumptions used to estimate the fair value of ESPP awards using the Black-Scholes option valuation model were as follows:

	Nine Months Ended September 30,	
	2021	2020
Assumptions:		
Expected term (in years)	0.69	1.00
Expected volatility	76.25%	76.25%
Risk free interest rate	0.09%	0.15%
Dividend yield	—	—

The estimated weighted-average fair value of ESPP awards during 2021 was \$14.66. As of September 30, 2021, the total unrecognized compensation expense related to the ESPP was \$0.1 million, which is expected to be recognized over a weighted-average period of approximately 0.3 years.

401(k) Plan

The Company established a 401(k) savings plan during the year ended December 31, 2020. The Company's contributions to the plan are discretionary. During the year ended December 31, 2020, the Company incurred \$0.3 million of expense related to employer contributions, which was based on a 75% match of employees' annual contributions. In January 2021, the Board of Directors approved the annual discretionary match for 2020, which was settled by contributing 8,356 shares. In August 2021, the Board of Directors approved a semi-annual discretionary match for 2021, which was settled by contributing 18,394 shares. During the three and nine months ended September 30, 2021, the Company incurred \$0.1 million and \$0.7 million of expense related to estimated 2021 employer contribution liabilities, which was based on a 75% match of employees' contributions during the period.

Stock Options

The fair value of each employee and non-employee stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model. The Company, prior to the IPO on October 29, 2019, was a private company and lacked company-specific historical and implied volatility information. Therefore, it estimated its expected volatility based on the historical volatility of a publicly traded set of peer companies. Due to the lack of historical exercise history, the expected term of the Company's stock options for employees was determined utilizing the "simplified" method for awards. The expected term of stock options granted to non-employees was equal to the contractual term of the option award. The risk-free interest rate was determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield was zero based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future.

A summary of the Company's stock option activity and related information is as follows:

	Options Outstanding	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value (in thousands)
Balance at December 31, 2020	2,728,742	\$ 21.36	9.10	\$ 34,432
Options granted	1,568,250	38.61		
Options exercised and shares vested	(95,071)	18.73		
Options cancelled	(107,605)	34.07		
Balance at September 30, 2021	4,094,316	\$ 27.70	8.65	\$ 30,591
Options exercisable as of September 30, 2021	941,254	\$ 18.73	7.95	\$ 13,122

The estimated weighted-average fair value of employee and nonemployee director stock options granted during 2021 was \$23.20 per option. As of September 30, 2021, the Company had \$49.4 million of unrecognized stock-based compensation expense, which is expected to be recognized over a weighted-average period of 2.9 years.

The weighted-average assumptions used to estimate the fair value of stock options using the Black-Scholes option valuation model were as follows:

Assumptions:	Nine Months Ended September 30,	
	2021	2020
Expected term (in years)	6.00	5.23
Expected volatility	67.37%	56.24%
Risk free interest rate	0.65%	0.36%
Dividend yield	—	—

Stock-Based Compensation Expense

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Research and development expense	\$ 1,024	\$ 604	\$ 2,910	\$ 842
General and administrative expense	3,395	1,466	9,564	2,619
Total	\$ 4,419	\$ 2,070	\$ 12,474	\$ 3,461

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

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the unaudited interim financial statements and notes thereto included in this Quarterly Report on Form 10-Q and with our audited financial statements and notes thereto for the year ended December 31, 2020 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K for the year ended December 31, 2020 ("2020 Form 10-K").

Forward Looking Statements

The following discussion and other parts of this quarterly report contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements other than statements of historical facts contained in this quarterly report, including statements regarding our future results of operations and financial position, business strategy, research and development plans and costs, the impact of COVID-19, the timing and likelihood of regulatory filings and approvals, commercialization plans, pricing and reimbursement, the potential to develop future product candidates, the timing and likelihood of success of the plans and objectives of management for future operations, and future results of anticipated product development efforts, are forward-looking statements. These statements are often identified by the use of words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "should," "estimate," or "continue," and similar expressions or variations. The forward-looking statements in this quarterly report are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, operating results, business strategy, short-term and long-term business operations and objectives. These forward-looking statements speak only as of the date of this quarterly report and are subject to a number of risks, uncertainties and assumptions, including those described in the Part II, Item 1A under the heading "Risk Factors." The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

Overview

We are a late clinical-stage biopharmaceutical company focused on developing and commercializing novel treatments for gastrointestinal, or GI, diseases. Our initial product candidate, vonoprazan, is an oral small molecule potassium competitive acid blocker, or P-CAB. P-CABs are a novel class of medicines that block acid secretion in the stomach. Vonoprazan has shown rapid, potent, and durable anti-secretory effects and has demonstrated clinical benefits over the current standard of care as a single agent in the treatment of gastroesophageal reflux disease, or GERD, and in combination with antibiotics for the treatment of *H. pylori* infection. Takeda Pharmaceutical Company Limited, or Takeda, developed vonoprazan and has received marketing approval in Japan and numerous other countries in Asia and Latin America. Vonoprazan generated over \$750 million in net sales in its sixth full year on the market since its approval in Japan in late 2014. In May 2019, we licensed the U.S., European, and Canadian rights to vonoprazan from Takeda. We initiated two pivotal Phase 3 clinical trials in the fourth quarter of 2019 for vonoprazan: one for the treatment of erosive GERD (PHALCON-EE), also known as erosive esophagitis, and a second for the treatment of *H. pylori* infection (PHALCON-HP). In August 2019, we received Qualified Infectious Disease Product ("QIDP") and Fast Track designations from the FDA, for vonoprazan tablets in combination with amoxicillin tablets and clarithromycin tablets and with amoxicillin tablets alone for the treatment of *H. pylori* infection. In May 2021, we received additional QIDP and Fast Track designations to include amoxicillin capsules in addition to amoxicillin tablets. Vonoprazan has the potential to be the first gastric anti-secretory agent from a novel class approved in the United States, Europe, or Canada in over 30 years. In addition, we continue to plan to pursue vonoprazan lifecycle extension strategies in areas with clear unmet need, clinical rationale, and commercial justification.

In March 2020, due to global efforts to combat the coronavirus, COVID-19 pandemic, we announced a temporary pause in randomization of new patients in our Phase 3 trials. In June 2020, we announced that we had recommenced randomization of new patients in both of our Phase 3 trials. Despite the pause, we completed patient enrollment in PHALCON-EE in November 2020 and in PHALCON-HP in January 2021.

On April 29, 2021, we announced that in PHALCON-HP both vonoprazan-based regimens successfully met their primary endpoints and met all secondary endpoints. The trial studied vonoprazan in combination with amoxicillin and clarithromycin ("vonoprazan triple therapy") and vonoprazan in combination with amoxicillin ("vonoprazan dual therapy") compared to lansoprazole in combination with amoxicillin and clarithromycin ("lansoprazole triple therapy"). PHALCON-HP is the largest Phase 3 registration trial ever conducted in *H. pylori* infection, randomizing 992 patients with confirmed *H. pylori* infection.

The primary endpoints in the PHALCON-HP study were non-inferiority of the *H. pylori* eradication rate for each of vonoprazan triple and dual therapy compared to lansoprazole triple therapy. Based on FDA feedback, the primary endpoint excluded patients with amoxicillin or clarithromycin resistant strains of *H. pylori*. Both vonoprazan-based regimens successfully met their primary endpoints. Vonoprazan triple therapy and vonoprazan dual therapy also met all secondary endpoints, demonstrating superior eradication rates versus lansoprazole triple therapy in all patients and in patients with clarithromycin-resistant strains of *H. pylori*. Patients with clarithromycin resistant strains comprised 20.3% of the study population. In addition, both vonoprazan-based regimens were generally well tolerated with a safety profile comparable to lansoprazole triple therapy.

On October 18, 2021, we announced that vonoprazan successfully met its primary endpoints and key secondary superiority endpoints in PHALCON-EE, a pivotal phase 3 trial evaluating vonoprazan versus lansoprazole for the treatment of erosive esophagitis (EE).

PHALCON-EE was a trial with two phases. In the first phase, vonoprazan 20 mg was compared to lansoprazole 30 mg in the healing of EE after up to 8 weeks of treatment (Healing Phase). In the Healing Phase, patients were assessed via endoscopy to determine complete healing following 2 weeks of treatment and, if complete healing was not achieved, a second endoscopy occurred at 8 weeks of treatment. Patients who achieved complete healing were re-randomized into the second phase of the trial, where vonoprazan 10 mg and 20 mg were compared to lansoprazole 15 mg to assess maintenance of healing via endoscopy following 24 weeks of treatment (Maintenance Phase). Heartburn symptom relief was assessed via secondary endpoints in both the Healing and Maintenance Phases of the study based on twice daily e-diary data collection.

The trial met the primary endpoint of the Healing Phase, demonstrating non-inferiority of vonoprazan compared to lansoprazole in the percentage of all patients who have complete healing of EE by Week 8. The trial also met the secondary superiority endpoint of healing in patients with LA Classification Grade C/D erosions, or moderate-to-severe disease, at Week 2, with vonoprazan demonstrating significantly faster healing than lansoprazole. Vonoprazan was also compared to lansoprazole in a superiority test for onset of sustained resolution of heartburn by day 3 but did not achieve statistical significance. In additional secondary endpoint superiority comparisons, vonoprazan healing rates were numerically greater than lansoprazole in all patients at Week 2 and in moderate-to-severe patients by Week 8 although these results were not statistically significant in favor of vonoprazan due to the sequential testing method employed in the trial. Vonoprazan also met the secondary endpoint of showing non-inferiority to lansoprazole in the mean percentage of 24-hour heartburn free days over the healing period.

In the Maintenance Phase, vonoprazan met the primary and all secondary endpoints. The primary endpoint of the Maintenance Phase was non-inferiority of vonoprazan 10 mg and 20 mg compared to lansoprazole 15 mg in the percentage of all patients who maintained healing of EE through Week 24. Both vonoprazan doses met the Maintenance Phase primary endpoint of non-inferiority while also meeting the secondary comparison demonstrating superiority of maintenance of healing versus lansoprazole.

Both vonoprazan doses also met the secondary endpoint of demonstrating superiority of the percentage of patients with moderate-to-severe disease who maintained healing of EE through Week 24. Additionally, both vonoprazan doses also met the secondary endpoint of showing non-inferiority to lansoprazole 15 mg in the mean percentage of 24-hour heartburn free days over the maintenance period.

Overall, the safety results for vonoprazan observed in PHALCON-EE were consistent with the results observed in prior clinical studies. We plan to present the full results from the PHALCON-EE study at a medical meeting next year and submit them for publication in a peer-reviewed journal.

Based on the positive PHALCON-EE data, we plan to submit an NDA to FDA in the first quarter of 2022 seeking the following indications: healing of all grades of EE and relief of heartburn, and maintenance of healing of all grades of EE and relief of heartburn. We expect a decision on the NDA in 2023 and, if approved, we expect a commercial launch of vonoprazan for the treatment of EE in 2023.

In September 2021 we submitted, and in November 2021 the FDA accepted for filing, NDAs for convenience packs for each of vonoprazan triple therapy and vonoprazan dual therapy for the treatment of *H. pylori* infection. In addition, in April 2021, we commenced enrollment of patients in our Phase 2 trial evaluating various doses of vonoprazan as an on-demand therapy for non-erosive reflux disease or NERD with expected top line data in the first quarter of 2022.

Our assumptions used to determine expected timelines for clinical trials and regulatory filings, however, may not be correct due to a number of factors, including the uncertainties regarding COVID-19 and its potential further impact on our operations and clinical trials, and we may experience delays in the completion of such trials beyond our expected timelines and resulting delays in the filing of our regulatory submissions. Any delays in the completion of our clinical trials and regulatory filings or disruption in our supply chain could have a material adverse effect on our business, financial condition and results of operations.

As of July 14, 2021, we had received agreement from FDA on our proposed initial Pediatric Study Plans for the treatment of *H. pylori* infection and for the healing of erosive esophagitis and relief of heartburn, maintenance of erosive esophagitis and relief of heartburn, and the treatment of heartburn related to symptomatic GERD. We also received, in October 2020, a positive opinion from the European Paediatric Committee on the agreement of a Paediatric Investigational Plan for the treatment of gastroesophageal reflux disease and the treatment of *H. pylori* infection.

We commenced our operations in 2018 and have devoted substantially all of our resources to date to organizing and staffing our company, business planning, raising capital, in-licensing our initial product candidate, vonoprazan, meeting with regulatory authorities, preparing for and managing our Phase 3 clinical trials of vonoprazan, and providing other general and administrative support for these operations. Our operations to date have been funded primarily through the issuance of convertible promissory notes, commercial bank debt, proceeds from our initial public offering, or IPO, and proceeds from our follow-on stock offering in December 2020. From our inception through September 30, 2021, we have raised aggregate gross proceeds of \$90.3 million from the issuance of convertible promissory notes in 2019, \$50.0 million of commercial bank debt, net proceeds from our IPO of \$191.5 million from the sale of 10,997,630 shares of common stock and, in December 2020, the Company raised net proceeds of \$88.6 million from the sale of 2,250,000 shares of common stock at a public offering price of \$39.48 per share after deducting underwriting discounts and commissions, and an additional \$0.2 million in offering costs. As of September 30, 2021, we had cash and cash equivalents of \$224.6 million. Based on our current operating plan, and subject to the potential delays and cost increases resulting from the evolving COVID-19 pandemic, we believe that our existing cash and cash equivalents together with the drawdown of the remaining \$100 million under our loan agreement Hercules will be sufficient to fund our operations into the middle of 2023.

We do not have any products approved for sale and have incurred net losses since our inception. Our net losses for the nine month periods ended September 30, 2021 and 2020 were \$108.1 million and \$75.3 million, respectively. As of September 30, 2021, we had an accumulated deficit of \$493.5 million. Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of our clinical development activities, other research and development activities, and pre-commercialization activities. We expect our expenses and operating losses will increase substantially as we advance vonoprazan through clinical trials, seek regulatory approval for vonoprazan, expand our clinical, regulatory, quality, manufacturing and commercialization capabilities, incur significant commercialization expenses for marketing, sales, manufacturing and distribution if we obtain marketing approval for vonoprazan, protect our intellectual property, expand our general and administrative support functions, including hiring additional personnel, and incur additional costs associated with operating as a public company.

We have never generated any revenue and do not expect to generate any revenues from product sales unless and until we successfully complete development and obtain regulatory approval for vonoprazan. Accordingly, until such time as we can generate significant revenue from sales of vonoprazan, if ever, we expect to finance our cash needs through equity offerings, our existing loan and security agreement, or the Loan Agreement, debt financings, or other capital sources, including potential collaborations, licenses and other similar arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all, and this risk could be exacerbated by the impact of COVID-19 on global economic conditions. Our failure to raise capital or enter into such other arrangements when needed would have a negative impact on our financial condition and could force us to delay, limit, reduce or terminate our product development or future commercialization efforts, or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Financial Operations Overview

Our financial statements include our accounts (the receiving entity) and the accounts of YamadaCo IIA, Inc., or YamadaCo, prior to being merged into a single entity effective March 13, 2019. We and YamadaCo were entities under common control of Frazier Life Sciences IX, L.P., or Frazier, as a result of, among other things, Frazier's: (i) ownership of a majority of the outstanding capital stock of both companies; (ii) financing of both companies; (iii) control of the board of directors of both companies; and (iv) management of both companies. Both Phathom and YamadaCo were formed for the purpose of identifying potential assets around which to form an operating company. As the merged entities were under common control, the financial statements report the financial position, results of operations and cash flows of Phathom and YamadaCo as though the transfer of net assets and equity interests had occurred at the beginning of 2018. All intercompany accounts and transactions have been eliminated.

License Agreement with Takeda

On May 7, 2019, we and Takeda entered into an exclusive license, or the Takeda License, pursuant to which we in-licensed the U.S., European, and Canadian rights to vonoprazan fumarate. During the term of the Takeda License, we and our affiliates are not permitted to commercialize any pharmaceutical product, other than vonoprazan, that treats acid-related disorders, except for certain generic and OTC competing products in specified circumstances. We will be responsible at our cost for the development, manufacture and commercialization of vonoprazan products. We are required to use commercially reasonable efforts to develop and commercialize the vonoprazan products in our licensed territory.

Under the Takeda License, Takeda has the sole right and authority, with our input, to prepare, file, prosecute, and maintain all Takeda and joint patents on a worldwide basis at its own cost. We are responsible, at our cost, for preparing, filing, prosecuting, and maintaining patents on inventions made solely by us in connection with vonoprazan, subject to input from Takeda.

We paid Takeda upfront consideration consisting of a cash fee of \$25.0 million, 1,084,000 shares of our common stock, a warrant to purchase 7,588,000 shares of our common stock at an exercise price of \$0.00004613 per share, or the Takeda Warrant, and issued Takeda a right to receive an additional common stock warrant, or the Takeda Warrant Right, if Takeda's fully-diluted ownership of the Company represented less than a certain specified percentage of the fully-diluted capitalization, including shares issuable upon conversion of then outstanding convertible promissory notes, calculated immediately prior to the closing of our IPO. The Takeda Warrant Right expired without effect since no fair value had been allocated to it upon completion of our IPO, and no additional warrant was issued. We agreed to make milestone payments to Takeda upon achieving certain tiered aggregate annual net sales of licensed products in the United States, Europe, and Canada up to a total maximum milestone amount of \$250.0 million. We also agreed to make tiered royalty payments at percentages in the low double digits on net sales of licensed products, subject to specified offsets and reductions. Royalties will be payable, on a product-by-product and country-by-country basis from the first commercial sale of such product in such country, until the latest of expiration of the licensed patents covering the applicable product, expiration of regulatory exclusivity in such country, or 15 years following first commercial sale in such country.

Components of Results of Operations

Operating Expenses

Research and Development

To date, our research and development expenses have related to the development of vonoprazan. Research and development expenses are recognized as incurred and payments made prior to the receipt of goods or services to be used in research and development are capitalized until the goods or services are received.

Research and development expenses include:

- salaries, payroll taxes, employee benefits, and stock-based compensation charges for those individuals involved in research and development efforts;
- external research and development expenses incurred under agreements with contract research organizations, or CROs, and consultants to conduct and support our ongoing clinical trials of vonoprazan; and
- costs related to the manufacturing of vonoprazan for our clinical trials as well as for qualification of future third party commercial manufacturing.

We cannot determine with certainty the timing of initiation, the duration or the completion costs of current or future clinical trials and nonclinical studies of vonoprazan or any future product candidates due to the inherently unpredictable nature of clinical and preclinical development. Clinical and preclinical development timelines, the probability of success and development costs can differ materially from expectations. In addition, we cannot forecast which product candidates may be subject to future collaborations, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

Our future clinical development costs may vary significantly based on factors such as:

- per patient trial costs;
- the number of trials required for approval;
- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the number of patients that participate in the trials;
- the number of doses evaluated in the trials;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in the trials and follow-up;
- the phase of development of the product candidate;
- the efficacy and safety profile of the product candidate; and
- delays and cost increases as a result of COVID-19.

General and Administrative

General and administrative expenses consist of salaries and employee-related costs, including stock-based compensation, for personnel in executive, finance, accounting, legal, human resources and other administrative functions, legal fees relating to intellectual property and corporate matters, and professional fees for accounting and consulting services. We anticipate that our general and administrative expenses will increase in the future to support our continued research and development activities, pre-commercial preparation activities for vonoprazan and, if any future product candidate receives marketing approval, commercialization activities. We also anticipate increased expenses related to audit, legal, regulatory, and tax-related services associated with maintaining compliance with exchange listing and Securities and Exchange Commission, or SEC, requirements, director and officer insurance premiums, and investor relations costs associated with operating as a public company.

Interest Income

Interest income consists of interest on our money market fund.

Interest Expense

Beginning on September 17, 2021, interest expense consists of (i) cash interest at a variable annual rate equal to the greater of (a) 5.50% and (b) the Prime Rate (as reported in the Wall Street Journal) plus 2.25% (the "Interest Rate"), (ii) payment-in-kind interest at a per annum rate of interest equal to 3.35%, and (iii) amortization of the Hercules Loan Agreement debt discount recorded in connection with the fair value of warrants issued to the lenders, the debt issuance costs incurred, and the obligation to make a final payment.

Prior to September 17, 2021, interest expense consisted of interest on our outstanding commercial bank debt with SVB at a variable annual rate equal to the greater of (a) 7.25% and (b) Prime Rate (as reported by the Wall Street Journal) plus 1.75% and amortization of the SVB Term Loan debt discount recorded in connection with the fair value of warrants issued to the lenders, the debt issuance costs incurred, and the obligation to make a final payment.

Change in Fair Value of Warrant Liabilities

In connection with the entry into the SVB Term Loan, we issued the lenders warrants to purchase our capital stock, or the Lender Warrants. The Lender Warrants were accounted for as liabilities as they contained a holder put right under which the lenders could have required us to pay cash in exchange for the warrants. We adjusted the carrying value of the Lender Warrants to their estimated fair value at each reporting date, with any change in fair value of the warrant liabilities recorded as an increase or decrease to change in fair value of warrant liabilities in the statements of operations. The Lender Warrants were accounted for at fair value using the Black-Scholes option-pricing model with an expected term equal to the remaining contractual term of the warrants. When we drew down an additional \$25.0 million, or the Term Loan B, in March 2020, the Lender put right expired, and we recorded a final fair value adjustment and reclassified the Lender Warrants balance of \$0.3 million to additional paid-in-capital.

Results of Operations

Comparison of the Nine Months Ended September 30, 2021 and 2020

The following table summarizes our results of operations for the nine months ended September 30, 2021 and 2020 (in thousands):

	Nine Months Ended September 30,		Change
	2021	2020	
Operating expenses:			
Research and development	\$ 58,786	\$ 56,494	\$ 2,292
General and administrative	43,254	16,732	26,522
Total operating expenses	102,040	73,226	28,814
Loss from operations	(102,040)	(73,226)	(28,814)
Other income (expense):			
Interest income	35	1,075	(1,040)
Interest expense	(4,013)	(3,286)	(727)
Change in fair value of warrant liabilities	—	95	(95)
Other income (expense)	(2,039)	(5)	(2,034)
Total other income (expense)	(6,017)	(2,121)	(3,896)
Net loss	\$ (108,057)	\$ (75,347)	\$ (32,710)

Research and Development Expenses. Research and development expenses were \$58.8 million and \$56.5 million for the nine months ended September 30, 2021 and 2020, respectively. The increase of \$2.3 million consisted of \$5.6 million of chemistry manufacturing and controls (“CMC”) costs related to vonoprazan, \$5.3 million of personnel-related expenses, \$4.1 million of expenses related to the regulatory requirements partially offset by a decline in clinical trial costs of \$12.3 million and \$0.4 million of other research costs.

General and Administrative Expenses. General and administrative expenses were \$43.3 million and \$16.7 million for the nine months ended September 30, 2021 and 2020, respectively. The increase of \$26.6 million was due to increases of \$14.3 million in personnel-related expenses, \$9.7 million in professional services expenses for commercial, medical affairs and other services, \$1.2 million in consulting fees and \$1.4 million in other expenses. Due to the planned continued buildout of administrative and commercial functions we expect general and administrative expenses to increase in future periods.

Other Income (Expense). Other expense of \$6.0 million for the nine months ended September 30, 2021 consisted of \$4.0 million of interest expense on outstanding commercial bank debt and \$2.0 million of charges related to early extinguishment of debt. Other expense of \$2.1 million for the nine months ended September 30, 2020 consisted of \$3.3 million of interest expense on outstanding commercial bank debt partially offset by \$1.1 million of interest income and \$0.1 million of other income related to the decrease in the fair value of warrant liabilities.

Results of Operations

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

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

	Three Months Ended		Change
	2021	2020	
Operating expenses:			
Research and development	\$ 16,608	\$ 25,770	\$ (9,162)
General and administrative	16,529	7,060	9,469
Total operating expenses	33,137	32,830	307
Loss from operations	(33,137)	(32,830)	(307)
Other income (expense):			
Interest income	8	15	(7)
Interest expense	(1,485)	(1,286)	(199)
Change in fair value of warrant liabilities	—	—	—
Other income (expense)	(2,048)	(4)	(2,044)
Total other income (expense)	(3,525)	(1,275)	(2,250)
Net loss	\$ (36,662)	\$ (34,105)	\$ (2,557)

Research and Development Expenses. Research and development expenses were \$16.6 million and \$25.8 million for the three months ended September 30, 2021 and 2020, respectively. The decrease of \$9.2 million consisted of \$15.3 million of clinical trial costs partially offset by increases of \$4.2 million of expenses related to the regulatory requirements and \$1.9 million of personnel-related expenses.

General and Administrative Expenses. General and administrative expenses were \$16.5 million and \$7.1 million for the three months ended September 30, 2021 and 2020, respectively. The increase of \$9.4 million was due to increases of \$4.1 million in personnel-related expenses, \$4.9 million in professional services expenses for commercial, medical affairs and other services and \$0.4 million in other expenses. Due to the planned continued buildout of administrative and commercial functions we expect general and administrative expenses to increase in future periods.

Other Income (Expense). Other expense of \$3.5 million for the three months ended September 30, 2021 consisted of \$1.5 million interest expense on outstanding commercial bank debt and \$2.0 million of charges related to early extinguishment of debt. Other expense of \$1.3 million for the three months ended September 30, 2020 consisted of interest expense on outstanding commercial bank debt.

Liquidity and Capital Resources

We have incurred net losses and negative cash flows from operations since our inception and anticipate we will continue to incur net losses for the foreseeable future. As of September 30, 2021, we had cash and cash equivalents of \$224.6 million.

Loan Agreement with Hercules

On September 17, 2021, (the "Closing Date"), we entered into a Loan and Security Agreement (the "Loan Agreement") with Hercules Capital, Inc., in its capacity as administrative agent and collateral agent and as a lender (in such capacity, the "Agent" or "Hercules") and the other financial institutions that from time to time become parties to the Loan Agreement as lenders (collectively, the "Lenders").

The Loan Agreement provides for term loans in an aggregate principal amount of up to \$200.0 million (the “Term Loan”) under multiple tranches. The tranches consist of (i) a first tranche consisting of term loans in an aggregate principal amount of \$100.0 million, all of which was funded on the Closing Date (the “First Advance”), (ii) a second tranche consisting of up to an additional \$50.0 million, which will become available to us upon achievement of the protocol-specified primary efficacy endpoints in our Phase 3 trial studying vonoprazan for the healing and maintenance of healing of erosive esophagitis with acceptable safety data, such that the results support the submission of a New Drug Application (“NDA”) or supplemental NDA without the need to conduct another Phase 3 study and will be available, if specified conditions are met, through December 15, 2022, (iii) a third tranche consisting of an additional \$25.0 million, which will become available to us upon the achievement of (a) FDA approval of our NDA for vonoprazan and amoxicillin, or its NDA for vonoprazan, amoxicillin and clarithromycin, in each case for an indication relating to the treatment of H. pylori with an approved indication on the claim that is generally consistent with that sought in our NDA submission; and (b) filing of an NDA or supplemental NDA for vonoprazan for indications relating to the healing and maintenance of healing of erosive esophagitis (milestones (a) and (b), together, the “Second Performance Milestone”), and will be available, if specified conditions are met, through September 30, 2023, and (iv) a fourth tranche consisting of up to an additional \$25.0 million, which will be available, if specified conditions are met, through March 31, 2024, upon achievement of the Second Performance Milestone. We intend to use the proceeds of the Term Loan advances for working capital and general corporate purposes. In addition, approximately \$54 million of the proceeds from the First Advance was used to satisfy in full and retire our indebtedness under its previously outstanding credit facility with Silicon Valley Bank (the “SVB Term Loan”).

The Term Loan will mature on October 1, 2026 (the “Maturity Date”). The Term Loan bears (i) cash interest at a variable annual rate equal to the greater of (a) 5.50% and (b) the Prime Rate (as reported in the Wall Street Journal) plus 2.25% (the “Interest Rate”) and (ii) payment-in-kind interest at a per annum rate of interest equal to 3.35%. We may make payments of interest only through October 1, 2024, which may be extended to October 1, 2025, upon the achievement of the Second Performance Milestone on or prior to September 30, 2024 and the condition that no default or event of default exists, and which is further extendable to October 1, 2026, subject to FDA approval of our NDA (or supplemental NDA) for vonoprazan for an indication relating to the healing and maintenance of healing of erosive esophagitis with an approved indication on the label that is generally consistent with that sought in our NDA submission (or supplemental NDA submission) (the “Third Performance Milestone”) on or prior to September 30, 2025 and no default or event of default exists (the “interest only period”). After the interest-only period, the principal balance and related interest will be required to be repaid in equal monthly installments and continuing until the Maturity Date.

The Loan Agreement contains customary closing fees, prepayment fees and provisions, events of default, and representations, warranties and covenants, including a financial covenant requiring us to maintain certain levels of cash subject to a control agreement in favor of the Agent (minus accounts payable not paid within 120 days of invoice) (“Qualified Cash”), and commencing on May 15, 2023, trailing three-month net product revenue from the sale of vonoprazan and products containing vonoprazan. The revenue covenant will be waived at any time in which we maintain Qualified Cash equal to at least 60.0% (prior to the Third Performance Milestone), and 35% (following the Third Performance Milestone) of the total outstanding Term Loan principal amount, or our market capitalization is at least \$900.0 million.

As collateral for the obligations, we granted to Hercules a senior security interest in all of our right, title, and interest in, to and under substantially all of our property, inclusive of intellectual property.

In connection with the entry into the Loan Agreement, we issued to Hercules a warrant (the “Warrant”) to purchase a number of shares of our common stock equal to 2.5% of the aggregate amount of the Term Loan advances funded, and will issue to Hercules additional warrants when future Term Loan advances are funded. On the Closing Date, we issued a Warrant for 74,782 shares of common stock. The Warrant will be exercisable for a period of seven years from the date of issuance at a per-share exercise price equal to \$33.43, which was the closing price of our common stock on September 16, 2021.

Commercial Bank Debt with SVB

On May 14, 2019, we entered into the SVB Term Loan with Silicon Valley Bank, or SVB, as administrative and collateral agent, and lenders SVB and WestRiver Innovation Lending Fund VIII, L.P. We borrowed \$25.0 million, Term Loan A, at the inception of the Loan Agreement and the additional \$25.0 million, Term Loan B, in March 2020. On September 17, 2021, the SVB Term Loan was paid by the Company as a result of the Hercules Financing.

The SVB Term Loan bore interest at a floating rate of the higher of the Wall Street Journal Prime rate plus 1.75% or 7.25%. Under the original SVB Loan Agreement, the monthly payments consisted of interest-only through May 31, 2021. Pursuant to the first amendment to the SVB Term Loan entered into on March 11, 2020, and the second amendment to the SVB Term Loan entered into on March 11, 2021, the interest-only payment period was initially extended through July 31, 2021, and was further extended until December 31, 2021, after we received positive data from its Phase 3 clinical trial in *H. pylori* infection sufficient to file a new drug application, or NDA, with the FDA. The interest-only payment period could have been further extended until November 30, 2022, if we would receive positive data from its Phase 3 clinical trial in erosive esophagitis for vonoprazan sufficient to file an NDA with the FDA. Subsequent to the interest-only period, the Term Loans would have been payable in equal monthly installments of principal, plus accrued and unpaid interest through the maturity date of May 1, 2024.

In addition, we were obligated to pay a final payment fee of 8.25% of the original principal amount of the SVB Term Loan. We could have elected to prepay all or a portion of the SVB Term Loan prior to maturity, subject to a prepayment fee of up to 2.0% of the then outstanding principal balance and payment of a pro rata portion of the final payment fee. After repayment, no SVB Term Loan amounts could have been borrowed again. The borrowings under the SVB Term Loan were collateralized by substantially all of our assets.

The SVB Term Loan contained certain customary affirmative and negative covenants and events of default. The affirmative covenants included, among others, covenants requiring us to maintain our legal existence and governmental approvals, deliver certain financial reports, maintain insurance coverage and satisfy certain requirements regarding our operating accounts. The negative covenants included, among others, limitations on our ability to incur additional indebtedness and liens, merge with other companies or consummate certain changes of control, acquire other companies, engage in new lines of business, make certain investments, pay dividends, transfer or dispose of assets, amend certain material agreements or enter into various specified transactions. Upon the occurrence of an event of default, subject to any specified cure periods, all amounts owed by us would have begun to bear interest at a rate that is 4.00% above the rate effective immediately before the event of default and could have been declared immediately due and payable by SVB, as collateral agent.

In connection with the SVB Term Loan, we issued Lender Warrants, which became exercisable when we borrowed Term Loan B in March 2020. The Lender Warrants are exercisable for 16,446 shares of common stock. The Lender Warrants expire ten years from the date of issuance. The Lender Warrants included a put option pursuant to which, in the event that we did not draw down Term Loan B on or before March 31, 2020, the warrant holders could have required us to repurchase the warrants for a total aggregate repurchase price of \$0.5 million. Upon the Term Loan B draw in March 2020, the put option related to the Lender Warrants expired, at which time we recorded a final fair value adjustment and reclassified the Lender Warrants balance of \$0.3 million to additional paid-in-capital.

At-the-Market-Offering

On November 10, 2020, we entered into an Open Market Sale AgreementSM, or the Sales Agreement, with Jefferies LLC, or the Sales Agent, under which we may, from time to time, sell shares of our common stock having an aggregate offering price of up to \$125.0 million through the Sales Agent, or the ATM Offering. Sales of our common stock made pursuant to the Sales Agreement, if any, will be made under our shelf registration statement on Form S-3 which was filed on November 10, 2020 and declared effective by the SEC on November 16, 2020. We are not obligated to, and we cannot provide any assurances that we will, make any sales of the shares under the Sales Agreement. The Sales Agreement may be terminated by the Sales Agent or us at any time. There were no sales of our common stock under the ATM Offering for the nine-month period ended September 30, 2021.

Underwritten Public Offering

On December 16, 2020, the Company completed an underwritten public offering, in which it sold 2,250,000 shares of its common stock at a price of \$42.00 per share for total gross proceeds of \$94.5 million. The net purchase price after deducting underwriting discounts and commissions was \$39.48 per share, which generated net proceeds of \$88.8 million. We incurred an additional \$0.2 million of offering expenses in connection with the public offering.

Funding Requirements

Based on our current operating plan, we believe that our existing cash and cash equivalents together with the drawdown of the remaining \$100 million under our loan agreement Hercules will be sufficient to fund our operations into the middle of 2023. We expect such current cash and cash equivalents, when combined with our anticipated borrowing ability, will allow us to complete our ongoing Phase 2 trial of vonoprazan for on-demand treatment of non-erosive reflux disease and commercially launch vonoprazan, if approved, in both *H. pylori* and EE. However, our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties and actual results could vary materially. We have based this estimate on assumptions that may prove to be wrong, and we could deplete our capital resources sooner than we expect. Additionally, the process of testing product candidates in clinical trials is costly, and the timing of progress and expenses in these trials is uncertain.

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

- the initiation, type, number, scope, results, costs, and timing of our clinical trials of vonoprazan and preclinical studies or clinical trials of other potential product candidates we may choose to pursue in the future, including feedback received from regulatory authorities;
- delays and cost increases as a result of COVID-19;
- the costs and timing of manufacturing for vonoprazan or any future product candidates, including commercial scale manufacturing if any product candidate is approved;
- the costs, timing and outcome of regulatory review of vonoprazan or any future product candidates;
- the costs of obtaining, maintaining, and enforcing our patents and other intellectual property rights;
- our efforts to enhance operational systems and hire additional personnel to satisfy our obligations as a public company, including enhanced internal controls over financial reporting;
- the costs associated with hiring additional personnel and consultants as our business grows, including additional executive officers and clinical development personnel;
- the timing and amount of the milestone or other payments we must make to Takeda and any future licensors;
- the costs and timing of establishing or securing sales and marketing capabilities for vonoprazan or any future product candidate;
- our ability to achieve sufficient market acceptance, coverage and adequate reimbursement from third-party payors and adequate market share and revenue for any approved products;
- patients' willingness to pay out-of-pocket for any approved products in the absence of coverage and/or adequate reimbursement from third-party payors;
- the terms and timing of establishing and maintaining collaborations, licenses, and other similar arrangements; and
- costs associated with any products or technologies that we may in-license or acquire.

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

Including our existing cash and cash equivalents we believe that we have sufficient working capital on hand to fund operations such that there is no substantial doubt as to our ability to continue as a going concern at the date the financial statements were issued. There can be no assurance that we will be successful in acquiring additional funding, that our projections of its future working capital needs will prove accurate, or that any additional funding would be sufficient to continue operations in future years.

Cash Flows

The following table sets forth a summary of the net cash flow activity for each of the periods indicated (in thousands):

	Nine Months Ended September 30,		\$ Change
	2021	2020	
Net cash provided by (used in):			
Operating activities	\$ (107,195)	\$ (41,488)	\$ (65,707)
Investing activities	(228)	(916)	688
Financing activities	44,545	25,000	19,545
Net increase (decrease) in cash	\$ (62,878)	\$ (17,404)	\$ (45,474)

Operating Activities

Net cash used in operating activities was approximately \$107.2 million and \$41.5 million for the nine months ended September 30, 2021 and 2020, respectively. The net cash used in operating activities for the nine months ended September 30, 2021 was due to approximately \$91.3 million spent on ongoing research and development and general and administrative activities and a \$15.9 million net change in operating assets and liabilities. The net change in operating assets and liabilities primarily related to a \$19.1 million decrease in accounts payable and accrued expenses (including clinical trial expenses) in support of the growth in our operating activities, partially offset by a \$3.2 million decrease in prepaid assets. The net cash used in operating activities for the nine months ended September 30, 2020 was due to approximately \$70.7 million spent on ongoing research and development and general and administrative activities, partially offset by a \$29.2 million net change in operating assets and liabilities. The net change in operating assets and liabilities primarily related to a \$11 million decrease in prepaid clinical activities, and an \$18.4 million increase in accounts payable and accrued expenses in support of the growth in our operating activities, partially offset by a \$0.2 million increase in other long-term assets.

Investing Activities

Net cash used in investing activities for the nine months ended September 30, 2021 and 2020 was primarily due to the cash we paid for acquiring property, plant and equipment.

Financing Activities

Net cash provided by financing activities for the nine months ended September 30, 2021 was due to net proceeds from the loan agreement with Hercules and issuance of common stock from exercise of stock options partially offset by the repayment of the SVB Term Loan. Net cash provided by financing activities for the nine months ended September 30, 2020 was due to our commercial bank debt proceeds of \$25.0 million related to the Term Loan B drawdown.

Contractual Obligations and Commitments

Other than disclosed below, there were no material changes outside the ordinary course of our business during the nine months ended September 30, 2021 to the information regarding our contractual obligations that was disclosed in Management's Discussion and Analysis of Financial Condition and Results of Operations contained in our 2020 Form 10-K.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of our financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities and expenses and the disclosure of contingent assets and liabilities in our financial statements and accompanying notes. We evaluate these estimates and judgments on an ongoing basis. We base our estimates on 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.

For a description of our critical accounting policies, please see the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Policies and Significant Judgments and Estimates" contained in our 2020 Form 10-K. There have not been any material changes to the critical accounting policies discussed therein during the nine months ended September 30, 2021.

Other Company Information

JOBS Act

As an emerging growth company under the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, we can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. We intend to rely on other exemptions provided by the JOBS Act, including without limitation, not being required to comply with the auditor attestation requirements of Section 404(b) of Sarbanes-Oxley.

We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year following the fifth anniversary of the consummation of our IPO, (ii) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.07 billion, (iii) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of the second fiscal quarter of such year, or (iv) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period.

Recent Accounting Pronouncements

The information required by this item is included in Note 1, Organization, Basis of Presentation and Summary of Significant Accounting Policies included in Part 1, Item 1 of this quarterly report.

Off-Balance Sheet Arrangements

During the periods presented we did not have, nor do we currently have, any off-balance sheet arrangements as defined under SEC rules.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

As of September 30, 2021, there have been no material changes surrounding our market risk, including interest rate risk, foreign currency exchange risk, and inflation risk, from the discussion provided in "Management's Discussion and Analysis of Financial Condition and Results of Operations - Quantitative and Qualitative Disclosures About Market Risk" of our 2020 Form 10-K.

Item 4. Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic and current reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable and not absolute assurance of achieving the desired control objectives. In reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. In addition, the design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, control may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act as of the end of the period covered by this quarterly report. Based on such evaluation, our principal executive officer and principal financial officer have concluded that as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the nine months ended September 30, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We are not currently subject to any material legal proceedings. From time to time, we may be involved in legal proceedings or subject to claims incident to the ordinary course of business. Regardless of the outcome, such proceedings or claims can have an adverse impact on us because of defense and settlement costs, diversion of resources and other factors, and there can be no assurances that favorable outcomes will be obtained.

Item 1A. Risk Factors

There have been no material changes to the risk factors disclosed in Part I, Item 1A, "Risk Factors" of our 2020 Form 10-K.

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

Unregistered Sales of Equity Securities

None.

Use of Proceeds from Initial Public Offering of Common Stock

On October 24, 2019, our registration statement on Form S-1 (File No. 333-234020) was declared effective by the SEC for our initial public offering. At the closing of the offering on October 29, 2019, we sold 10,997,630 shares of common stock, which included the exercise in full by the underwriters of their option to purchase 1,434,473 additional shares, at an initial public offering price of \$19.00 per share and received gross proceeds of \$209.0 million, which resulted in net proceeds to us of approximately \$191.5 million, after deducting underwriting discounts and commissions of approximately \$14.6 million and offering-related transaction costs of approximately \$2.9 million. None of the expenses associated with the initial public offering were paid to directors, officers, persons owning ten percent or more of any class of equity securities, or to their associates, or to our affiliates. Goldman Sachs & Co. LLC, Jefferies LLC and Evercore Group L.L.C. acted as joint book-running managers for the offering.

As of September 30, 2021, the net proceeds from our initial public offering have been applied as follows: \$132.6 million towards the clinical development of vonoprazan and \$57.3 million towards working capital and general corporate purposes.

Issuer Repurchases of Equity Securities

None.

Item 3. Defaults Upon Senior Securities

Not Applicable.

Item 4. Mine Safety Disclosures

Not Applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Date	Number	
3.1	Amended and Restated Certificate of Incorporation	8-K	10/29/19	3.1	
3.2	Amended and Restated Bylaws	8-K	9/25/20	3.1	
4.1	Form of Common Stock Certificate	S-1/A	10/15/19	4.1	
4.2	Warrant to purchase shares of common stock issued to Takeda Company Limited, dated May 7, 2019	S-1	9/30/19	4.2	
4.3	Warrant to purchase stock issued to Silicon Valley Bank, dated May 14, 2019	S-1	9/30/19	4.3	
4.4	Warrant to purchase stock issued to WestRiver Innovation Lending Fund VIII, L.P., dated May 14, 2019	S-1	9/30/19	4.4	
4.5	Note Purchase Agreement, dated May 7, 2019, by and among the Registrant and the other parties party thereto, as amended	S-1/A	10/15/19	4.5	
4.6	Description of Registered Securities	10-K	12/31/20	4.6	
10.1	Loan and Security Agreement, dated September 17, 2021, by and among Hercules Capital and the Registrant				X
10.2	Warrant to purchase stock issued to Hercules Capital, dated September 17, 2021				X
31.1	Certification of Chief Executive Officer of Phathom Pharmaceuticals, Inc., as required by Rule 13a-14(a) or Rule 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certification of acting Principal Financial Officer of Phathom Pharmaceuticals, Inc., as required by Rule 13a-14(a) or Rule 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32.1*	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
32.2*	Certification of acting Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.				X
101.SCH	Inline XBRL Taxonomy Extension Schema Document				X
101.CAL	Inline XBRL Taxonomy Calculation Linkbase Document				X
101.LAB	Inline XBRL Taxonomy Label Linkbase Document				X
101.PRE	Inline XBRL Presentation Linkbase Document				X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document				X
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)				X

* This certification is deemed not filed for purpose of section 18 of the Exchange Act or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

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.

PHATHOM PHARMACEUTICALS, INC.

Date: November 8, 2021

By: /s/ Terrie Curran
Terrie Curran
Chief Executive Officer and Director
(Principal Executive Officer)

Date: November 8, 2021

By: /s/ Anthony Guzzo
Anthony Guzzo
Vice President and Chief Accounting Officer
(Principal Accounting Officer and interim Principal Financial Officer)

LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT is made and dated as of September 17, 2021 and is entered into by and among PHATHOM PHARMACEUTICALS, INC., a Delaware corporation, each of its Subsidiaries from time to time party hereto as borrower (individually or collectively, as the context may require, "Borrower"), and the several banks and other financial institutions or entities from time to time parties to this Agreement (each, a "Lender", and collectively "Lenders") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lenders (in such capacity, "Agent").

RECITALS

- A. Borrower has requested Lenders to make available to Borrower one or more Advances in an aggregate principal amount of up to \$200,000,000; and
- B. Lenders are willing to make such Advances on the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, Borrower, Agent and Lenders agree as follows:

**SECTION 1
DEFINITIONS AND RULES OF CONSTRUCTION**

1.1 Unless otherwise defined herein, the following capitalized terms shall have the following meanings:

"Account Control Agreement(s)" means any agreement entered into by and among Agent, Borrower and a third party bank or other institution (including a Securities Intermediary) in which Borrower maintains a Deposit Account or an account holding Investment Property and which perfects Agent's first priority security interest in the subject account or accounts.

"ACH Authorization" means the ACH Debit Authorization Agreement in substantially the form of Exhibit G, provided that account numbers shall be redacted for security purposes if and when filed publicly by Borrower.

"Advance" means a Term Loan Advance.

"Advance Date" means the funding date of any Advance.

"Advance Request" means a request for an Advance submitted by Borrower to Agent in substantially the form of Exhibit A, provided that account numbers shall be redacted for security purposes if and when filed publicly by Borrower.

"Affiliate" means (a) any Person that directly or indirectly controls, is controlled by, or is under common control with the Person in question, (b) any Person directly or indirectly owning, controlling or holding with power to vote 20% or more of the outstanding voting securities of another Person, or (c) any Person 20% or more of whose outstanding voting securities are directly or indirectly owned, controlled or held by another Person with power to vote such securities. As used in the definition of "Affiliate," the term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities, by contract or otherwise.

"Agreement" means this Loan and Security Agreement, as amended, restated, supplemented or otherwise modified from time to time.

"Amortization Date" means October 1, 2024; provided however, (x) if the First Interest Only Extension Conditions are satisfied, then October 1, 2025, and (y) if the Second Interest Only Extension Conditions are satisfied, then October 1, 2026.

“Anti-Corruption Laws” means all laws, rules, and regulations of any jurisdiction applicable to Borrower or any of their respective Affiliates from time to time concerning or relating to bribery or corruption, including without limitation the United States Foreign Corrupt Practices Act of 1977, as amended, the UK Bribery Act 2010 and other similar legislation in any other jurisdictions.

“Anti-Terrorism Laws” means any laws, rules, regulations or orders relating to terrorism or money laundering, including without limitation Executive Order No. 13224 (effective September 24, 2001), the USA PATRIOT Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

“Approval Milestone I” shall mean satisfaction of each of the following events: (a) the HP Milestone has been achieved; and (b) Borrower has provided evidence reasonably satisfactory to Agent that the FDA has filed Borrower’s New Drug Application or supplemental New Drug Application for vonoprazan for indications relating to the healing and maintenance of healing of erosive esophagitis.

“Approval Milestone I Date” means the date on which Borrower achieves the Approval Milestone I.

“Approval Milestone II” shall mean satisfaction of each of the following events: (a) the Approval Milestone I has been achieved; and (b) the EE Milestone has been achieved.

“Approval Milestone II Date” means the date on which the Borrower achieves the Approval Milestone II.

“Blocked Person” means any Person: (a) listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (c) a Person with which any Lender is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law, (d) a Person that commits, threatens or conspires to commit or supports “terrorism” as defined in Executive Order No. 13224, or (e) a Person that is named a “specially designated national” or “blocked person” on the most current list published by OFAC or other similar list.

“Board” means, with respect to any Person that is a corporation, its board of directors, with respect to any Person that is a limited liability company, its board of managers, board of members or similar governing body, and with respect to any other Person that is a legal entity, such Person’s governing body in accordance with its Organizational Documents.

“Borrower Products” means all products, software, service offerings, technical data or technology currently being designed, manufactured or sold or that are under clinical investigation or development by Borrower or any of its Subsidiaries or which Borrower or any of its Subsidiaries intends to sell, license, or distribute in the future including any products or service offerings under development, collectively, together with all products, software, service offerings, technical data or technology that have been sold, licensed or distributed by Borrower since formation.

“Business Day” means any day other than Saturday, Sunday and any other day on which banking institutions in the State of California or State of New York are closed for business.

“Cash” means all cash, cash equivalents and liquid funds.

“CFC” means a controlled foreign corporation within the meaning of Section 957(a) of the Code.

“Change in Control” means any (x) reorganization, recapitalization, consolidation or merger (or similar transaction or series of related transactions) of Borrower, sale or exchange of outstanding shares (or similar transaction or series of related transactions) of Borrower in which the holders of Borrower’s outstanding shares immediately before consummation of such transaction or series of related transactions do not, immediately after consummation of such transaction or series of related transactions, retain shares representing more than 50% of the voting power of the surviving entity of such transaction or series of related transactions (or the parent of such surviving entity if such surviving entity is wholly owned by such parent), in each case without regard to whether Borrower is the surviving

entity or (y) “change of control”, “fundamental change”, “make-whole fundamental change” or any comparable term under and as defined in any indenture governing any Permitted Convertible Debt has occurred.

“Charter” means, with respect to any Person, such Person’s incorporation, formation or equivalent documents, as in effect from time to time.

“Clinical Milestone” means Borrower shall have announced that Borrower’s Phase 3 PHALCON-EE trial, clinicaltrials.gov identifier NCT04124926, has achieved its protocol-specified primary efficacy endpoints with acceptable safety data, such that the results support the submission of a New Drug Application or supplemental New Drug Application without the need to conduct another Phase 3 study (as determined by Borrower’s executive team and Board, subject to Lenders’ reasonable verification). For the avoidance of doubt, statistical superiority with respect to any secondary endpoints does not need to be demonstrated in Borrower’s PHALCON-EE trial for purposes of the this milestone.

“Closing Date” means the date of this Agreement.

“Code” means the Internal Revenue Code of 1986, as amended.

“Compliance Certificate” means a certificate in the form attached hereto as Exhibit D

“Contingent Obligation” means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any Indebtedness, lease, dividend, letter of credit or other obligation of another, including any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards or merchant services issued for the account of that Person; and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term “Contingent Obligation” shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed, without duplication of the primary obligation, to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement. For the avoidance of doubt, no Warrant, Permitted Bond Hedge Transaction or Permitted Warrant Transaction will be considered a Contingent Obligation of Borrower.

“Copyright License” means any written agreement granting any right to use any Copyright or Copyright registration, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“Copyrights” means all copyrights, whether registered or unregistered, held pursuant to the laws of the United States of America, any State thereof, or of any other country.

“Current Company IP” means each pending, registered, issued or in-licensed Intellectual Property that, individually or taken together with any other such Intellectual Property, is material to the business of Borrower and its Subsidiaries, taken as a whole, relating to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Borrower Products, and is owned or co-owned by or exclusively or non-exclusively licensed to the Borrower or any of its Subsidiaries.

“Deposit Accounts” means any “deposit accounts,” as such term is defined in the UCC, and includes any checking account, savings account, or certificate of deposit.

“Domestic Subsidiary” means any Subsidiary organized under the laws of the United States of America, any State thereof, the District of Columbia, or any other jurisdiction within the United States of America.

“Due Diligence Fee” means \$75,000, which fee has been paid to Agent prior to the Closing Date, and shall be deemed fully earned on such date regardless of the early termination of this Agreement.

“EE Milestone” means Borrower shall have provided evidence reasonably satisfactory to Agent that the FDA has approved Borrower’s New Drug Application (or supplemental New Drug Application) for vonoprazan for an indication relating to the healing and maintenance of healing of erosive esophagitis with an approved indication on the label that is generally consistent with that sought in Borrower’s New Drug Application submission (or Borrower’s supplemental New Drug Application submission).

“Equity Interests” means, with respect to any Person, the capital stock, partnership or limited liability company interest, or other equity securities or equity ownership interests of such Person.

“ERISA” means the Employee Retirement Income Security Act of 1974, as amended, and the regulations promulgated thereunder.

“Excluded Account” means any of the following accounts which are designated as such in writing to Agent as of the Closing Date or, with respect to any account opened after the Closing Date, in the next Compliance Certificate delivered after such account is opened: (i) accounts used exclusively to maintain cash collateral subject to a Permitted Lien, (ii) any payroll or benefits account, provided that the aggregate balance of all such accounts shall not exceed the amount of all payroll or related benefit payments required to be made in the two next payroll periods, (iii) any zero balance account, and (iv) any other deposit accounts, so long as the aggregate amount in all such deposit accounts do not exceed \$1,000,000 on any day.

“Excluded Subsidiaries” means all Foreign Subsidiaries, and Foreign Subsidiary Holding Companies; provided that in each of the foregoing cases, the Excluded Subsidiary Condition is satisfied with respect to such Subsidiary at all times, and in each case as long as no Excluded Subsidiary owns any Intellectual Property; provided further that, for the avoidance of doubt, an Excluded Subsidiary may license Intellectual Property on a non-exclusive basis.

“Excluded Subsidiary Condition” means (a) the aggregate revenues (under GAAP) of all Excluded Subsidiaries does not exceed five percent (5%) of the consolidated revenues (under GAAP) of Borrower and its Subsidiaries; and (b) value of the total assets of all Excluded Subsidiaries does not exceed five percent (5%) of the consolidated total assets of Borrower and its Subsidiaries.

“Existing Indebtedness” is the indebtedness of Borrower to Silicon Valley Bank in an outstanding principal amount of approximately \$50,000,000 pursuant to that certain Loan and Security Agreement dated as of May 14, 2019.

“FDA” means the U.S. Food and Drug Administration or any successor thereto.

“FDA Laws” means all applicable statutes, rules, regulations, and orders and Requirements of Law administered, implemented, enforced or issued by FDA.

“Federal Health Care Program Laws” means collectively, federal Medicare or federal or state Medicaid statutes, the exclusion laws (42 U.S.C. § 1320a-7), the civil monetary penalties law (42 U.S.C. § 1320a-7a), all federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b), the Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h), the civil False Claims Act of 1863 (31 U.S.C. § 3729 et seq.), criminal false claims statutes (e.g., 18 U.S.C. §§ 287 and 1001), the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. § 3801 et seq.), HIPAA, or related regulations or other Requirements of Law applicable to Borrower that directly or indirectly govern the health care industry, programs of governmental authorities related to healthcare, health care professionals or other health care participants, or relationships among health care providers, suppliers, distributors, manufacturers and patients.

“First Interest Only Extension Conditions” shall mean satisfaction of each of the following events: (a) no default or Event of Default shall have occurred and be continuing; and (b) the Approval Milestone I has been achieved on or prior to September 30, 2024.

“Foreign Subsidiary” means a Subsidiary other than a Domestic Subsidiary.

“Foreign Subsidiary Holding Company” means any Domestic Subsidiary that owns (directly or indirectly) no material assets other than Equity Interests (or Equity Interests and debt interests) of one or more (a) CFCs or (b) other Foreign Subsidiary Holding Companies.

“GAAP” means generally accepted accounting principles in the United States of America, as in effect from time to time.

“Guarantor” means any subsidiary of Borrower that enters into a Guaranty.

“Guaranty” means a guaranty with respect to the Secured Obligations, in form and substance satisfactory to Agent.

“HP Milestone” means Borrower shall have provided evidence reasonably satisfactory to Agent that the FDA has approved Borrower’s New Drug Application for vonoprazan and amoxicillin, or its New Drug Application for vonoprazan, amoxicillin and clarithromycin, in each case for an indication relating to the treatment of *H. pylori* with an approved indication on the label that is generally consistent with that sought in Borrower’s New Drug Application submission.

“Indebtedness” means indebtedness of any kind, including (a) all indebtedness for borrowed money or the deferred purchase price of property or services (excluding trade credit entered into in the ordinary course of business), including reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations, (d) equity securities of any Person subject to repurchase or redemption other than at the sole option of such Person, (e) “earnouts” (to the extent treated as liabilities on the balance sheet in accordance with GAAP), purchase price adjustments, profit sharing arrangements, deferred purchase money amounts and similar payment obligations or continuing obligations of any nature arising out of purchase and sale contracts, (f) non-contingent obligations to reimburse any bank or Person in respect of amounts paid under a letter of credit, banker’s acceptance or similar instrument, and (g) all Contingent Obligations. For the avoidance of doubt, no Warrant, Permitted Bond Hedge Transaction or Permitted Warrant Transaction will be considered Indebtedness of Borrower.

“Initial Facility Charge” means a charge of \$1,250,000.

“Initial Performance Covenant Test Date” means the date on which the outstanding principal amount of the Term Loan Advances is first greater than \$100,000,000; provided that the Initial Performance Covenant Test Date shall begin only on or after May 15, 2023 (i.e. the date Borrower’s 2023 first fiscal quarter reporting is due under Section 7.1(b) hereof).

“Intellectual Property” means all of Borrower’s Copyrights; Trademarks; Patents; Licenses; trade secrets and inventions; mask works; Borrower’s applications therefor and reissues, extensions, or renewals thereof; and Borrower’s goodwill associated with any of the foregoing, together with Borrower’s rights to sue for past, present and future infringement of Intellectual Property and the goodwill associated therewith.

“Intellectual Property Security Agreement” means the Intellectual Property Security Agreement dated as of the Closing Date between the Borrower and Agent, as the same may from time to time be amended, restated, modified or otherwise supplemented.

“Investment” means any beneficial ownership (including stock, partnership interests, limited liability company interests or other securities) of or in any Person, or any loan, advance or capital contribution to any Person or the acquisition of, or the right to use, develop or sell (in each case, including through licensing), any product that would constitute a Borrower Product upon acquisition.

“IRS” means the United States Internal Revenue Service.

“Joinder Agreements” means for each Subsidiary (other than Excluded Subsidiaries), a completed and executed Joinder Agreement in substantially the form attached hereto as Exhibit G.

“License” means any Copyright License, Patent License, Trademark License or other Intellectual Property license of rights or interests.

“Lien” means any mortgage, deed of trust, pledge, hypothecation, assignment for security, security interest, encumbrance, levy, lien or charge of any kind, whether voluntarily incurred or arising by operation of law or otherwise, against any property, any conditional sale or other title retention agreement, and any lease in the nature of a security interest.

“Loan” means the Advances made under this Agreement.

“Loan Documents” means this Agreement, the promissory notes (if any), the ACH Authorization, the Account Control Agreements, any Joinder Agreements, all UCC Financing Statements, the Warrant, the Intellectual Property Security Agreement, the Guaranty (if any) and any other documents executed in connection with the Secured Obligations or the transactions contemplated hereby, as the same may from time to time be amended, modified, supplemented or restated.

“Loan Party” means Borrower or any Guarantor.

“Market Capitalization” means, for any given date of determination, an amount equal to (a) the average of the daily volume weighted average price of Borrower’s common stock as reported for each of the five (5) trading days preceding such date of determination (it being understood that a “trading day” shall mean a day on which shares of Borrower’s common stock trade on the NASDAQ (or, if the primary listing of such common stock is on another exchange, on such other exchange) in an ordinary trading session) multiplied by (b) the total number of issued and outstanding shares of Borrower’s common stock that are issued and outstanding on the date of the determination and listed on the NASDAQ (or, if the primary listing of such common stock is on another exchange, on such other exchange), subject to appropriate adjustment for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

“Material Adverse Effect” means a material adverse effect upon: (i) the business, operations, properties, assets or financial condition of Borrower and its Subsidiaries taken as a whole; or (ii) the ability of Borrower to perform or pay the Secured Obligations in accordance with the terms of the Loan Documents, or the ability of Agent or Lenders to enforce any of its rights or remedies with respect to the Secured Obligations; or (iii) the Collateral or Agent’s Liens on the Collateral or the priority of such Liens.

“Material Agreement” means (a) the Takeda License, and (b) any license, agreement or other contractual arrangement, the termination of which could be reasonably expected to result in a Material Adverse Effect, individually or in the aggregate.

“Material Regulatory Liabilities” means (i) any liabilities arising from the violation of applicable Public Health Laws, Federal Health Care Program Laws, and other applicable comparable Requirements of Law, or from any requirements imposed relative to any Registrations (including costs of actions required under applicable Requirements of Law, including FDA Laws and Federal Health Care Program Laws, or necessary to remedy any violation of any terms or conditions applicable to any Registrations), including, but not limited to, withdrawal of approval, recall, revocation, suspension, import detention and seizure of any Borrower Product, and (ii) any loss of recurring annual revenues as a result of any loss, suspension or limitation of any Registrations, which, in the case of the foregoing clauses (i) and (ii), could reasonably be expected to result in a Material Adverse Effect.

“Maximum Term Loan Amount” means \$200,000,000.

“New Drug Application” means an application submitted to the FDA pursuant to 21 U.S.C. § 355 seeking authorization to market a new drug in the United States.

“Non-Disclosure Agreement” means that certain Non-Disclosure Agreement/Confidentiality Agreement by and between Borrower and Agent dated as of February 8, 2021.

“OFAC” means the U.S. Department of Treasury Office of Foreign Assets Control.

“OFAC Lists” means, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

“Organizational Documents” means with respect to any Person, such Person’s Charter, and (a) if such Person is a corporation, its bylaws, (b) if such Person is a limited liability company, its limited liability company 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 or modifications thereto.

“Patent License” means any written agreement granting any right with respect to any invention on which a Patent is in existence or a Patent application is pending, in which agreement Borrower now holds or hereafter acquires any interest.

“Patents” means all letters patent of, or rights corresponding thereto, in the United States of America or in any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto, in the United States of America or any other country.

“Performance Covenant A” means that Borrower’s Market Capitalization exceeds \$900,000,000 at all times.

“Performance Covenant B” means that Borrower at all times maintains Qualified Cash in an amount greater than or equal to (x) the outstanding principal amount of the Term Loan Advances, multiplied by (y) (i) at all times prior to the Approval Milestone II Date, 60% and (ii) at all times after the Approval Milestone II Date, 35%.

“Performance Covenant C” means Borrower’s achievement of T3M Net Product Revenue equal to or greater than the least of (i) 50% of the amount set forth for the applicable month in the Performance Covenant C Schedule, (ii) (x) the outstanding principal amount of the Term Loan Advances divided by (y) 3.75, and (iii) \$45,000,000, tested monthly.

“Performance Covenant C Schedule” means that certain Performance Covenant C Schedule delivered by the Borrower to the Agent, and approved by the Agent, prior to the Closing Date.

“Permitted Acquisition” means any acquisition (including without limitation by way of merger or in-licensing arrangement) by Borrower of all or substantially all of the assets of another Person, or of a division or line of business of another Person, or capital stock of another Person, or any product that would constitute a Borrower Product upon acquisition, which is conducted in accordance with the following requirements:

- (a) such acquisition is of a business or Person engaged in a line of business substantially related to that of Borrower or its Subsidiaries;
- (b) if such acquisition is structured as a stock acquisition, then the Person so acquired shall either (i) become a wholly-owned Subsidiary of Borrower or of a Subsidiary and Borrower shall comply, or cause such Subsidiary to comply, with Section 7.13 hereof or (ii) such Person shall be merged with and into Borrower (with Borrower being the surviving entity);
- (c) if such acquisition is structured as the acquisition of assets, such assets shall be acquired by Borrower, and shall be free and clear of Liens other than Permitted Liens;
- (d) Borrower shall have delivered to Lenders not less than seven (7) nor more than twenty (20) days prior to the closing date of such acquisition, notice of such acquisition together with pro forma projected financial

information, copies of all material documents relating to such acquisition, and historical financial statements for such acquired entity, division or line of business (to the extent applicable), in each case in form reasonably satisfactory to Lenders and demonstrating compliance with the covenants set forth in Section 7.20 hereof on a pro forma basis as if the acquisition occurred on the first day of the most recent measurement period;

(e) both immediately before and after such acquisition no default or Event of Default shall have occurred and be continuing; and

(f) the sum of the purchase price of such proposed new acquisition, computed on the basis of total acquisition consideration paid or incurred, or to be paid or incurred, by Borrower with respect thereto, including any contingent or deferred acquisition consideration, and including the amount of Permitted Indebtedness assumed or to which such assets, businesses or business or ownership interest or shares, or any Person so acquired, is subject, shall not be greater than (i) at all times prior to the Approval Milestone II Date, \$10,000,000 in cash for any single acquisition or group of related acquisitions or \$25,000,000 in cash for all such acquisitions during the term of this Agreement, and (ii) on and at all times after the Approval Milestone II Date, \$15,000,000 in cash for any single acquisition or group of related acquisitions or \$35,000,000 in cash for all such acquisitions during the term of this Agreement; provided that in each case, acquisition consideration funded by proceeds from the sale and issuance of Borrower's Equity Interests in a transaction not resulting in a Change in Control, which sale and issuance has a primary purpose to fund such acquisition, and which sale and issuance is consummated substantially contemporaneously with (and in any event, prior to, but no more than fifteen (15) days prior to) the consummation of such acquisition, shall be disregarded in determining compliance with this clause (f), provided further, that for any acquisition in which the consideration consists solely of Equity Interests of Borrower, the value of such Equity Interests shall be disregarded in determining compliance with this clause (f).

"Permitted Bond Hedge Transaction" means any call or capped call option (or substantively equivalent derivative transaction) relating to Borrower's common stock (or other securities or property following a merger event or other change of the common stock of Borrower) purchased by Borrower in connection with the issuance of any Permitted Convertible Debt.

"Permitted Convertible Debt" means Indebtedness that is convertible into a fixed number (subject to customary anti-dilution adjustments, "make-whole" increases and other customary changes thereto) of shares of common stock of Borrower (or other securities or property following a merger event or other change of the common stock of Borrower), cash or any combination thereof (with the amount of such cash or such combination determined by reference to the market price of such common stock or such other securities); provided that such Indebtedness shall (a) not require any scheduled amortization or otherwise required payment of principal prior to, or have a scheduled maturity date, earlier than, one hundred eighty (180) days after the Term Loan Maturity Date, (b) be unsecured or subordinated to the Secured Obligations pursuant to terms satisfactory to the Agent in its sole discretion, (c) not be guaranteed by any Subsidiary of Borrower that is not also a Loan Party, and (d) shall be Indebtedness of Phathom Pharmaceuticals, Inc. and not any Subsidiary thereof.

"Permitted Indebtedness" means:

(a) Indebtedness of Borrower in favor of any Lender or Agent arising under this Agreement or any other Loan Document;

(b) Indebtedness existing on the Closing Date which is disclosed in Schedule 1A;

(c) Indebtedness of up to \$500,000 outstanding at any time secured by a Lien described in clause (g) of the defined term "Permitted Liens", provided that (x) such Indebtedness does not exceed the cost of the Equipment or software or other intellectual property financed with such Indebtedness, and (y) such amount may be increased by \$50,000 for each vehicle assigned by the Borrower to field-based employees;

(d) (i) Indebtedness to trade creditors incurred in the ordinary course of business and (ii) Indebtedness incurred in the ordinary course of business with corporate credit cards in an aggregate amount not to exceed (x) at all

times prior to the Approval Milestone II Date, \$2,000,000, and (y) at all times on an after the Approval Milestone II Date, \$5,000,000, in each case outstanding at any time;

(e) Indebtedness that also constitutes a Permitted Investment or is secured by a Permitted Lien;

(f) Subordinated Indebtedness;

(g) reimbursement obligations in connection with letters of credit that are secured by Cash and issued on behalf of Borrower or a Subsidiary in an amount not to exceed (x) at all times prior to the Approval Milestone II Date, \$1,500,000, and (y) at all times on an after the Approval Milestone II Date, \$2,500,000, in each case at any time outstanding;

(h) intercompany Indebtedness as long as each of the Subsidiary obligor and the Subsidiary obligee under such Indebtedness is a Subsidiary that has executed a Joinder Agreement, or other intercompany Indebtedness resulting from a Permitted Investment in accordance with clause (j) of the defined term "Permitted Investments";

(i) Permitted Convertible Debt in an aggregate principal amount not to exceed \$400,000,000 at any one time outstanding;

(j) other unsecured Indebtedness in an amount not to exceed \$1,000,000 at any time outstanding; and

(k) extensions, refinancings and renewals of any items of Permitted Indebtedness, provided that the principal amount is not increased or the terms modified to impose materially more burdensome terms upon Borrower or the applicable Subsidiary, as the case may be, and subject to any limitations on aggregate amount of such Indebtedness.

"Permitted Investment" means:

(a) Investments existing on the Closing Date which are disclosed in Schedule 1B;

(b) (i) marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one year from the date of acquisition thereof currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Services, (ii) commercial paper maturing no more than one year from the date of creation thereof and currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Services, (iii) 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, (iv) money market accounts, and (v) Investments pursuant to the investment policy that has been provided to the Agent prior to the Closing Date or any investment policy that has been approved by the Agent;

(c) repurchases of stock of Borrower from former employees, directors, or consultants of Borrower under the terms of applicable repurchase agreements at the original issuance price of such securities in an aggregate amount not to exceed \$500,000 in any fiscal year, provided that no Event of Default has occurred, is continuing or could exist after giving effect to the repurchases;

(d) Investments accepted in connection with Permitted Transfers;

(e) 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;

(f) Investments consisting of notes 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 clause (f) shall not apply to Investments of any Loan Party in any Subsidiary of a Loan Party;

- (g) Investments consisting of loans not involving the net transfer on a substantially contemporaneous basis of cash proceeds to employees, officers or directors relating to the purchase of capital stock of Borrower pursuant to employee stock purchase plans or other similar agreements approved by Borrower's Board;
 - (h) Investments consisting of travel advances in the ordinary course of business;
 - (i) Investments in newly-formed Domestic Subsidiaries, provided that each such Domestic Subsidiary enters into a Joinder Agreement promptly after its formation and executes such other documents as shall be reasonably requested by Agent;
 - (j) Investments in Foreign Subsidiaries not to exceed \$500,000 per fiscal year;
 - (k) joint ventures or strategic alliances in the ordinary course of business consisting of the licensing of technology, the development of technology or the providing of technical support as permitted hereunder, provided that cash Investments (if any) by Borrower or the applicable Subsidiary do not exceed \$500,000 in the aggregate in any fiscal year;
 - (l) Investments constituting Permitted Acquisitions;
 - (m) Borrower's entry into (including payments of premiums in connection therewith), and the performance of obligations under the Warrant, any Permitted Bond Hedge Transactions and Permitted Warrant Transactions in accordance with their terms; and
 - (n) additional Investments that do not exceed \$1,000,000 in the aggregate.
- "Permitted Liens" means:
- (a) Liens in favor of Agent;
 - (b) Liens existing on the Closing Date which are disclosed in Schedule 1C;
 - (c) Liens for taxes, fees, assessments or other governmental charges or levies, either not yet delinquent or being contested in good faith by appropriate proceedings; provided, that Borrower maintains adequate reserves therefor in accordance with GAAP;
 - (d) Liens securing claims or demands of materialmen, artisans, mechanics, carriers, warehousemen, landlords and other like Persons arising in the ordinary course of business and imposed without action of such parties; provided, that the payment thereof is not yet required;
 - (e) Liens arising from judgments, decrees or attachments in circumstances which do not constitute an Event of Default hereunder;
 - (f) the following deposits, to the extent made in the ordinary course of business: deposits under worker's compensation, unemployment insurance, social security and other similar laws, or to secure the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure indemnity, performance or other similar bonds for the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure statutory obligations (other than Liens arising under ERISA or environmental Liens) or surety or appeal bonds, or to secure indemnity, performance or other similar bonds;
 - (g) Liens on Equipment or software or other intellectual property constituting purchase money Liens and Liens in connection with capital leases securing Indebtedness permitted in clause (c) of "Permitted Indebtedness";
 - (h) Liens incurred in connection with Subordinated Indebtedness;

- (i) leasehold interests in leases or subleases and licenses (other than with respect to Intellectual Property) granted in the ordinary course of business and not interfering in any material respect with the business of the licensor;
- (j) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of custom duties that are promptly paid on or before the date they become due;
- (k) Liens on insurance proceeds securing the payment of financed insurance premiums that are promptly paid on or before the date they become due (provided that such Liens extend only to such insurance proceeds and not to any other property or assets);
- (l) statutory and common law rights of set-off and other similar rights as to deposits of cash and securities in favor of banks, other depository institutions and brokerage firms or securities intermediaries to cover fees, similar expenses and charges;
- (m) easements, servitudes, zoning restrictions, rights-of-way and similar encumbrances on real property imposed by law or arising in the ordinary course of business so long as they do not materially impair the value or marketability of the related property;
- (n) licenses and other arrangements for the use of Intellectual Property permitted hereunder;
- (o) (i) Liens on Cash securing obligations permitted under clause (g) of the definition of Permitted Indebtedness and (ii) security deposits in connection with real property leases, the combination of (i) and (ii) in an aggregate amount not to exceed \$2,000,000 at any time; and
- (p) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clause (b) above; provided, that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced (as may have been reduced by any payment thereon) does not increase.

"Permitted Transfers" means:

- (a) sales of Inventory in the ordinary course of business;
- (b) licenses and similar arrangements for the use of Intellectual Property in the ordinary course of business that could not result in a legal transfer of title of the licensed property that are non-exclusive or may be exclusive in respects other than territory or may be exclusive as to territory but only as to discreet geographical areas outside of the United States of America in the ordinary course;
- (c) dispositions of worn-out, obsolete or surplus Equipment at fair market value in the ordinary course of business;
- (d) use of Cash in the ordinary course of business or as otherwise permitted herein;
- (e) sale of stock or other shares in the ordinary course of business;
- (f) transfers constituting the making of Permitted Investments, or the granting of Permitted Liens; and
- (g) other transfers of assets having a fair market value of not more than \$500,000 in the aggregate in any fiscal year.

"Permitted Warrant Transaction" means any call option, warrant or right to purchase (or substantively equivalent derivative transaction) relating to Borrower's common stock (or other securities or property following a merger event or other change of the common stock of Borrower) and/or cash (in an amount determined by reference to

the price of such common stock) sold by Borrower substantially concurrently with any purchase by Borrower of a related Permitted Bond Hedge Transaction.

“Person” means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, other entity or government.

“Pledge Agreement” means the Pledge Agreement dated as of the Closing Date between Borrower and Agent, as the same may from time to time be amended, restated, modified or otherwise supplemented.

“Public Health Laws” means all Requirements of Law relating to the procurement, development, clinical and non-clinical evaluation, product approval or licensure, manufacture, production, analysis, distribution, dispensing, importation, exportation, use, handling, quality, sale, labeling, promotion, clinical trial registration or post market requirements of any drug product (including, without limitation, any ingredient or component of the foregoing products) subject to regulation under the Federal Food, Drug, and Cosmetic Act (21 U.S.C. § 301 et seq.) and the Public Health Service Act (42 U.S.C. § 282(j)), including without limitation all applicable regulations promulgated by the FDA at Title 21 of the Code of Federal Regulations and all applicable regulations promulgated by the National Institutes of Health (“NIH”) and codified at Title 42, Part 11 of the Code of Federal Regulations.

“Qualified Cash” means an amount equal to (a) the amount of Borrower’s Cash held in accounts subject to an Account Control Agreement in favor of Agent, *minus* (b) the Qualified Cash A/P Amount.

“Qualified Cash A/P Amount” means the amount of Borrower’s accounts payable under GAAP not paid after the 120th day following the invoice for such account payable.

“Receivables” means (i) all of Borrower’s Accounts, Instruments, Documents, Chattel Paper, Supporting Obligations, letters of credit, proceeds of any letter of credit, and Letter of Credit Rights, and (ii) all customer lists, software, and business records related thereto.

“Redemption Conditions” means, with respect to any redemption by Borrower of any Permitted Convertible Debt, satisfaction of each of the following events: (a) no default or Event of Default shall exist or result therefrom, and (b) both immediately before and at all times after such redemption, Borrower’s Qualified Cash shall be no less than 150% of the outstanding principal amount of the Term Loan Advances.

“Registrations” shall mean authorizations, approvals, licenses, permits, certificates, registrations, listings, certificates, or exemptions of or issued by any governmental authority that are required for the research, development, manufacture, commercialization, distribution, marketing, storage, transportation, pricing, governmental authority reimbursement, use and sale of Borrower Products.

“Regulatory Action” means an administrative or regulatory enforcement action, proceeding or investigation, warning letter, untitled letter, Form 483 or similar inspectional observations, other written notice of violation letter, recall, seizure, “Section 305 notice” or other similar written communication, or consent decree, issued or required by the FDA or the NIH under the Public Health Laws or by a comparable governmental authority under similar Requirements of Law in any other regulatory jurisdiction.

“Required Lenders” means at any time, the holders of more than 50% of the sum of the aggregate unpaid principal amount of the Term Loan Advances then outstanding.

“Requirements of Law” means, with respect to any Person, collectively, the common law and all federal, state, provincial, local, foreign, multinational or international laws, statutes, codes, treaties, standards, rules and regulations, ordinances, orders, judgments, writs, injunctions, decrees (including administrative or judicial precedents or authorities), in each case that are applicable to and binding upon such Person or any of its property or to which such Person or any of its property is subject.

“Sanctioned Country” means, at any time, a country or territory which is the subject or target of any Sanctions.

“Sanctioned Person” means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or by the United Nations Security Council, the European Union or any EU member state, (b) any Person operating, organized or resident in a Sanctioned Country or (c) any Person controlled by any such Person.

“Sanctions” means economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by (a) the U.S. government, including those administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or (b) the United Nations Security Council, the European Union or Her Majesty’s Treasury of the United Kingdom.

“SBA Funding Date” means the Closing Date (such date being the date on which a Lender which is an SBIC funds any portion of the Loan, which such date can only occur upon the confirmation by Borrower in its sole discretion that on such date it meets the requirements under Addendum 2).

“Second Interest Only Extension Conditions” shall mean satisfaction of each of the following events: (a) no default or Event of Default shall have occurred and be continuing; (b) the First Interest Only Extension Conditions have been satisfied, and (c) the Approval Milestone II has been achieved on or prior to September 30, 2025.

“Secured Obligations” means each Borrower’s obligations under this Agreement and any Loan Document (other than the Warrant), including any obligation to pay any amount now owing or later arising.

“Subordinated Indebtedness” means Indebtedness subordinated to the Secured Obligations in amounts and on terms and conditions satisfactory to Agent in its reasonable discretion and subject to a subordination agreement in form and substance satisfactory to Agent in its reasonable discretion.

“Subsequent Financing” means the closing of any Borrower financing which becomes effective after the Closing Date that is broadly marketed to multiple investors but excluding, for the avoidance of doubt, any Borrower financing under the Borrower’s “at the market” or similar facilities.

“Subsidiary” means an entity, whether a corporation, partnership, limited liability company, joint venture or otherwise, in which Borrower owns or controls 50% or more of the outstanding voting securities, directly or indirectly. If not otherwise specified, a Subsidiary shall mean a direct or indirect Subsidiary of Borrower, including each entity listed on Schedule 5.14 hereto.

“T3M Net Product Revenue” means Borrower’s net product revenue (as determined in accordance with GAAP) solely from the sale of vonoprazan or products containing vonoprazan (which may include royalty, profit sharing, or sales-based milestone revenue recognized in accordance with GAAP, but which shall not include any upfront or non-sales-based milestone payments under business development or licensing transactions), measured on a trailing three-month basis as of the date of the most recently delivered monthly financial statement in accordance with Section 7.1(a). For the avoidance of doubt, net product revenue shall not include any of the following to the extent not recognizable as revenue in accordance with GAAP (i) trade, quantity and cash discounts allowed by Borrower, (ii) discounts, refunds, rebates, charge backs, retroactive price adjustment and any other allowances which effectively reduce net selling price, (iii) product returns and allowances, (iv) allowances for shipping or other distribution expenses, (iv) set-offs and counterclaims, and (v) any other similar and customary deductions that are typically deducted from gross revenue and not included in net revenue in accordance with GAAP.

“Takeda License” means that certain License Agreement dated May 7, 2019 by and between Takeda Pharmaceutical Company Limited and Borrower, as amended, restated, supplemented or otherwise modified from time to time.

“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.

“Term Commitment” means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrower in a principal amount not to exceed the amount set forth under the heading “Term Commitment” opposite such Lender’s name on Schedule 1.1(a).

“Term Loan Advance” means an Advance pursuant to Section 2.1(a).

“Term Loan Cash Interest Rate” means, for any day, a per annum rate of interest equal to the greater of (i) (x) the prime rate as reported in The Wall Street Journal plus (y) 2.25%, and (ii) 5.50%.

“Term Loan PIK Interest Rate” means, for any day, a per annum rate of interest equal to 3.35%.

“Term Loan Maturity Date” means October 1, 2026; provided that if such day is not a Business Day, the Term Loan Maturity Date shall be the immediately preceding Business Day.

“Trademark License” means any written agreement granting any right to use any Trademark or Trademark registration, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

“Trademarks” means all trademarks (registered, common law or otherwise) and any applications in connection therewith, including registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States of America, any State thereof or any other country or any political subdivision thereof.

“Tranche III” means the advances pursuant to Section 2.1(a)(iii).

“Tranche III Facility Charge” means 0.50% of the principal amount of any Advance pursuant to Tranche III, which is payable to Lenders in accordance with Section 4.2(d).

“Tranche IV” means the advances pursuant to Section 2.1(a)(iv).

“Tranche IV Facility Charge” means 0.50% of the principal amount of any Advance pursuant to Tranche IV, which is payable to Lenders in accordance with Section 4.2(d).

“UCC” means the Uniform Commercial Code as the same is, from time to time, in effect in the State of California; provided, 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, Agent’s Lien on any Collateral is governed by the Uniform Commercial Code as the same is, from time to time, in effect in a jurisdiction other than the State of California, then the term “UCC” shall mean the Uniform Commercial Code as in effect, from time to time, in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority or remedies and for purposes of definitions related to such provisions.

“U.S. Person” means any Person that is a “United States person” as defined in Section 7701(a)(30) of the Code.

“Warrant” means any warrant entered into in connection with the Loan, as may be amended, restated or modified from time to time.

1.2 Certain Additional Defined Terms. The following terms are defined in the Sections or subsections referenced opposite such terms:

Defined Term	Section
“Agent”	Preamble

“Assignee”	11.13
“Borrower”	Preamble
“Claims”	11.10
“Collateral”	3.1
“Confidential Information”	11.12
“End of Term Charge”	2.5
“Event of Default”	9
“Financial Statements”	7.1
“Lenders”	Preamble
“Maximum Rate”	2.2
“Performance Covenant Cure”	7.20
“Prepayment Charge”	2.4
“Publicity Materials”	11.18
“Register”	11.7
“Rights to Payment”	1.1
“SBA”	7.16
“SBIC”	7.16
“SBIC Act”	7.16

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. Unless otherwise specifically provided herein, any accounting term used in this Agreement or the other Loan Documents shall have the meaning customarily given such term in accordance with GAAP, and all financial computations hereunder shall be computed in accordance with GAAP, consistently applied. Unless otherwise defined herein or in the other Loan Documents, terms that are used herein or in the other Loan Documents and defined in the UCC shall have the meanings given to them in the UCC. For all purposes under the Loan Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction’s laws): (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person and (b) if any new Person comes into existence, such new Person shall be deemed to have been organized on the first date of its existence by the holders of its Equity Interests at such time.

Notwithstanding anything to the contrary in this Agreement or any other Loan Document, all terms of an accounting or financial nature used herein shall be construed, and all computations of amounts and ratios referred to

herein shall be made without giving effect to any treatment of Indebtedness in respect of convertible debt instruments under Accounting Standards Codification 470-20 (or any other Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) to value any such Indebtedness in a reduced or bifurcated manner as described therein, and such Indebtedness shall at all times be valued at the full stated principal amount thereof. For the avoidance of doubt, and without limitation of the foregoing, Permitted Convertible Debt shall at all times be valued at the full stated principal amount thereof and shall not include any reduction or appreciation in value of the shares deliverable upon conversion thereof.

SECTION 2
THE LOAN

2.1 Term Loan Advances.

(a) Term Commitment.

(i) *Tranche I.* Subject to the terms and conditions of this Agreement, on the Closing Date, Lenders shall severally (and not jointly) make, and Borrower agrees to draw, a Term Loan Advance of \$100,000,000.

(ii) *Tranche II.* Subject to the terms and conditions of this Agreement and satisfaction of the Clinical Milestone, on or prior to December 15, 2022, Borrower may request, and Lenders shall severally (and not jointly) make, one or more additional Term Loan Advances in minimum increments of \$5,000,000 (or if less than \$5,000,000 the remaining amount of Term Loan Advances available to be drawn pursuant to this Section 2.1(a)(ii)) in an aggregate principal amount up to \$50,000,000.

(iii) *Tranche III.* Subject to the terms and conditions of this Agreement and satisfaction of Approval Milestone I, on or prior to September 30, 2023, Borrower may request, and Lenders shall severally (and not jointly) make, one or more additional Term Loan Advances in minimum increments of \$5,000,000 (or if less than \$5,000,000 the remaining amount of Term Loan Advances available to be drawn pursuant to this Section 2.1(a)(iii)) in an aggregate principal amount up to \$25,000,000.

(iv) *Tranche IV.* Subject to the terms and conditions of this Agreement and satisfaction of Approval Milestone I, on or prior to March 31, 2024, Borrower may request, and Lenders shall severally (and not jointly) make, one or more additional Term Loan Advances in minimum increments of \$5,000,000 (or if less than \$5,000,000 the remaining amount of Term Loan Advances available to be drawn pursuant to this Section 2.1(a)(iv)) in an aggregate principal amount up to \$25,000,000.

The aggregate outstanding Term Loan Advances shall not exceed the Maximum Term Loan Amount plus, for the avoidance of doubt, any amount equal to the Term Loan PIK Interest added to principal pursuant to Section 2.2(c)(ii). Each Term Loan Advance of each Lender shall not exceed its respective Term Commitment plus, for the avoidance of doubt, any amount equal to the Term Loan PIK Interest added to principal pursuant to Section 2.1(c)(ii).

(b) Advance Request. To obtain a Term Loan Advance, Borrower shall complete, sign and deliver an Advance Request to Agent at least five (5) Business Days before the Advance Date, other than the Term Loan Advance to be made on the Closing Date, which shall be at least one (1) Business Day before the Advance Date. Lenders shall fund the Term Loan Advance in the manner requested by the Advance Request provided that each of the conditions precedent to such Term Loan Advance is satisfied as of the requested Advance Date.

(c) Interest.

(i) **Term Loan Cash Interest Rate.** In addition to interest accrued pursuant to the Term Loan PIK Interest Rate, the principal balance (including, for the avoidance of doubt, any payment-in-kind interest added to principal pursuant to Section 2.2(c)(ii)) of each Term Loan Advance shall bear interest thereon from such Advance Date at the Term Loan Cash Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed. The Term Loan Cash Interest Rate will float and change on the day the “prime rate” as reported in The Wall Street Journal changes from time to time.

(ii) **Term Loan PIK Interest Rate.** In addition to interest accrued pursuant to the Term Loan Cash Interest Rate, the principal balance of each Term Loan Advance shall bear interest thereon from such Advance Date at the Term Loan PIK Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed, which amount shall be added to the outstanding principal balance so as to increase the outstanding principal balance of such Term Loan Advance on each payment date for such Advance, which principal amount shall accrue interest payable as provided in Section 2.2(c)(i) and which accrued and unpaid amount shall be payable when the principal amount of the Advance is payable in accordance with Section 2.1(d).

(d) **Payment.** Borrower shall pay interest on each Term Loan Advance on the first Business Day of each month, beginning the month after the Advance Date continuing until the Amortization Date. Borrower shall repay the aggregate principal balance of the Term Loan Advances that is outstanding on the day immediately preceding the Amortization Date, in equal monthly installments of principal and interest (mortgage style) beginning on the Amortization Date and continuing on the first Business Day of each month thereafter until the Secured Obligations (other than inchoate indemnity obligations) are repaid, provided that if the Term Loan Cash Interest Rate is adjusted in accordance with its terms, or the Amortization Date is extended, the amount of each subsequent monthly installment shall be recalculated. The entire principal balance of the Term Loan Advances and all accrued but unpaid interest hereunder, shall be due and payable on the Term Loan Maturity Date. Borrower shall make all payments under this Agreement without setoff, recoupment or deduction and regardless of any counterclaim or defense. If a payment hereunder becomes due and payable on a day that is not a Business Day, the due date thereof shall be the immediately preceding Business Day. Agent, for the benefit of Lenders, shall initiate debit entries to Borrower’s account as authorized on the ACH Authorization (i) on each payment date of all periodic obligations payable to Lenders under each Term Loan Advance and (ii) out-of-pocket legal fees and costs incurred by Agent or Lenders in connection with Section 11.11 of this Agreement; provided that, with respect to clause (i) above, in the event that Agent informs Borrower that Agent shall not initiate a debit entry to Borrower’s account for a certain amount of the periodic obligations due on a specific payment date, Borrower shall pay to Agent, for the benefit of Lenders, such amount of periodic obligations in full in immediately available funds on such payment date; provided, further, that, with respect to clause (i) above, if Agent informs Borrower that Agent shall not initiate a debit entry as described above later than the date that is three (3) Business Days prior to such payment date, Borrower shall pay to Agent, for the ratable benefit of Lenders, such amount of periodic obligations in full in immediately available funds on the date that is three (3) Business Days after the date on which Agent notifies Borrower thereof; provided, further, that, with respect to clause (ii) above, in the event that Agent informs Borrower that Agent shall not initiate a debit entry to Borrower’s account for specified out-of-pocket legal fees and costs incurred by Agent or Lenders, Borrower shall pay to Agent such amount in full in immediately available funds within three (3) Business Days.

2.2 **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 (which under the laws of the State of California shall be deemed to be the laws relating to permissible rates of interest on commercial loans) (the “Maximum Rate”). If a court of competent jurisdiction shall finally determine that Borrower has actually paid to Lenders an amount of interest in excess of the amount that would have been payable if all of the Secured Obligations had at all times borne interest at the Maximum Rate, then such excess interest actually paid by Borrower shall be applied as follows: first, to the payment of the Secured Obligations consisting of the outstanding principal; second, after all principal is repaid, to the payment of Lenders’ accrued interest, costs, expenses, professional fees and any other Secured Obligations; and third, after all Secured Obligations are repaid, the excess (if any) shall be refunded to Borrower.

2.3 **Default Interest.** In the event any payment is not paid on the scheduled payment date, other than due to a failure of any ACH debit due solely to an administrative or operational error of Agent or Lender or Borrower's bank if Borrower had the funds to make the payment when due and makes the payment within three (3) Business Days following Borrower's knowledge of such failure to pay, an amount equal to four percent (4%) of the past due amount shall be payable on demand. In addition, upon the occurrence and during the continuation of an Event of Default hereunder, all Secured Obligations, including principal, interest, compounded interest, and professional fees, shall bear interest at a rate per annum equal to the rate set forth in Section 2.1(c), plus four percent (4%) per annum. In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 2.1(c) or this Section 2.3, as applicable.

2.4 **Prepayment.** At its option, Borrower may at any time prepay all or a portion of the outstanding Advances by paying the entire principal balance (or such portion thereof), all accrued and unpaid interest thereon, together with a prepayment charge equal to one and one quarter percent (1.25%) of the principal amount of the Advance being prepaid for any prepayment of an Advance on or prior to the Amortization Date (a "Prepayment Charge"). Borrower agrees that the Prepayment Charge is a reasonable calculation of Lenders' lost profits in view of the difficulties and impracticality of determining actual damages resulting from an early repayment of the Advances. Borrower shall prepay the outstanding amount of all principal and accrued interest through the prepayment date upon the occurrence of a Change in Control. Notwithstanding the foregoing, Agent and Lenders agree to waive the Prepayment Charge if (i) Borrower prepays all of the outstanding advances as the result of the occurrence of a Change in Control, (ii) Borrower's prepayment is made in connection with a Performance Covenant Cure in accordance with Section 7.20(b)(ii) or (iii) Agent and Lenders or their respective Affiliates (in their sole and absolute discretion) agree in writing to refinance the Advances prior to the Term Loan Maturity Date. Any amounts paid under this Section shall be applied by Agent to the then unpaid amount of any Secured Obligations (including principal and interest) pro rata to all scheduled amounts owed. For the avoidance of doubt, if a payment hereunder becomes due and payable on a day that is not a Business Day, the due date thereof shall be the immediately preceding Business Day.

2.5 **End of Term Charge.** On the earliest to occur of (i) the Term Loan Maturity Date, (ii) the date that Borrower prepays the outstanding Secured Obligations (other than any inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) in full, or (iii) the date that the Secured Obligations become due and payable in full pursuant to the terms of this Agreement, Borrower shall pay Lenders a charge of 7.50% of the aggregate original principal amount of the Term Loan Advances made hereunder (the "End of Term Charge"). Notwithstanding the required payment date of such End of Term Charge, the applicable pro rata portion of the End of Term Charge shall be deemed earned by Lenders on the date the applicable Term Loan Advance is made. For the avoidance of doubt, if a payment hereunder becomes due and payable on a day that is not a Business Day, the due date thereof shall be the immediately preceding Business Day.

2.6 **Pro Rata Treatment.** Each payment (including prepayment) on account of any fee and any reduction of the Term Loan Advances shall be made pro rata according to the Term Commitments of the relevant Lenders.

2.7 **Taxes; Increased Costs.** Borrower, Agent and Lenders each hereby agree to the terms and conditions set forth on Addendum 1 attached hereto.

2.8 **Treatment of Prepayment Charge and End of Term Charge.** Borrower agrees that any Prepayment Charge and any End of Term Charge payable shall be presumed to be the liquidated damages sustained by each Lender as the result of the early termination, and Borrower agrees that it is reasonable under the circumstances currently existing and existing as of the Closing Date. The Prepayment Charge and the End of Term Charge shall also be payable in the event the Secured Obligations (and/or this Agreement) are satisfied or released by foreclosure (whether by power of judicial proceeding), deed in lieu of foreclosure, or by any other means. Each Loan Party expressly waives (to the fullest extent it may lawfully do so) the provisions of any present or future statute or law that prohibits or may prohibit the collection of the foregoing Prepayment Charge and End of Term Charge in connection with any such acceleration. Borrower agrees (to the fullest extent that each may lawfully do so): (a) each of the Prepayment Charge and the End of Term Charge is reasonable and is the product of an arm's length transaction between sophisticated business people, ably represented by counsel; (b) each of the Prepayment Charge and the End of Term Charge shall be payable notwithstanding the then prevailing market rates at the time payment is made; (c) there has been a course of conduct between Lenders and Borrower giving specific consideration in this transaction for such agreement to pay the Prepayment Charge and the End of Term Charge as a charge (and not interest) in the event of

prepayment or acceleration; and (d) Borrower shall be estopped from claiming differently than as agreed to in this paragraph. Borrower expressly acknowledges that its agreement to pay each of the Prepayment Charge and the End of Term Charge to Lenders as herein described was on the Closing Date and continues to be a material inducement to Lenders to provide the Term Loan Advances.

SECTION 3 **SECURITY INTEREST**

3.1 **Grant of Security Interest.** As security for the prompt and complete payment when due (whether on the payment dates or otherwise) of all the Secured Obligations, Borrower grants to Agent a security interest in all of Borrower's right, title, and interest in, to and under all of Borrower's personal property and other assets including without limitation the following (except as set forth herein) whether now existing or hereafter acquired (collectively, the "Collateral"): (a) Receivables; (b) Equipment; (c) Fixtures; (d) General Intangibles (including Intellectual Property), (e) Inventory; (f) Investment Property; (g) Deposit Accounts; (h) Cash; (i) Goods; and all other tangible and intangible personal property of Borrower whether now or hereafter owned or existing, leased, consigned by or to, or acquired by, Borrower and wherever located, and any of Borrower's property in the possession or under the control of Agent; and, to the extent not otherwise included, all Proceeds of each of the foregoing and all accessions to, substitutions and replacements for, and rents, profits and products of each of the foregoing.

3.2 **Excluded Collateral.** Notwithstanding the broad grant of the security interest set forth in Section 3.1, above, the Collateral shall not include (a) more than 65% of the presently existing and hereafter arising issued and outstanding Equity Interests owned by Borrower of any Foreign Subsidiary or Foreign Subsidiary Holding Company which Equity Interests entitle the holder thereof to vote for directors or any other matter, (b) nonassignable licenses or contracts, including without limitation any licenses described in clause (b) of the defined term "Permitted Transfers", which by their terms require the consent of the licensor thereof or another party (but only to the extent such prohibition on transfer is enforceable under applicable law, including, without limitation, Sections 9406, 9407 and 9408 of the UCC), provided further, that upon the termination of such prohibition or such consent being provided with respect to any license or contract, such license or contract shall automatically be included in the Collateral, (c) property for which the granting of a security interest therein is contrary to applicable law, provided that upon the cessation of any such restriction or prohibition, such property shall automatically be included in the Collateral; (d) any Excluded Accounts; (e) any cash collateral deposit subject to a Permitted Lien hereunder, if the grant of a security interest with respect to such property pursuant to this Agreement would be prohibited by the agreement creating such Permitted Lien or would otherwise constitute a default thereunder or create a right of termination a party thereto (other than Borrower), provided that upon the termination and release of such cash collateral, such property shall automatically be included in the Collateral; (f) any lease, license or other agreement and any property subject thereto on the Closing Date or on the date of the acquisition of such property (other than any property acquired by a Loan Party subject to any such contract or other agreement to the extent such contract or other agreement was incurred in contemplation of such acquisition) to the extent that a grant of a security interest therein to secure the Secured Obligations would violate or invalidate such lease, license, contract or agreement or create a right of termination in favor of any other party thereto (other than the Borrower, any other Loan Party or any Subsidiary) (but (A) only to the extent such prohibition is enforceable under applicable law and (B) other than to the extent that any such term would be rendered ineffective pursuant to Sections 9-406, 9-408 or 9-409 (or any other Section) of Article 9 of the UCC); (g) any assets as to which the Agent in its reasonable discretion shall determine that the costs and burdens of obtaining or perfecting a security interest therein substantially outweigh the benefit to the Lenders of the security afforded thereby (including, without limitation, vehicles or other assets subject to a certificate of title); (h) any "intent to use" trademarks at all times prior to the first use thereof, whether by the actual use thereof in commerce, the recording of a statement of use with the United States Patent and Trademark Office or otherwise, provided, that upon submission and acceptance by the United States Patent and Trademark Office of an amendment to allege use of an intent-to-use trademark application pursuant to 15 U.S.C. Section 1060(a) (or any successor provision) such intent-to-use application shall constitute Collateral and (i) any other assets as may be agreed by the Agent in writing in its sole discretion to be excluded from Collateral.

SECTION 4
CONDITIONS PRECEDENT TO LOAN

The obligations of Lenders to make the Loan hereunder are subject to the satisfaction by Borrower of the following conditions:

4.1 Initial Advance. On or prior to the Closing Date, Borrower shall have delivered to Agent the following:

(a) Subject to Section 4.4, duly executed copies of the Loan Documents (other than the Warrant, which shall be an original) and all other documents and instruments reasonably required by Agent to effectuate the transactions contemplated hereby or to create and perfect the Liens of Agent with respect to all Collateral, in all cases in form and substance reasonably acceptable to Agent;

(b) a legal opinion of Borrower's counsel in form and substance reasonably acceptable to Agent;

(c) a copy of resolutions of Borrower's Board evidencing approval of (i) the Loan and other transactions evidenced by the Loan Documents; and (ii) the Warrant and transactions evidenced thereby, certified by an officer of Borrower;

(d) copies of the Charter of Borrower, certified by the Secretary of State of the applicable jurisdiction of organization and the other Organizational Documents, as amended through the Closing Date, of Borrower, certified by an officer of Borrower;

(e) certificates of good standing for Borrower from the applicable jurisdiction of organization and similar certificates from all other jurisdiction in which Borrower does business and where the failure to be qualified could have a Material Adverse Effect;

(f) payment of the Due Diligence Fee, Initial Facility Charge and reimbursement of Agent's and Lenders' current expenses reimbursable pursuant to this Agreement, which amounts may be deducted from the initial Advance;

(g) a duly executed payoff letter from each holder of Existing Indebtedness, in form satisfactory to Agent, together with evidence that (i) the Liens securing the Existing Indebtedness have or will be terminated and (ii) the documents and/or filings evidencing the perfection of such Liens, including without limitation any financing statements and/or control agreements, have been or will be, promptly following the initial Advance, released or otherwise terminated;

(h) all certificates of insurance, endorsements, and copies of each insurance policy required pursuant to Section 6.2; and

(a) such other documents as Agent may reasonably request.

4.2 All Advances. On each Advance Date:

(a) Agent shall have received (i) an Advance Request for the relevant Advance as required by Section 2.1(b), duly executed by Borrower's Chief Executive Officer, Chief Financial Officer or Chief Accounting Officer, and (ii) any other documents Agent may reasonably request in its good faith business discretion.

(b) The representations and warranties set forth in this Agreement shall be true and correct in all material respects on and as of the applicable Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date.

(c) Borrower shall be in compliance with all the terms and provisions set forth herein and in each other Loan Document on its part to be observed or performed, and at the time of and immediately after such Advance no Event of Default shall have occurred and be continuing.

(d) With respect to any Advance pursuant to Tranche III, Borrower shall have paid the Tranche III Facility Charge.

(e) With respect to any Advance pursuant to Tranche IV, Borrower shall have paid the Tranche IV Facility Charge.

Each Advance Request shall be deemed to constitute a representation and warranty by Borrower on the relevant Advance Date as to the matters specified in subsections (b) and (c) of this Section 4.2 and as to the matters set forth in the Advance Request.

4.3 No Default. As of the Closing Date and each Advance Date, (i) no fact or condition exists that could (or could, with the passage of time, the giving of notice, or both) constitute an Event of Default and (ii) no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants that:

5.1 Organizational Status. Borrower is duly organized, legally existing and in good standing under the laws of its jurisdiction of incorporation, and is duly qualified as a foreign corporation in all jurisdictions in which the nature of its business or location of its properties require such qualifications and where the failure to be qualified could reasonably be expected to have a Material Adverse Effect. Borrower's present name, former names (if any), locations, place of formation, tax identification number, organizational identification number and other information are correctly set forth in Exhibit B, as may be updated by Borrower in a written notice (including any Compliance Certificate) provided to Agent after the Closing Date in accordance with this Agreement.

5.2 Collateral. Borrower owns the Collateral free of all Liens, except for Permitted Liens. Borrower has the power and authority to grant to Agent a Lien in the Collateral as security for the Secured Obligations.

5.3 Consents. Borrower's execution, delivery and performance of this Agreement and all other Loan Documents to which it is a party, (i) have been duly authorized by all necessary action in accordance with Borrower's Organizational Documents and applicable law, (ii) will not result in the creation or imposition of any Lien upon the Collateral, other than Permitted Liens, (iii) do not violate (A) any provisions of Borrower's Organizational Documents, or (B) any law, regulation, order, injunction, judgment, decree or writ to which Borrower is subject in any material respect, and (iv) do not violate any material contract or agreement or require the consent or approval of any other Person which has not already been obtained. The individual or individuals executing the Loan Documents on behalf of Borrower are duly authorized to do so.

5.4 Material Adverse Effect. No Material Adverse Effect has occurred and is continuing, and Borrower is not aware of any event or circumstance that is likely to occur that is reasonably expected to result in a Material Adverse Effect.

5.5 Actions Before Governmental Authorities. There are no actions, suits or proceedings at law or in equity or by or before any governmental authority now pending or, to the knowledge of Borrower, threatened against or affecting Borrower or its property, that is reasonably expected to result in a Material Adverse Effect.

5.6 Laws.

(a) Neither Borrower nor any of its Subsidiaries is in violation of any law, rule or regulation, or in default with respect to any judgment, writ, injunction or decree of any governmental authority, where

such violation or default is reasonably expected to result in a Material Adverse Effect. Borrower is not in default under (i) any provision of any agreement or instrument evidencing material Indebtedness in any material respect, or (ii) any other agreement to which it is a party or by which it is bound that is reasonably expected to result in a Material Adverse Effect.

(b) Neither Borrower nor any of its Subsidiaries is an “investment company” or a company “controlled” by an “investment company” under the Investment Company Act of 1940, as amended. Neither Borrower nor any of its Subsidiaries is engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower and each of its Subsidiaries has complied in all material respects with the Federal Fair Labor Standards Act. Neither Borrower nor any of its Subsidiaries is a “holding company” or an “affiliate” of a “holding company” or a “subsidiary company” of a “holding company” as each term is defined and used in the Public Utility Holding Company Act of 2005. Neither Borrower’s nor any of its Subsidiaries’ properties or assets have been used by Borrower or such Subsidiary or, to Borrower’s knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than in material compliance with applicable laws. Borrower and each of its Subsidiaries has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all governmental authorities that are necessary to continue their respective businesses as currently conducted.

(c) None of Borrower, any of its Subsidiaries, or, to the knowledge of Borrower, any of Borrower’s or its Subsidiaries’ Affiliates or any of their respective agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement is (i) in violation of any Anti-Terrorism Law, (ii) engaging in or conspiring to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law, or (iii) is a Blocked Person. None of Borrower, any of its Subsidiaries, or to the knowledge of Borrower, any of their Affiliates or agents, acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement, (x) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Blocked Person, or (y) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law. None of the funds to be provided under this Agreement shall be used, directly or indirectly, (a) for any activities in violation of any applicable anti-money laundering, economic sanctions and anti-bribery laws and regulations laws and regulations or (b) for any payment 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.

5.7 Information Correct and Current. No information, report, Advance Request, financial statement, exhibit or schedule furnished, by or on behalf of Borrower to Agent in connection with any Loan Document or included therein or delivered pursuant thereto contained, or, when taken as a whole, contains, or shall contain, any material misstatement of fact or, when taken together with all other such information or documents, omitted, omits or shall omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were, are or shall be made, not materially misleading at the time such statement was made or deemed made. Additionally, any and all financial or business projections provided by a Borrower to Agent, whether prior to or after the Closing Date, shall be (i) provided in good faith and based on the most current data and information available to Borrower, and (ii) the most current of such projections provided to Borrower’s Board (it being understood that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts, that such projections are subject to significant uncertainties and contingencies, many of which are beyond the control of Borrower, that no assurance is given that any particular projections will be realized, and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

5.8 Tax Matters. Except as set forth on Schedule 5.8, (a) Borrower and its Subsidiaries have filed all federal and state income Tax returns and other material Tax returns that they are required to file, (b) Borrower and its Subsidiaries have duly paid all federal and state income Taxes and other material Taxes or installments thereof that they are required to pay, except Taxes being contested in good faith by appropriate proceedings and for which

Borrower and its Subsidiaries maintain adequate reserves in accordance with GAAP, and (c) to the best of Borrower's knowledge, no proposed or pending Tax assessments, deficiencies, audits or other proceedings with respect to Borrower or any Subsidiary have had, or could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

5.9 Intellectual Property Claims. Borrower is the sole owner of, or otherwise has the right to use, the Intellectual Property material to Borrower's business. Except as described on Schedule 5.9 and as may be updated by Borrower in a written notice provided from time to time after the Closing Date, (i) each of the material Copyrights, Trademarks and Patents (other than patent applications) is valid and enforceable, (ii) no material part of the Intellectual Property has been judged invalid or unenforceable, in whole or in part, and (iii) except as set forth in the most recently delivered Compliance Certificate in accordance with Section 7.1(d), no claim has been made to Borrower in writing that any material part of the Intellectual Property violates the rights of any third party. Exhibit C (and as may be updated by Borrower in a written notice provided from time to time after the Closing Date) is a true, correct and complete list of each of Borrower's registered Patents and filed Patent applications, registered Trademarks, registered Copyrights, and Material Agreements under which Borrower licenses Intellectual Property from third parties (other than shrink-wrap software licenses, licenses that are commercially available to the public, open source licenses, licenses disclosed in writing to Agent as required under this Agreement and immaterial Intellectual Property licensed to Borrower in the ordinary course of business), together with application or registration numbers, as applicable, owned by Borrower or any Subsidiary, in each case as of the Closing Date. Borrower is not in material breach of, nor has Borrower failed to perform any material obligations under, any of the foregoing contracts, licenses or agreements and, to Borrower's knowledge, no third party to any such contract, license or agreement is in material breach thereof or has failed to perform any material obligations thereunder.

5.10 Intellectual Property.

(a) A true, correct and complete list of Current Company IP, including its name/title, current owner or co-owners (including ownership interest), registration, patent or application number, and registration or application date, issued or filed in the United States, is set forth on Schedule 5.10(a). Except as set forth on Schedule 5.10(a), (i) (A) each item of owned Current Company IP is valid, subsisting and (other than with respect to Patent applications) enforceable and no such item of Current Company IP has lapsed, expired, been cancelled or invalidated or become abandoned or unenforceable, and (B) no written notice has been received challenging the inventorship or ownership, or relating to any lapse, expiration, invalidation, abandonment or unenforceability, of any such item of Current Company IP, and (ii) (A) each such item of Current Company IP which is licensed from another Person is valid, subsisting and enforceable and no such item of Current Company IP has lapsed, expired, been cancelled or invalidated, or become abandoned or unenforceable, and (B) no written notice has been received challenging the inventorship or ownership, or relating to any lapse, expiration, invalidation, abandonment or unenforceability, of any such item of Current Company IP. To the knowledge of Borrower, there are no published patents, patent applications, articles or prior art references that would reasonably be expected to be infringed by the exploitation of the Borrower Products. Except as set forth on Schedule 5.10(a), (x) each Person who has or has had any rights in or to owned Current Company IP or any trade secrets owned by the Borrower or any of its Subsidiaries, including each inventor named on the Patents within such owned Current Company IP filed by the Borrower or any of its Subsidiaries, has executed an agreement assigning his, her or its entire right, title and interest in and to such owned Current Company IP and such trade secrets, and the inventions, improvements, ideas, discoveries, writings, works of authorship, information and other intellectual property embodied, described or claimed therein, to the stated owner thereof, and (y) no such Person has any contractual or other obligation that would preclude or conflict with such assignment or the exploitation of the Borrower Products or entitle such Person to ongoing payments.

(b) [reserved].

(c) There are no maintenance, annuity or renewal fees that are currently overdue beyond their allotted grace period for any of the Current Company IP, nor have any applications or registrations therefor lapsed or become abandoned, been cancelled or expired.

(d) There are no unpaid fees or royalties under any Material Agreements that have become due, or are expected to become overdue. Each Material Agreement is in full force and effect and is legal, valid, binding, and enforceable in accordance with its respective terms, except as may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally or by equitable principles relating to enforceability. Except as set forth on Schedule 5.10(d), neither Borrower nor any of its Subsidiaries, as applicable, is in breach of or default in any manner that could reasonably be expected to materially affect the Borrower Products under any Material Agreement to which it is a party or may otherwise be bound, and no circumstances or grounds exist that would give rise to a claim of breach or right of rescission, termination, non-renewal, revision or amendment of any of the Material Agreements, including the execution, delivery and performance of this Agreement and the other Loan Documents.

(e) No payments by the Borrower or any of its Subsidiaries are due to any other Person in respect of the Current Company IP, other than pursuant to the Material Agreements and those fees payable to patent offices in connection with the prosecution and maintenance of the Current Company IP, any applicable taxes and associated attorney fees.

(f) Neither the Borrower nor any of its Subsidiaries has undertaken or omitted to undertake any acts, and no circumstance or grounds exist that would invalidate or reduce, in whole or in part, the enforceability or scope of (i) the Current Company IP in any manner that could reasonably be expected to materially adversely affect the Borrower Products, or (ii) except as set forth on Schedule 5.10(f), the Borrower's or Subsidiary's entitlement to own or license and exploit such Current Company IP.

(g) Except as described on Schedule 5.9 or in the most recently delivered Compliance Certificate in accordance with Section 7.1(d), there is no requested, filed pending, decided or settled opposition, interference proceeding, reissue proceeding, reexamination proceeding, inter-partes review proceeding, post-grant review proceeding, cancellation proceeding, injunction, litigation, paragraph IV patent certification or lawsuit under the Hatch-Waxman Act, hearing, investigation, complaint, arbitration, mediation, demand, International Trade Commission investigation, decree, or any other dispute, disagreement, or claim, in each case alleged in writing to Borrower or any of its Subsidiaries (collectively referred to hereinafter as "Specified Disputes"), nor to the knowledge of Borrower, has any such Specified Dispute been threatened in writing, in each case challenging the legality, validity, enforceability or ownership of any Current Company IP, in each case that would have a material adverse effect on the Borrower Products.

(h) In each case where an issued Patent within the Current Company IP is owned or co-owned by the Borrower or any of its Subsidiaries by assignment, the assignment has been duly recorded with the U.S. Patent and Trademark Office.

(i) Except as set forth on Schedule 5.10(i) there are no pending or, to the knowledge of Borrower, threatened claims against Borrower or any of its Subsidiaries alleging that any research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Borrower Products in the United States infringes or violates (or in the past infringed or violated) the rights of any third parties in or to any Intellectual Property ("Third Party IP") or constitutes a misappropriation of (or in the past constituted a misappropriation of) any Third Party IP.

(j) [reserved].

(k) Except as set forth on Schedule 5.10(k), to the knowledge of the Borrower, there are no settlements, covenants not to sue, consents, judgments, orders or similar obligations which: (i) restrict the rights of the Borrower or any of its Subsidiaries to use any Intellectual Property relating to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Borrower Products (in order to accommodate any Third Party IP or otherwise), or (ii) permit any third parties to use any Current Company IP.

(l) Except as set forth on Schedule 5.10(l), to the knowledge of Borrower (i) there is no, nor has there been any, infringement or violation by any Person of any of the Current Company IP or the rights

therein, and (ii) there is no, nor has there been any, misappropriation by any Person of any of the Current Company IP or the subject matter thereof.

(m) The Borrower and each of its Subsidiaries has taken all commercially reasonable measures customary in the biopharmaceutical industry to protect the confidentiality and value of all trade secrets owned by the Borrower or any of its Subsidiaries or used or held for use by the Borrower or any of its Subsidiaries, in each case relating to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Borrower Products.

(n) [reserved].

(o) Except as described on Schedule 5.10(o), Borrower has all material rights with respect to Intellectual Property necessary or material in the operation or conduct of Borrower's business as currently conducted and proposed to be conducted by Borrower. Without limiting the generality of the foregoing, and in the case of Licenses, except for restrictions that are unenforceable under Division 9 of the UCC or restrictions that are permitted hereunder, Borrower has the right, to the extent required to operate Borrower's business, to freely transfer, license or assign Intellectual Property owned by Borrower and necessary or material in the operation or conduct of Borrower's business as currently conducted and proposed to be conducted by Borrower, without condition, restriction or payment of any kind (other than license payments in the ordinary course of business) to any third party, and Borrower owns or has the right to use, pursuant to valid licenses, all software development tools, library functions, compilers and all other third-party software and other items that are material to Borrower's business and used in the design, development, promotion, sale, license, manufacture, import, export, use or distribution of Borrower Products that are material to Borrower's business except customary covenants in license agreements, joint venture or strategic alliances (to the extent such joint ventures or strategic alliances are Permitted Investments) and equipment leases where Borrower is the licensee or lessee.

(p) No material software or other material materials used by Borrower or any of its Subsidiaries (or used in any Borrower Products or any Subsidiaries' products) are subject to an open-source or similar license (including but not limited to the General Public License, Lesser General Public License, Mozilla Public License, or Affero License) (collectively, "Open Source Licenses") in a manner that would cause such software or other materials to have to be (i) distributed to third parties at no charge or a minimal charge (royalty-free basis); (ii) licensed to third parties to modify, make derivative works based on, decompile, disassemble, or reverse engineer; or (iii) used in a manner that does could require disclosure or distribution in source code form.

5.11 Borrower Products. Except as set forth on Schedule 5.11, no material Intellectual Property owned by Borrower or Borrower Product has been or is subject to any actual or, to the knowledge of Borrower, threatened litigation, proceeding (including any proceeding in the United States Patent and Trademark Office or any corresponding foreign office or agency) or outstanding decree, order, judgment, settlement agreement or stipulation that restricts in any manner Borrower's use, transfer or licensing thereof or that may affect the validity, use or enforceability thereof. There is no decree, order, judgment, agreement, stipulation, arbitral award or other provision entered into in connection with any litigation or proceeding that obligates Borrower to grant licenses or ownership interest in any future Intellectual Property related to the operation or conduct of the business of Borrower or Borrower Products. Borrower has not received any written notice or claim, or, to the knowledge of Borrower, oral notice or claim, challenging or questioning Borrower's ownership in any material Intellectual Property (or written notice of any claim challenging or questioning the ownership in any licensed Intellectual Property of the owner thereof) or suggesting that any third party has any claim of legal or beneficial ownership with respect thereto nor, to Borrower's knowledge, is there a reasonable basis for any such claim. To Borrower's knowledge, neither Borrower's use of its material Intellectual Property nor the production and sale of Borrower Products materially infringes the Intellectual Property or other rights of others.

5.12 Financial Accounts. Exhibit D, as may be updated by Borrower in a written notice provided to Agent after the Closing Date, is a true, correct and complete list of (a) all banks and other financial institutions at which Borrower or any Subsidiary maintains Deposit Accounts and (b) all institutions at which Borrower or any Subsidiary maintains an account holding Investment Property, and such exhibit correctly identifies the name, address

and telephone number 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.

5.13 Employee Loans. Other than loans constituting Permitted Investments, Borrower has no outstanding loans to any employee, officer or director of Borrower nor has Borrower guaranteed the payment of any loan made to an employee, officer or director of Borrower by a third party.

5.14 Subsidiaries. Borrower does not own any stock, partnership interest or other securities of any Person, except for Permitted Investments. Attached as Schedule 5.14, as may be updated by Borrower in a written notice provided after the Closing Date, is a true, correct and complete list of each Subsidiary.

SECTION 6 INSURANCE; INDEMNIFICATION

6.1 Coverage. Borrower shall cause to be carried and maintained commercial general liability insurance covering Borrower and each of its Subsidiaries, on an occurrence form, against risks customarily insured against in Borrower's line of business. Such risks shall include the risks of bodily injury, including death, property damage, personal injury, advertising injury, and contractual liability per the terms of the indemnification agreement found in Section 6.3. Borrower shall maintain a minimum of \$1,000,000 of commercial general liability insurance for each occurrence. Borrower maintains and shall continue to maintain a minimum of \$2,000,000 of directors' and officers' insurance for each occurrence and \$5,000,000 in the aggregate. So long as there are any Secured Obligations outstanding, Borrower shall maintain insurance upon the business and assets of Borrower and its Subsidiaries, insuring against all risks of physical loss or damage howsoever caused, in an amount not less than the full replacement cost of the Collateral, provided that such insurance may be subject to standard exceptions and deductibles. If Borrower fails to obtain the insurance called for by this Section 6.1 or fails to pay any premium thereon or fails to pay any other amount which Borrower is obligated to pay under this Agreement or any other Loan Document or which may be required to preserve the Collateral, Agent may obtain such insurance or make such payment, and all amounts so paid by Agent are immediately due and payable, bearing interest at the then highest rate applicable to the Secured Obligations, and secured by the Collateral. Agent will make reasonable efforts to provide Borrower with notice of Agent obtaining such insurance at the time it is obtained or within a reasonable time thereafter. No payments by Agent are deemed an agreement to make similar payments in the future or Agent's waiver of any Event of Default.

6.2 Certificates. Borrower shall deliver to Agent certificates of insurance that evidence compliance with its insurance obligations in Section 6.1 and the obligations contained in this Section 6.2. Borrower's insurance certificate shall reflect Agent (shown as "Hercules Capital, Inc., as Agent, and its successors and/or assigns") as an additional insured for commercial general liability, and a lenders loss payable for property insurance and additional insured for liability insurance for any future insurance that Borrower may acquire from such insurer. Attached to the certificates of insurance will be additional insured endorsements for liability and lender's loss payable endorsements for all risk property damage insurance. All certificates of insurance shall provide for a minimum of thirty (30) days' advance written notice to Agent of cancellation (other than cancellation for non-payment of premiums, for which ten (10) days' advance written notice shall be sufficient) or any other change adverse to Agent's interests. Any failure of Agent to scrutinize such insurance certificates for compliance is not a waiver of any of Agent's rights, all of which are reserved. Upon Agent's reasonable request, Borrower shall provide Agent with copies of each insurance policy, and upon entering or amending any insurance policy required hereunder, Borrower shall provide Agent with copies of such policies and shall promptly deliver to Agent updated insurance certificates with respect to such policies.

6.3 Indemnity. Borrower agrees to indemnify and hold Agent, Lenders and their officers, directors, employees, agents, in-house attorneys, representatives and shareholders (each, an "Indemnified Person") harmless from and against any and all claims, costs, expenses, damages and liabilities (including such claims, costs, expenses, damages and liabilities based on liability in tort, including strict liability in tort), including reasonable attorneys' fees and disbursements and other costs of investigation or defense (including those incurred upon any appeal) (collectively, "Liabilities"), that may be instituted or asserted against or incurred by such Indemnified Person as the result of credit having been extended, suspended or terminated under this Agreement and the other Loan Documents or the administration of such credit, or in connection with or arising out of the transactions contemplated hereunder and thereunder, or any actions or failures to act in connection therewith, or arising out of the disposition or utilization of the Collateral, excluding in all cases Liabilities to the extent resulting solely from any Indemnified Person's gross

negligence or willful misconduct. This Section 6.3 shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim. In no event shall any Indemnified Person be liable on any theory of liability for any special, indirect, consequential or punitive damages (including any loss of profits, business or anticipated savings). This Section 6.3 shall survive the repayment of indebtedness under, and otherwise shall survive the expiration or other termination of, the Loan Agreement, in each case subject to the applicable statute of limitations.

SECTION 7
COVENANTS

Borrower agrees as follows:

7.1 Financial Reports. Borrower shall furnish to Agent the financial statements and reports listed hereinafter (the "Financial Statements"):

(a) as soon as practicable (and in any event within 30 days) after the end of each month, a management report containing a balance sheet and related statement of income;

(b) as soon as practicable (and in any event within 45 days) after the end of each calendar quarter, unaudited interim and year-to-date financial statements as of the end of such calendar quarter (prepared on a consolidated basis, if applicable), including balance sheet and related statements of income and cash flows accompanied by a report detailing any material contingencies (including the commencement of any material litigation by or against Borrower) or any other occurrence that could reasonably be expected to have a Material Adverse Effect, certified by Borrower's Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer or another authorized executive of Borrower to the effect that they have been prepared in accordance with GAAP, (i) except for the absence of footnotes, and (ii) subject to normal year-end adjustments;

(c) as soon as practicable (and in any event within 90 days) after the end of each fiscal year, unqualified (other than as to going concern qualification) audited financial statements as of the end of such year (prepared on a consolidated and consolidating basis, if applicable), including balance sheet and related statements of income and cash flows, and setting forth in comparative form the corresponding figures for the preceding fiscal year, certified by a firm of independent certified public accountants selected by Borrower and reasonably acceptable to Agent, accompanied by any management report from such accountants; it being agreed that Ernst & Young LLP is reasonably acceptable to the Agent;

(d) as soon as practicable (and in any event within 30 days) after the end of each month, a Compliance Certificate in the form of Exhibit E;

(e) as soon as practicable (and in any event within 30 days) after the end of each month, a report showing agings of accounts receivable and accounts payable;

(f) promptly after the sending or filing thereof, as the case may be, copies of any proxy statements, financial statements or reports that Borrower has made available to holders of its common stock, and copies of any regular, periodic and special reports or registration statements that Borrower files with the Securities and Exchange Commission or any governmental authority that may be substituted therefor, or any national securities exchange;

(g) financial and business projections promptly following their approval by Borrower's Board, and in any event, 60 days after the end of Borrower's fiscal year, as well as budgets, operating plans and other financial information reasonably requested by Agent;

(h) insurance renewal statements, annually or otherwise promptly upon renewal of insurance policies required to be maintained in accordance with Section 6.1, and

(i) prompt (but in any event no more than 3 Business Days) notice if Borrower or any Subsidiary has knowledge that Borrower, or any Subsidiary or controlled Affiliate of Borrower, is listed on the OFAC Lists or (a) is convicted on, (b) pleads *nolo contendere* to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering.

Borrower shall not make any change in its (a) accounting policies or reporting practices (other than as permitted under GAAP or pursuant to applicable securities laws or regulations of the SEC), or (b) fiscal years or fiscal quarters. The fiscal year of Borrower shall end on December 31.

The executed Compliance Certificate, all Financial Statements required to be delivered pursuant to clauses (a), (b) and (c) above shall be sent via e-mail to financialstatements@htgc.com with a copy to legal@htgc.com and mdutra@htgc.com, provided, that if e-mail is not available or sending such Financial Statements via e-mail is not possible, they shall be faxed to Agent at: (650) 473-9194, attention Account Manager: Phathom Pharmaceuticals, Inc.

Notwithstanding the foregoing, documents required to be delivered hereunder (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower makes such documents or materials publicly available.

7.2 Management Rights. Borrower shall permit any representative that Agent or Lenders authorizes, including its attorneys and accountants, to inspect the Collateral and examine and make copies and abstracts of the books of account and records of Borrower at reasonable times and upon reasonable notice during normal business hours; provided, however, that so long as no Event of Default has occurred and is continuing, such examinations shall be limited to no more often than once per fiscal year. In addition, any such representative shall have the right to meet with management and officers of Borrower to discuss such books of account and records at reasonable times and upon reasonable notice. In addition, Agent or Lenders shall be entitled at reasonable times and intervals to consult with and advise the management and officers of Borrower concerning significant business issues affecting Borrower. Such consultations shall not unreasonably interfere with Borrower's business operations. The parties intend that the rights granted Agent and Lenders shall constitute "management rights" within the meaning of 29 C.F.R. Section 2510.3-101(d)(3)(ii), but that any advice, recommendations or participation by Agent or Lenders with respect to any business issues shall not be deemed to give Agent or any Lender, nor be deemed an exercise by Agent or any Lender of, control over Borrower's management or policies.

7.3 Further Assurances. Borrower shall, and shall cause each other Loan Party to, from time to time execute, deliver and file, alone or with Agent, any financing statements, security agreements, collateral assignments, notices, control agreements, promissory notes or other documents to perfect or give the highest priority to Agent's Lien on the Collateral or otherwise evidence Agent's rights herein, in each case as reasonably requested by Agent. Borrower shall, from time to time procure any instruments or documents as may be reasonably requested by Agent, and take all further action that may be necessary, or that Agent may reasonably request, to perfect and protect the Liens granted hereby or pursuant to applicable Loan Documents. In addition, and for such purposes only, Borrower hereby authorizes Agent to execute and deliver on behalf of Borrower and to file such financing statements (including an indication that the financing statement covers "all assets or all personal property" of Borrower in accordance with Section 9-504 of the UCC), without the signature of Borrower, either in Agent's name or in the name of Agent as agent and attorney-in-fact for Borrower. Borrower shall in good faith and in its reasonable commercial discretion, in each case subject to the terms of this Agreement, protect and defend its title to the Collateral and Agent's Lien thereon against all Persons claiming any interest adverse to Borrower or Agent other than Permitted Liens.

7.4 Indebtedness. Borrower shall not create, incur, assume, guarantee or be or remain liable with respect to any Indebtedness, and shall not permit any Subsidiary to do so, other than Permitted Indebtedness, or prepay any Indebtedness or take any actions which impose on Borrower an obligation to prepay any Indebtedness, except (a) for the conversion of Indebtedness into equity securities and the payment of cash in lieu of fractional shares in connection with such conversion, (b) for purchase money Indebtedness pursuant to its then applicable payment schedule or with other purchase money Indebtedness permitted hereunder, (c) for prepayment (i) by any Loan Party or Subsidiary of intercompany Indebtedness owed to Borrower, or (ii) by any Subsidiary that is not a Loan Party of intercompany Indebtedness owed by such Subsidiary to another Subsidiary that is not a Loan Party, or (d) as may be permitted under any Subordination Agreement, (e) as otherwise permitted hereunder or approved in writing by Agent, and (f) Permitted

Indebtedness with the proceeds of other Permitted Indebtedness.

Notwithstanding anything to the contrary in the foregoing, the issuance of, performance of obligations under (including any payments of interest), and conversion, exercise, repurchase, redemption (including, for the avoidance of doubt, a required repurchase in connection with the redemption of Permitted Convertible Debt upon satisfaction of a condition related to the stock price of Borrower's common stock), settlement or early termination or cancellation of (whether in whole or in part and including by netting or set-off) (in each case, whether in cash, common stock of Borrower or, following a merger event or other change of the common stock of Borrower, other securities or property), or the satisfaction of any condition that would permit or require any of the foregoing, any Permitted Convertible Debt shall not constitute a prepayment of Indebtedness by Borrower for the purposes of this Section 7.4 provided that principal payments in cash (other than cash in lieu of fractional shares) shall only be allowed with respect to any repurchase in connection with the redemption of Permitted Convertible Debt upon satisfaction of a condition related to the stock price of Borrower's common stock if the Redemption Conditions are satisfied in respect of such redemption and at all times after such redemption.

7.5 Collateral. Borrower shall at all times keep the Collateral and all other property and assets used in Borrower's business or in which Borrower now or hereafter holds any interest free and clear from Liens whatsoever (except for Permitted Liens), and shall give Agent prompt written notice of any legal process that is reasonably likely to result in damages, expenses or liabilities in excess of \$1,000,000 affecting the Collateral, the Intellectual Property, such other property or assets, or any Liens thereon, provided however, that the Collateral and such other property and assets may be subject to Permitted Liens. Borrower shall not agree with any Person other than Agent or Lenders not to encumber its property other than in connection with Permitted Liens. Borrower shall not enter into or suffer to exist or become effective any agreement that prohibits or limits the ability of Borrower to create, incur, assume or suffer to exist any Lien upon any of its property (including Intellectual Property), whether now owned or hereafter acquired, to secure its obligations under the Loan Documents to which it is a party other than (a) this Agreement and the other Loan Documents, (b) any agreements governing any purchase money Liens or capital lease obligations otherwise permitted hereby (in which case, any prohibition or limitation shall only be effective against the assets financed thereby) and (c) customary restrictions on the assignment of leases, licenses and other agreements. Borrower shall cause each of its Subsidiaries to protect and defend such Subsidiary's title to its assets from and against all Persons claiming any interest adverse to such Subsidiary, and Borrower shall cause each of its Subsidiaries at all times to keep such Subsidiary's property and assets free and clear from Liens whatsoever (except for Permitted Liens), and shall give Agent prompt written notice of any legal process that is reasonably likely to result in damages, expenses or liabilities in excess of \$500,000.

7.6 Investments. Borrower shall not, directly or indirectly acquire or own, or make any Investment in or to any Person, nor permit any of its Subsidiaries so to do, other than Permitted Investments.

Notwithstanding the foregoing, and for the avoidance of doubt, this Section 7.6 shall not prohibit (i) the conversion by holders of (including any cash payment upon conversion), or required payment of any principal or premium on (including, for the avoidance of doubt, in respect of a required repurchase in connection with the redemption of Permitted Convertible Debt upon satisfaction of a condition related to the stock price of Borrower's common stock) or required payment of any interest with respect to, any Permitted Convertible Debt in each case, in accordance with the terms of the indenture governing such Permitted Convertible Debt provided that principal payments in cash (other than cash in lieu of fractional shares) shall be allowed with respect to any repurchase in connection with the redemption of Permitted Convertible Debt upon satisfaction of a condition related to the stock price of Borrower's common stock only if the Redemption Conditions are satisfied in respect of such redemption and at all times after such redemption, (ii) the entry into (including the payment of premiums in connection therewith) or any required payment with respect to, or required early unwind or settlement of, any Warrant, Permitted Bond Hedge Transaction or Permitted Warrant Transaction, in each case, in accordance with the terms of the agreement governing such Warrant, Permitted Bond Hedge Transaction or Permitted Warrant Transaction, or (iii) the withholding of shares of common stock upon the vesting of performance stock units and restricted stock units issued to the Borrower's employees under the Borrower's equity incentive plan upon vesting of such stock units.

Notwithstanding the foregoing, Borrower may repurchase, exchange or induce the conversion of Permitted Convertible Debt by delivery of shares of Borrower's common stock and/or a different series of Permitted Convertible Debt and/or by payment of cash (in an amount that does not exceed the proceeds received by Borrower from the

substantially concurrent issuance of shares of Borrower's common stock and/or Permitted Convertible Debt plus the net cash proceeds, if any, received by Borrower pursuant to the related exercise or early unwind or termination of the related Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, pursuant to the immediately following proviso); provided that, for the avoidance of doubt, substantially concurrently with, or a commercially reasonable period of time before or after, the related settlement date for the Permitted Convertible Debt that are so repurchased, exchanged or converted, Borrower may exercise or unwind or terminate early (whether in cash, shares or any combination thereof) the portion of the Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, corresponding to such Permitted Convertible Debt that are so repurchased, exchanged or converted.

7.7 Distributions. Borrower shall not, nor shall it permit any Subsidiary to, (a) repurchase or redeem any class of stock or other Equity Interest other than the repurchases described in clause (c) of the defined term "Permitted Investments"; (b) declare or pay any cash dividend or make a cash distribution on any class of stock or other Equity Interest, except that a Subsidiary of Borrower may pay dividends or make distributions to Borrower or a Subsidiary of Borrower; (c) lend money to any employees, officers or directors or guarantee the payment of any such loans granted by a third party in excess of \$500,000 in the aggregate; or (d) waive, release or forgive any Indebtedness owed by any employees, officers or directors in excess of \$500,000 in the aggregate.

Notwithstanding the foregoing, and for the avoidance of doubt, this Section 7.7 shall not prohibit (i) the conversion by holders of (including any cash payment upon conversion), or required payment of any principal or premium on (including, for the avoidance of doubt, in respect of a required repurchase in connection with the redemption of Permitted Convertible Debt upon satisfaction of a condition related to the stock price of Borrower's common stock) or required payment of any interest with respect to, any Permitted Convertible Debt in each case, in accordance with the terms of the indenture governing such Permitted Convertible Debt, (ii) the entry into (including the payment of premiums in connection therewith) or any required payment with respect to, or required early unwind or settlement of, any Warrant, Permitted Bond Hedge Transaction or Permitted Warrant Transaction, in each case, in accordance with the terms of the agreement governing such Warrant, Permitted Bond Hedge Transaction or Permitted Warrant Transaction, or (iii) the withholding of shares of common stock upon the vesting of restricted stock units and performance stock units issued to the Borrower's employees under the Borrower's equity incentive plan upon vesting of such stock units and any related cash payments required to be paid to such employees and or any governmental authority on account of Taxes related thereto, in each case in the ordinary course of business of the Borrower.

Notwithstanding the foregoing, Borrower may repurchase, exchange or induce the conversion of Permitted Convertible Debt by delivery of shares of Borrower's common stock and/or a different series of Permitted Convertible Debt and/or by payment of cash (in an amount that does not exceed the proceeds received by Borrower from the substantially concurrent issuance of shares of Borrower's common stock and/or Refinancing Convertible Notes plus the net cash proceeds, if any, received by Borrower pursuant to the related exercise or early unwind or termination of the related Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, pursuant to the immediately following proviso); provided that, for the avoidance of doubt, substantially concurrently with, or a commercially reasonable period of time before or after, the related settlement date for the Permitted Convertible Debt that are so repurchased, exchanged or converted, Borrower may exercise or unwind or terminate early (whether in cash, shares or any combination thereof) the portion of the Permitted Bond Hedge Transactions and Permitted Warrant Transactions, if any, corresponding to such Permitted Convertible Debt that are so repurchased, exchanged or converted.

7.8 Transfers. Except for Permitted Transfers, Borrower shall not, and shall not permit any Subsidiary to, voluntarily or involuntarily transfer, sell, lease, license, lend or in any other manner convey any equitable, beneficial or legal interest in any material portion of its assets (including Cash).

7.9 Mergers or Acquisitions. Borrower shall not merge or consolidate, nor permit any of its Subsidiaries to merge or consolidate, with or into any other business organization, other than mergers or consolidations of (a) a Subsidiary which is not a Loan Party into another Subsidiary or into a Loan Party, or (b) a Loan Party into another Loan Party (provided that Borrower shall be the surviving entity in any transaction involving Borrower), or acquire, or permit any of its Subsidiaries to acquire, in each case including for the avoidance of doubt through a merger, purchase, licensing arrangement or any similar transaction, all or substantially all of the capital stock or property of another Person, provided however, that Borrower shall be permitted to enter into Permitted Acquisitions.

7.10 Taxes. Borrower shall, and shall cause each of its Subsidiaries to, pay when due all material Taxes of any nature whatsoever now or hereafter imposed or assessed against Borrower or such Subsidiary or the Collateral or upon Borrower's (or such Subsidiary's) ownership, possession, use, operation or disposition thereof or upon Borrower's (or such Subsidiary's) rents, receipts or earnings arising therefrom. Borrower shall, and shall cause each of its Subsidiaries to accurately file on or before the due date therefor (taking into account proper extensions) all federal and state income Tax returns and other material Tax returns required to be filed. Notwithstanding the foregoing, Borrower and its Subsidiaries may contest, in good faith and by appropriate proceedings diligently conducted, Taxes for which Borrower and its Subsidiaries maintain adequate reserves in accordance with GAAP.

7.11 Certain Changes. Neither Borrower nor any Subsidiary shall change its jurisdiction of organization, organizational form or legal name without twenty (20) days' prior written notice to Agent. Neither Borrower nor any Subsidiary shall suffer a Change in Control. Neither Borrower nor any Subsidiary shall relocate its chief executive office or its principal place of business unless: (i) it has provided prior written notice to Agent; and (ii) such relocation shall be within the continental United States of America. Neither Borrower nor any Subsidiary shall relocate any item of Collateral (other than (x) sales of Inventory in the ordinary course of business, (y) relocations of Equipment within the United States having an aggregate value of up to \$250,000 in any fiscal year, and (z) relocations of Collateral from a location described on Exhibit B to another location described on Exhibit B) unless (i) it has provided prompt written notice to Agent, (ii) such relocation is within the continental United States of America and, (iii) if such relocation is to a third party bailee, it has used commercially reasonable efforts to deliver a bailee agreement in form and substance reasonably acceptable to Agent.

7.12 Deposit Accounts. Other than Excluded Accounts, neither Borrower nor any Subsidiary (other than an Excluded Subsidiary) shall maintain any Deposit Accounts, or accounts holding Investment Property, except with respect to which Agent has an Account Control Agreement.

7.13 Joinder of Subsidiaries; Limitation on Foreign Subsidiaries. Borrower shall notify Agent of each Subsidiary formed or acquired subsequent to the Closing Date and, within 30 days of such formation or acquisition, shall cause any such Domestic Subsidiary (other than an Excluded Subsidiary) to execute and deliver to Agent a Joinder Agreement, or, if requested by Agent, a Guaranty and appropriate collateral security documents to secure the obligations pursuant to such Guaranty. Borrower shall not permit Foreign Subsidiaries to maintain Cash balances in excess of \$1,000,000 at any time.

7.14 Regulatory and Product Notices. The Borrower shall promptly (but in any event within three (3) Business Days) after the receipt or occurrence thereof notify Agent of:

- (a) any written notice received by Borrower or its Subsidiaries from a governmental authority alleging potential or actual violations of any FDA Laws or Federal Health Care Program Laws by Borrower or its Subsidiaries,
- (b) any written notice that the FDA (or international equivalent) is limiting, suspending or revoking any Registrations (including, but not limited to, the issuance of a clinical hold),
- (c) any written notice that Borrower or its Subsidiaries has become subject to any Regulatory Action,
- (d) the exclusion or debarment from any governmental healthcare program or debarment or disqualification by FDA (or international equivalent) of Borrower or its Subsidiaries,
- (e) any written notice that any product of Borrower or its Subsidiaries has been seized, withdrawn, recalled, detained, or subject to a suspension of manufacturing, or the commencement of any proceedings in the United States or any other jurisdiction seeking the withdrawal, recall, suspension, import detention, or seizure of any Borrower Product are pending or threatened in writing against Borrower or its Subsidiaries, or

(f) narrowing or otherwise limiting the scope of marketing authorization or the labeling of the products of Borrower and its Subsidiaries under any such Registration,

except, in each case of (a) through (f) above, where such action would not reasonably be expected to have, either individually or in the aggregate, any Material Regulatory Liabilities.

7.15 Notification of Event of Default. Borrower shall notify Agent promptly, in any event within three (3) Business Days, of the occurrence of any Event of Default.

7.16 SBA Addendum. One or more affiliates of Agent have received a license from the U.S. Small Business Administration ("SBA") to extend loans as a small business investment company ("SBIC") pursuant to the Small Business Investment Act of 1958, as amended, and the associated regulations (collectively, the "SBIC Act"). Portions of the Loan to Borrower may be made by a Lender that is an SBIC. Addendum 2 to this Agreement outlines various responsibilities of Agent, each Lender and Borrower associated with a loan made by an SBIC, and such Addendum 2 is hereby incorporated in this Agreement.

7.17 Use of Proceeds. Borrower agrees that the proceeds of the Loans shall be used solely to pay off the Existing Indebtedness, pay related fees and expenses in connection with this Agreement and for working capital and general business purposes. The proceeds of the Loans shall not be used in violation of Anti-Corruption Laws or applicable Sanctions.

7.18 Material Agreement. Borrower (a) shall not, without the consent of Agent, terminate the Takeda License or amend the Takeda License in a manner that is reasonably likely to have a material negative impact on Agent or Lenders and (b) shall give prompt written notice to the Agent of entering into a Material Agreement or materially amending or terminating a Material Agreement.

7.19 Compliance with Laws.

(a) Borrower shall maintain, and shall cause each of its Subsidiaries to maintain compliance in all material respects with all applicable laws, rules or regulations, and shall, or cause its Subsidiaries to, obtain and maintain all required Registrations reasonably necessary in connection with the conduct of Borrower's business. Borrower shall not 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 X, T and U of the Federal Reserve Board of Governors).

(b) Neither Borrower nor any of its Subsidiaries shall, nor shall Borrower or any of its Subsidiaries permit any controlled Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. Neither Borrower nor any of its Subsidiaries shall, nor shall Borrower or any of its Subsidiaries permit any controlled Affiliate to, directly or indirectly, (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224 or any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law.

(c) Borrower has implemented and shall maintain in effect policies and procedures designed to reasonably ensure compliance by Borrower and its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions, and Borrower and its Subsidiaries and their respective officers and employees and to the knowledge Borrower, its directors and agents, are in compliance with Anti-Corruption Laws and applicable Sanctions in all material respects

(d) Neither Borrower nor its Subsidiaries nor any of their respective directors, officers or employees, or to the knowledge of Borrower, any agent for Borrower or any of its Subsidiaries that shall act in any capacity in connection with or benefit from the credit facility established hereby, is a Sanctioned Person. No Loan, use of proceeds or other transaction contemplated by this Agreement shall violate Anti-Corruption Laws or applicable Sanctions.

7.20 Financial Covenants.

(a) Minimum Cash.

(i) Beginning on July 1, 2022 and at all times thereafter, Borrower shall maintain Qualified Cash in an amount greater than or equal to (x) the outstanding principal amount of the Term Loan Advances, *multiplied by* (y) (i) at all times prior to the Approval Milestone II Date, 30% and (ii) at all times after the Approval Milestone II Date, 15%.

(ii) If Borrower makes a redemption or any other cash payment in respect of Permitted Convertible Debt, subject to satisfaction of the Redemption Conditions, Borrower shall, at all times thereafter, maintain Qualified Cash in the amount required by the defined term "Redemption Conditions".

(b) Performance Covenant.

(i) If the Initial Performance Covenant Test Date has occurred, Borrower shall thereafter satisfy either of (i) Performance Covenant A or Performance Covenant B, tested at all times, or (ii) Performance Covenant C, tested monthly.

(ii) Borrower shall be permitted to prepay the portion of the outstanding Advances (and all accrued and unpaid interest thereon) necessary in order to maintain compliance with Section 7.20(b)(i) to prevent an Event of Default under Section 9.2 and Borrower's failure to satisfy either of Performance Covenant A, Performance Covenant B, or Performance Covenant C shall not be considered an Event of Default if Borrower makes a prepayment which results in Borrower's satisfaction of either of Performance Covenant A, Performance Covenant B, or Performance Covenant C no later than four (4) Business Days after the date Borrower first fails to satisfy one of Performance Covenant A, Performance Covenant B, or Performance Covenant C (such prepayment, a "Performance Covenant Cure").

7.21 Intellectual Property. Borrower shall (i) protect, defend and maintain the validity and enforceability of its Intellectual Property; (ii) promptly advise Agent in writing of material infringements of its Intellectual Property; and (iii) not allow any Intellectual Property material to Borrower's business to be abandoned, forfeited or dedicated to the public without Agent's written consent. If Borrower (a) obtains any Patent, registered Trademark, registered Copyright, registered mask work, or any pending application for any of the foregoing, as owner, or (b) applies for any Patent or the registration of any Trademark, then Borrower shall immediately provide written notice thereof to Agent and shall execute such intellectual property security agreements and other documents and take such other actions as Agent may request in its good faith business judgment to perfect and maintain a first priority perfected security interest in favor of Agent in such property. Together with the delivery of each Compliance Certificate pursuant to Section 7.1(d), Borrower shall provide to Agent copies of all applications that it files for Patents or for the registration of Trademarks, Copyrights or mask works, together with evidence of the recording of the intellectual property security agreement required for Agent to perfect and maintain a first priority perfected security interest in such property.

7.22 Transactions with Affiliates. Borrower shall not, and shall not permit any Subsidiary to, directly or indirectly, enter into or permit to exist any transaction of any kind with any Affiliate of Borrower or such Subsidiary on terms that are less favorable to Borrower or such Subsidiary, as the case may be, than those that might be obtained in an arm's length transaction from a Person who is not an Affiliate of Borrower or such Subsidiary, other than (a) any equity investments in Borrower by existing investors of Borrower not constituting a Change of Control, or Subordinated Indebtedness, (b) any compensation, director indemnification or similar arrangements in the ordinary

course of business of Borrower and as approved by Borrower's Board, (c) any intercompany arrangements entered into in the ordinary course of business and not prohibited hereunder, or (d) any transaction otherwise permitted under this Article 7.

SECTION 8 **RIGHT TO INVEST**

8.1 **Right to Invest.** Borrower shall provide (or in the case of a Subsequent Financing that is a registered offering, the Borrower shall use its commercially reasonable efforts to provide) the Lenders or their permitted assignees or nominees, designated as such in writing to Borrower, the opportunity, in their discretion, to participate in each Subsequent Financing in an amount of up to \$5,000,000, in the aggregate for all Lenders and their permitted assignees or nominees, in such Subsequent Financing on substantially the same terms, conditions and pricing afforded to other investors participating in such Subsequent Financing. If the Lenders (or their permitted assignees or nominees) elect to participate in any Subsequent Financing, the Lenders (or their permitted assignees or nominees, as applicable) participating in such Subsequent Financing agree to become a party to the agreements executed by the other investors participating in such Subsequent Financing, including with respect to obligations of confidentiality or as may otherwise be required by the Securities Act of 1933, as amended, and the rules and regulations promulgated by the Securities and Exchange Commission thereunder. Borrower, or an investment bank or underwriter engaged on Borrower's behalf, shall provide the Lenders or their permitted assignees or nominees at least three (3) Business Days' written notice of any planned Subsequent Financing and the opportunity to exercise the right to invest under this Section 8.1 with respect to any such Subsequent Financing. This Section 8.1, and all rights and obligations hereunder, shall terminate upon the earliest to occur of (a) termination of this Agreement or (b) such time that the Lenders or their permitted assignees or nominees have purchased \$5,000,000 of Borrower's Equity Interests in the aggregate in Subsequent Financings.

SECTION 9 **EVENTS OF DEFAULT**

The occurrence of any one or more of the following events shall be an Event of Default:

9.1 **Payments.** A Loan Party fails to (a) pay principal or interest on any Loan on its due date or (b) make any payment when due on account of any other Secured Obligations within two (2) Business Days after the applicable due date; provided, however, that in each case an Event of Default shall not occur on account of a failure to pay due solely to an administrative or operational error of Agent or Lenders or Borrower's bank if Borrower had the funds to make the payment when due and makes the payment within three (3) Business Days following Borrower's knowledge of such failure to pay; or

9.2 **Covenants.** A Loan Party breaches or defaults in the performance of any covenant or Secured Obligation under this Agreement, or any of the other Loan Documents or any other agreement among any Loan Party, Agent and Lenders, and (a) with respect to a default under any covenant under this Agreement other than the Sections specifically identified in clause (b) hereof, any other Loan Document or any other agreement between any Loan Party and Agent or Lenders, and such default continues for more than fifteen (15) Business Days after the earlier of the date on which (i) Agent or Lenders has given notice of such default to Borrower and (ii) Borrower has actual knowledge of such default (provided that, with respect to a default due to a failure to comply with Section 7.12 with respect to any new account, Borrower shall be deemed to have knowledge of the default as of the time such account is opened) or (b) with respect to a default under any of Sections 4.4, 6, 7.1, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.14, 7.15, 7.17, 7.18(a), 7.19, 7.20 (subject to the Performance Covenant Cure set forth in Section 7.20(b)(ii)), 7.21 and 7.22, the occurrence of such default; or

9.3 **Material Adverse Effect.** A circumstance has occurred that could reasonably be expected to have a Material Adverse Effect; provided that, solely for purposes of this Section 9.3, the failure to achieve Clinical Milestone, Approval Milestone I or Approval Milestone II shall not in and of itself constitute a Material Adverse Effect under this Section 9.3; or

9.4 Representations. Any representation or warranty made by any Loan Party in any Loan Document, when taken as a whole, shall have been false or misleading in any material respect when made or when deemed made; or

9.5 Insolvency. Any Loan Party (i) (A) shall make an assignment for the benefit of creditors; or (B) shall be unable to pay its debts as they become due; or (C) shall file a voluntary petition in bankruptcy; or (D) shall file any petition, answer, or document seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation pertinent to such circumstances; or (E) shall seek or consent to or acquiesce in the appointment of any trustee, receiver, or liquidator of any Loan Party or of all or any substantial part (i.e. 33-1/3% or more) of the assets or property of any Loan Party; or (F) shall cease operations of its business as its business has normally been conducted, or terminate substantially all of its employees; or (G) any Loan Party or its directors or a majority of the holders of its Equity Interests shall take any action initiating any of the foregoing actions described in clauses (A) through (E); or (ii) either (A) forty-five (45) days shall have expired after the commencement of an involuntary action against any Loan Party seeking reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, without such action being dismissed or all orders or proceedings thereunder affecting the operations or the business of any Loan Party being stayed; or (B) a stay of any such order or proceedings shall thereafter be set aside and the action setting it aside shall not be timely appealed; or (C) any Loan Party shall file any answer admitting or not contesting the material allegations of a petition filed against such Loan Party in any such proceedings; or (D) the court in which such proceedings are pending shall enter a decree or order granting the relief sought in any such proceedings; or (E) forty-five (45) days shall have expired after the appointment, without the consent or acquiescence of any Loan Party, of any trustee, receiver or liquidator of such Loan Party or of all or any part of the properties of such Loan Party without such appointment being vacated; or

9.6 Attachments; Judgments. Any portion of any Loan Party's assets in aggregate value of \$2,000,000 or more, is attached or seized, or a levy is filed against any such assets, or a judgment or judgments is/are entered for the payment of money (not covered by independent third party insurance as to which liability has not been rejected by such insurance carrier) individually or in the aggregate, of at least \$2,000,000, or any Loan Party is enjoined or in any way prevented by court order from conducting any part of its business; or

9.7 Other Obligations.

(a) The occurrence of any default under any agreement or obligation of any Loan Party involving any Indebtedness in excess of \$2,000,000; or

(b) Any early payment is required or unwinding or termination occurs with respect to any Warrant, Permitted Bond Hedge Transaction and Permitted Warrant Transaction, or any condition giving rise to the foregoing is met, in each case, with respect to which Borrower or its Affiliates is the "defaulting party" under the terms of such Warrant, Permitted Bond Hedge Transaction or Permitted Warrant Transaction.

SECTION 10 **REMEDIES**

10.1 General. Upon and during the continuance of any one or more Events of Default, Agent may, and at the direction of the Required Lenders shall, accelerate and demand payment of all or any part of the Secured Obligations together with a Prepayment Charge and declare them to be immediately due and payable (provided, that upon the occurrence of an Event of Default of the type described in Section 9.5, all of the Secured Obligations (including, without limitation, the Prepayment Charge and the End of Term Charge) shall automatically be accelerated and made due and payable, in each case without any further notice or act). Borrower hereby irrevocably appoints Agent as its lawful attorney-in-fact to: exercisable following the occurrence of an Event of Default, (i) sign Borrower's name on any invoice or bill of lading for any account or drafts against account debtors; (ii) demand, collect, sue, and give releases to any account debtor for monies due, settle and adjust disputes and claims about the accounts directly with account debtors, and compromise, prosecute, or defend any action, claim, case, or proceeding about any Collateral (including filing a claim or voting a claim in any bankruptcy case in Agent's or Borrower's name, as Agent may elect); (iii) make, settle, and adjust all claims under Borrower's insurance policies; (iv) pay, contest or settle any Lien, charge, encumbrance, security interest, or other claim in or to the Collateral, or any judgment based

thereon, or otherwise take any action to terminate or discharge the same; (v) transfer the Collateral into the name of Agent or a third party as the UCC permits; and (vi) receive, open and dispose of mail addressed to Borrower. Borrower hereby appoints Agent as its lawful attorney-in-fact to sign Borrower's name on any documents necessary to perfect or continue the perfection of Agent's security interest in the Collateral regardless of whether an Event of Default has occurred until all Secured Obligations have been satisfied in full and the Loan Documents (other than the Warrant) have been terminated. Agent's foregoing appointment as Borrower's attorney in fact, and all of Agent's rights and powers, coupled with an interest, are irrevocable until all Secured Obligations have been fully repaid and performed and the Loan Documents (other than the Warrant) have been terminated. Agent may, and at the direction of the Required Lenders shall, exercise all rights and remedies with respect to the Collateral under the Loan Documents or otherwise available to it under the UCC and other applicable law, including the right to release, hold, sell, lease, liquidate, collect, realize upon, or otherwise dispose of all or any part of the Collateral and the right to occupy, utilize, process and commingle the Collateral. All Agent's rights and remedies shall be cumulative and not exclusive.

10.2 Collection; Foreclosure. Upon the occurrence and during the continuance of any Event of Default, Agent may, and at the direction of the Required Lenders shall, at any time or from time to time, apply, collect, liquidate, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Agent may elect. Any such sale may be made either at public or private sale at its place of business or elsewhere. Borrower agrees that any such public or private sale may occur upon ten (10) calendar days' prior written notice to Borrower. Agent may require Borrower to assemble the Collateral and make it available to Agent at a place designated by Agent that is reasonably convenient to Agent and Borrower. The proceeds of any sale, disposition or other realization upon all or any part of the Collateral shall be applied by Agent in the following order of priorities:

First, to Agent and Lenders in an amount sufficient to pay in full Agent's and Lenders' reasonable costs and professionals' and advisors' fees and expenses as described in Section 11.11;

Second, to Lenders, ratably, in an amount equal to the then unpaid amount of the Secured Obligations (including principal, interest, subject to increase in accordance with Section 2.3), in such order and priority as Agent may choose in its sole discretion; and

Finally, after the full and final payment in Cash of all of the Secured Obligations (other than inchoate obligations), to any creditor holding a junior Lien on the Collateral, or to Borrower or its representatives or as a court of competent jurisdiction may direct.

Agent shall be deemed to have acted reasonably in the custody, preservation and disposition of any of the Collateral if it complies with the obligations of a secured party under the UCC.

10.3 No Waiver. Agent shall be under no obligation to marshal any of the Collateral for the benefit of Borrower or any other Person, and Borrower expressly waives all rights, if any, to require Agent to marshal any Collateral.

10.4 Waivers. Borrower waives demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Agent on which Borrower is liable.

10.5 Cumulative Remedies. The rights, powers and remedies of Agent hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of or election of remedies with respect to any other rights, powers and remedies of Agent.

SECTION 11 **MISCELLANEOUS**

11.1 Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

11.2 Notice. Except as otherwise provided herein, any notice, demand, request, consent, approval, declaration, service of process or other communication (including the delivery of Financial Statements) that is required, contemplated, or permitted under the Loan Documents or with respect to the subject matter hereof shall be in writing, and shall be deemed to have been validly served, given, delivered, and received upon the earlier of: (i) the day of transmission by electronic mail or hand delivery or delivery by an overnight express service or overnight mail delivery service; or (ii) the third calendar day after deposit in the United States of America mails, with proper first class postage prepaid, in each case addressed to the party to be notified as follows:

(a) If to Agent:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer and Michael Dutra
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

email: legal@htgc.com; mdutra@htgc.com
Telephone: 650-289-3060

(b) If to Lenders:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer and Michael Dutra
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

email: legal@htgc.com; mdutra@htgc.com
Telephone: 650-289-3060

(c) If to Borrower:

Phathom Pharmaceuticals, Inc.
Attention: General Counsel
100 Campus Drive, Suite 102
Florham Park, NJ 07932

email: legal@phathompharma.com
Telephone: 877- 742-8466

with a copy to

Latham & Watkins LLP
Attention: Cheston Larson
12670 High Bluff Drive
San Diego, CA 92130
Email: cheston.larson@lw.com
Telephone: 858-523-5435

or to such other address as each party may designate for itself by like notice.

11.3 Entire Agreement; Amendments.

(a) This Agreement and the other Loan Documents constitute the entire agreement and understanding of the parties hereto in respect of the subject matter hereof and thereof, and supersede and replace in their entirety any prior proposals, term sheets, non-disclosure or confidentiality agreements, letters, negotiations or other documents or agreements, whether written or oral, with respect to the subject matter hereof or thereof (including Agent's proposal letter dated August 18, 2021 and accepted by Borrower on August 18, 2021 and the Non-Disclosure Agreement).

(b) Neither this Agreement, any other Loan Document (other than the Warrant which is subject to the amendment provisions therein), nor any terms hereof or thereof may be amended, supplemented or modified except in accordance with the provisions of this [Section 11.3\(b\)](#). The Required Lenders and Loan Parties party to the relevant Loan Document may, or, with the written consent of the Required Lenders, Agent and Loan Parties party to the relevant Loan Document may, from time to time, (i) enter into written amendments, supplements or modifications hereto and to the other Loan Documents for the purpose of adding any provisions to this Agreement or the other Loan Documents or changing in any manner the rights of Lenders or of Loan Parties hereunder or thereunder or (ii) waive, on such terms and conditions as the Required Lenders or Agent, as the case may be, may specify in such instrument, any of the requirements of this Agreement or the other Loan Documents or any default or Event of Default and its consequences; provided, however, that no such waiver and no such amendment, supplement or modification shall (A) forgive the principal amount or extend the final scheduled date of maturity of any Loan, extend the scheduled date of any amortization payment in respect of any Term Loan Advance, reduce the stated rate of any interest or fee payable hereunder, or extend the scheduled date of any payment thereof, in each case without the written consent of each Lender directly affected thereby; (B) eliminate or reduce the voting rights of any Lender under this [Section 11.3\(b\)](#), without the written consent of such Lender; (C) reduce any percentage specified in the definition of Required Lenders, consent to the assignment or transfer by Loan Parties of any of its rights and obligations under this Agreement and the other Loan Documents, release all or substantially all of the Collateral or release a Loan Party from its obligations under the Loan Documents, in each case without the written consent of all Lenders; or (D) amend, modify or waive any provision of [Section 11.17](#) without the written consent of Agent. Any such waiver and any such amendment, supplement or modification shall apply equally to each Lender and shall be binding upon the applicable Loan Parties, Lenders, Agent and all future holders of the Loans. Notwithstanding the foregoing, the Warrant may be amended in accordance with its terms, and this [Section 11.3\(b\)](#) shall not apply to such amendments.

11.4 [No Strict Construction](#). The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

11.5 [No Waiver](#). The powers conferred upon Agent and Lenders by this Agreement are solely to protect their rights hereunder and under the other Loan Documents and their interest in the Collateral and shall not impose any duty upon Agent or Lenders to exercise any such powers. No omission or delay by Agent or Lenders at any time to enforce any right or remedy reserved to them, or to require performance of any of the terms, covenants or provisions hereof by Borrower at any time designated, shall be a waiver of any such right or remedy to which Agent or Lenders is entitled, nor shall it in any way affect the right of Agent or Lenders to enforce such provisions thereafter.

11.6 [Survival](#). All agreements, representations and warranties contained in this Agreement and the other Loan Documents or in any document delivered pursuant hereto or thereto shall be for the benefit of Agent, Lenders and Borrower, as applicable, and shall survive the execution and delivery of this Agreement. [Sections 6.3, 11.8, 11.9, 11.10, 11.14, 11.15 and 11.17](#), shall survive the termination of this Agreement.

11.7 [Successors and Assigns](#). The provisions of this Agreement and the other Loan Documents shall inure to the benefit of and be binding on Borrower and its permitted assigns (if any). No Loan Party shall assign its obligations under this Agreement or any of the other Loan Documents (other than the Warrant which may be assigned in accordance with its terms) without Agent's express prior written consent, and any such attempted assignment shall be void and of no effect. Agent and Lenders may assign, transfer, or endorse its rights hereunder and under the other Loan Documents without prior notice to Borrower (provided that any assignment, transfer or endorsement of the Warrant shall be subject to the terms thereof), and all of such rights shall inure to the benefit of Agent's and Lenders'

successors and assigns; provided that as long as no Event of Default has occurred and is continuing, neither Agent nor any Lenders may assign, transfer or endorse its rights hereunder or under the Loan Documents to any party that is a direct competitor of Borrower or a distressed debt or vulture fund (as reasonably determined by Agent), it being acknowledged that in all cases, any transfer to a controlled Affiliate of any Lenders or Agent shall be allowed. Notwithstanding the foregoing, (x) in connection with any assignment by a Lender as a result of a forced divestiture at the request of any regulatory agency, the restrictions set forth herein shall not apply and Agent and Lenders may assign, transfer or indorse its rights hereunder and under the other Loan Documents to any Person or party (provided that any assignment, transfer or endorsement of the Warrant shall be subject to the terms thereof) and (y) in connection with a Lender's own financing or securitization transactions, the restrictions set forth herein shall not apply and Agent and Lenders may assign, transfer or indorse its rights hereunder and under the other Loan Documents to any Person or party providing such financing or formed to undertake such securitization transaction and any transferee of such Person or party upon the occurrence of a default, event of default or similar occurrence with respect to such financing or securitization transaction (provided that any assignment, transfer or endorsement of the Warrant shall be subject to the terms thereof); provided that no such sale, transfer, pledge or assignment under this clause (y) shall release such Lender from any of its obligations hereunder or substitute any such Person or party for such Lender as a party hereto until Agent shall have received and accepted an effective assignment agreement from such Person or party in form satisfactory to Agent executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such assignee as Agent reasonably shall require. Agent, acting solely for this purpose as an agent of Borrower, shall maintain at one of its offices in the United States a register for the recordation of the names and addresses of Lender(s), Term Commitments of, and principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and Borrower, Agent and Lender shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

11.8 Participations. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrower, 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 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, 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, letter of credit 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, the Agent (in its capacity as Agent) shall have no responsibility for maintaining a Participant Register. Borrower agrees that each participant shall be entitled to the benefits of the provisions in Addendum 1 attached hereto (subject to the requirements and limitations therein, including the requirements under Section 7 of Addendum 1 attached hereto (it being understood that the documentation required under Section 7 of Addendum 1 attached hereto shall be delivered to the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to Section 11.7; provided that such participant shall not be entitled to receive any greater payment under Addendum 1 attached hereto, with respect to any participation, than its participating Lender would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a change in law that occurs after the participant acquired the applicable participation.

11.9 Governing Law. This Agreement and the other Loan Documents have been negotiated and delivered to Agent and Lenders in the State of California, and shall have been accepted by Agent and Lenders in the State of California. Payment to Agent and Lenders by Borrower of the Secured Obligations is due in the State of California. This Agreement and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

11.10 Consent to Jurisdiction and Venue. All judicial proceedings (to the extent that the reference requirement of Section 11.10 is not applicable) arising in or under or related to this Agreement or any of the other

Loan Documents may be brought in any state or federal court located in the State of California. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to nonexclusive personal jurisdiction in Santa Clara County, State of California; (b) waives any objection as to jurisdiction or venue in Santa Clara County, State of California; (c) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement or the other Loan Documents. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in [Section 11.2](#), and shall be deemed effective and received as set forth in [Section 11.2](#). Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

11.11 Mutual Waiver of Jury Trial / Judicial Reference.

(a) Because disputes arising in connection with complex financial transactions are most quickly and economically resolved by an experienced and expert Person and the parties wish applicable state and federal laws to apply (rather than arbitration rules), the parties desire that their disputes be resolved by a judge applying such applicable laws. EACH OF BORROWER AGENT AND LENDERS SPECIFICALLY WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY OF ANY CAUSE OF ACTION, CLAIM, CROSS-CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR ANY OTHER CLAIM (COLLECTIVELY, "**CLAIMS**") ASSERTED BY BORROWER AGAINST AGENT, LENDERS OR THEIR RESPECTIVE ASSIGNEE OR BY AGENT, LENDERS OR THEIR RESPECTIVE ASSIGNEE AGAINST BORROWER. This waiver extends to all such Claims, including Claims that involve Persons other than Agent, Borrower or any Lenders; Claims that arise out of or are in any way connected to the relationship among Borrower, Agent and Lenders; and any Claims for damages, breach of contract, tort, specific performance, or any equitable or legal relief of any kind, arising out of this Agreement, any other Loan Document.

(b) If the waiver of jury trial set forth in [Section 11.10\(a\)](#) is ineffective or unenforceable, the parties agree that all Claims shall be resolved by reference to a private judge sitting without a jury, pursuant to Code of Civil Procedure Section 638, before a mutually acceptable referee or, if the parties cannot agree, a referee selected by the Presiding Judge of the Santa Clara County, California. Such proceeding shall be conducted in Santa Clara County, California, with California rules of evidence and discovery applicable to such proceeding.

(c) In the event Claims are to be resolved by judicial reference, either party may seek from a court identified in [Section 11.9](#), any prejudgment order, writ or other relief and have such prejudgment order, writ or other relief enforced to the fullest extent permitted by law notwithstanding that all Claims are otherwise subject to resolution by judicial reference.

11.12 **Professional Fees.** Borrower promises to pay Agent's and Lenders' reasonable documented out-of-pocket fees and expenses necessary to finalize the loan documentation, including but not limited to reasonable attorneys' fees, UCC searches, filing costs, and other miscellaneous expenses, provided that the Due Diligence Fee shall be applied in its entirety to the Lenders' non-legal transaction costs and due diligence expenses. In addition, Borrower promises to pay any and all reasonable documented out-of-pocket attorneys' and other professionals' fees and expenses incurred by Agent and Lenders after the Closing Date in connection with or related to: (a) the Loan; (b) the administration, collection, or enforcement of the Loan; (c) the amendment or modification of the Loan Documents; (d) any waiver, consent, release, or termination under the Loan Documents; (e) the protection, preservation, audit, field exam, sale, lease, liquidation, or disposition of Collateral or the exercise of remedies with respect to the Collateral; (f) any legal, litigation, administrative, arbitration, or out of court proceeding in connection with or related to Borrower or the Collateral, and any appeal or review thereof; and (g) any bankruptcy, restructuring, reorganization, assignment for the benefit of creditors, workout, foreclosure, or other action related to Borrower, the Collateral, the Loan Documents, including representing Agent or Lenders in any adversary proceeding or contested matter commenced or continued by or on behalf of Borrower's estate, and any appeal or review thereof.

11.13 **Confidentiality.** Agent and Lenders acknowledge that certain items of Collateral and information provided to Agent and Lenders by Borrower are confidential and proprietary information of Borrower, if and to the

extent such information either (i) is marked as confidential by Borrower at the time of disclosure, or (ii) should reasonably be understood to be confidential (the "Confidential Information"). Accordingly, Agent and Lenders agree that any Confidential Information it may obtain in the course of acquiring, administering, or perfecting Agent's security interest in the Collateral shall not be disclosed to any other Person or entity in any manner whatsoever, in whole or in part, without the prior written consent of Borrower, except that Agent and Lenders may disclose any such information: (a) to its Affiliates and its partners, lenders, directors, officers, employees, agents, advisors, accountants, counsel, representative and other professional advisors if Agent or Lenders in their reasonable discretion determines that any such party should have access to such information in connection with such party's responsibilities in connection with the Loan or this Agreement and, provided that such recipient of such Confidential Information either (i) agrees to be bound by the confidentiality provisions of this paragraph or (ii) is otherwise subject to confidentiality restrictions that reasonably protect against the disclosure of Confidential Information pursuant to similar terms; (b) if such information is generally available to the public or to the extent such information becomes publicly available other than as a result of a breach of this Section or becomes available to Agent or any Lender, or any of their respective Affiliates on a non-confidential basis from a source other than Borrower and not in violation of any confidentiality obligations known to the Agent or such Lender; (c) if required or appropriate in any report, statement or testimony submitted to any governmental authority having or claiming to have jurisdiction over Agent or Lenders and any rating agency; (d) if required or appropriate in response to any summons or subpoena or in connection with any litigation, to the extent permitted or deemed advisable by Agent's or Lenders' counsel; (e) to comply with any legal requirement or law applicable to Agent or Lenders or demanded by any governmental authority; (f) to the extent reasonably necessary in connection with the exercise of, or preparing to exercise, or the enforcement of, or preparing to enforce, any right or remedy under any Loan Document, including Agent's sale, lease, or other disposition of Collateral after default, or any action or proceeding relating to any Loan Document; (g) to any participant or assignee of Agent or Lenders or any prospective participant or assignee; provided, that such participant or assignee or prospective participant or assignee is subject to confidentiality restrictions no less protective than the provisions of this Section 11.12; (h) otherwise to the extent consisting of general portfolio information that does not identify Borrower; (i) to any investor or potential investor (and each of their respective Affiliates or clients) in the Agent or Lender (or each of their respective Affiliates); provided that such investor, potential investor, Affiliate or client is subject to confidentiality obligations with respect to the Confidential Information; or (j) otherwise with the prior consent of Borrower; provided, that any disclosure made in violation of this Agreement shall not affect the obligations of Borrower or any of its Affiliates or any guarantor under this Agreement or the other Loan Documents. Agent's and Lenders' obligations under this Section 11.12 shall supersede all of their respective obligations under the Non-Disclosure Agreement.

11.14 Assignment of Rights. Borrower acknowledges and understands that Agent or Lenders may, subject to Section 11.7, sell and assign all or part of its interest hereunder and under the Loan Documents (other than the Warrant which is subject to any assignment, transfer or endorsement provisions therein) to any Person or entity (an "Assignee"). After such assignment the term "Agent" or "Lender" as used in the Loan Documents (other than the Warrant which is subject to any assignment, transfer or endorsement provisions therein) shall mean and include such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Agent and Lenders hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, Agent and Lenders shall retain all rights, powers and remedies hereby given. No such assignment by Agent or Lenders shall relieve Borrower of any of its obligations hereunder. Lenders agree that in the event of any transfer by it of any promissory notes, it shall endorse thereon a notation as to the portion of the principal of such promissory notes, which shall have been paid at the time of such transfer and as to the date to which interest shall have been last paid thereon.

11.15 Revival of Secured Obligations; Termination. Other than as set forth in Section 11.6, this Agreement and the other Loan Documents shall terminate on the payment in full in cash of the Secured Obligations (other than any obligations that specifically survive termination). Notwithstanding the preceding sentence, this Agreement and the Loan Documents shall remain in full force and effect and continue to be effective if any petition is filed by or against Borrower for liquidation or reorganization, if Borrower becomes insolvent or makes an assignment for the benefit of creditors, if a receiver or trustee is appointed for all or any significant part of Borrower's assets, or if any payment or transfer of Collateral is recovered from Agent or Lenders. The Loan Documents and the Secured Obligations and Collateral security shall continue to be effective, or shall be revived or reinstated, as the case may be, if at any time payment and performance of the Secured Obligations or any transfer of Collateral to Agent, or any part thereof is rescinded, avoided or avoidable, reduced in amount, or must otherwise be restored or returned by, or is recovered from, Agent, Lenders or by any obligee of the Secured Obligations (other than obligations that survive

termination), whether as a “voidable preference,” “fraudulent conveyance,” or otherwise, all as though such payment, performance, or transfer of Collateral had not been made. In the event that any payment, or any part thereof, is rescinded, reduced, avoided, avoidable, restored, returned, or recovered, the Loan Documents and the Secured Obligations shall be deemed, without any further action or documentation, to have been revived and reinstated except to the extent of the full and final payment to Agent or Lenders in cash.

11.16 Counterparts. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.

11.17 No Third Party Beneficiaries. No provisions of the Loan Documents are intended, nor will be interpreted, to provide or create any third-party beneficiary rights or any other rights of any kind in any Person other than Agent, Lenders and Borrower unless specifically provided otherwise herein, and, except as otherwise so provided, all provisions of the Loan Documents shall be personal and solely among Agent, Lenders and the Loan Parties which are a party thereto.

11.18 Agency. Agent and each Lender hereby agree to the terms and conditions set forth on Addendum 3 attached hereto. Borrower acknowledges and agrees to the terms and conditions set forth on Addendum 3 attached hereto.

11.19 Publicity. None of the parties hereto nor any of its respective member businesses and Affiliates shall, without the other parties’ prior written consent (which shall not be unreasonably withheld or delayed), publicize or use (a) the other party’s name (including a brief description of the relationship among the parties hereto), logo or hyperlink to such other parties’ web site, separately or together, in written and oral presentations, advertising, promotional and marketing materials, client lists, public relations materials or on its web site (together, the “Publicity Materials”); (b) the names of officers of such other parties in the Publicity Materials; and (c) such other parties’ name, trademarks, servicemarks in any news or press release concerning such party; provided however, notwithstanding anything to the contrary herein, no such consent shall be required (i) to the extent necessary to comply with the requests of any regulators, legal requirements or laws applicable to such party, pursuant to any listing agreement with any national securities exchange (so long as such party provides prior notice to the other party hereto to the extent reasonably practicable) and (ii) to comply with Section 11.13.

11.20 Multiple Borrowers. If another party is joined as a Borrower hereunder after the Closing Date, each Borrower hereby agrees to the terms and conditions set forth on Addendum 4 attached hereto.

11.21 Electronic Execution of Certain Other Documents. The words “execution,” “execute,” “signed,” “signature,” and words of like import in or related to any document to be signed in connection with this Agreement and the transactions contemplated hereby (including without limitation assignments, assumptions, amendments, waivers and consents) shall be deemed to include electronic signatures, the electronic matching of assignment terms and contract formations on electronic platforms approved by the Agent, or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the California Uniform Electronic Transaction Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

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IN WITNESS WHEREOF, Borrower, Agent and Lenders have duly executed and delivered this Loan and Security Agreement as of the date set forth above.

BORROWER:

PHATHOM PHARMACEUTICALS, INC.

Signature: _____

Print
Name: _____

Title: _____

Accepted in Palo Alto, California:

AGENT:

HERCULES CAPITAL, INC.

Signature: _____

Print Name: _____

Title: _____

[SIGNATURE PAGE TO LOAN AND SECURITY AGREEMENT]

LENDERS:

HERCULES CAPITAL, INC.

Signature: _____

Print Name: Seth Meyer

Title: CFO

HERCULES CAPITAL IV, L.P.

By: Hercules Technology SBIC Management, LLC, its General Partner

By: Hercules Capital, Inc., its Manager

Signature: _____

Print Name: Seth Meyer

Title: CFO

HERCULES PRIVATE GLOBAL VENTURE GROWTH FUND I L.P.

By: Hercules Private Global Venture Growth Fund GP I LLC, its general partner

By: Hercules Adviser LLC, its sole member

Signature: _____

Print Name: Seth Meyer

Title: CFO

[SIGNATURE PAGE TO LOAN AND SECURITY AGREEMENT]

Table of Addenda, Exhibits and Schedules

Addendum 1:	Taxes; Increased Costs
Addendum 2:	SBA Provisions
Addendum 3:	Agent and Lender Terms
Addendum 4:	Multiple Borrower Terms
Exhibit A:	Advance Request Attachment to Advance Request
Exhibit B:	Name, Locations, and Other Information
Exhibit C:	Patents, Trademarks, Copyrights and Licenses
Exhibit D:	Deposit Accounts and Investment Accounts
Exhibit E:	Compliance Certificate
Exhibit F:	Joinder Agreement
Exhibit G:	ACH Debit Authorization Agreement
Exhibit H--1:	Form of U.S. Tax Compliance Certificate (For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)
Exhibit H--2:	Form of U.S. Tax Compliance Certificate (For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)
Exhibit H--3:	Form of U.S. Tax Compliance Certificate (For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)
Exhibit H--4:	Form of U.S. Tax Compliance Certificate (For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)
Schedule 1.1(a)	Commitments
Schedule 1A	Existing Indebtedness
Schedule 1B	Existing Investments
Schedule 1C	Existing Liens
Schedule 5.8	Tax Matters
Schedule 5.9	Intellectual Property Claims
Schedule 5.10(a)	Current Company IP
Schedule 5.10(d)	Matters Relating to current Material Agreements
Schedule 5.10(f)	Enforceability, Entitlement and Exploitation of Current Company IP
Schedule 5.10(i)	Claims of Infringement on Third Party IP By Current Company IP
Schedule 5.10(k)	Obligations Relating to Company IP
Schedule 5.10(l)	Third Party Infringements of Company IP
Schedule 5.10(o)	Intellectual Property
Schedule 5.11	Borrower Products
Schedule 5.14	Subsidiaries

THIS WARRANT AND THE SHARES ISSUABLE UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY STATE SECURITIES LAWS, AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR, SUBJECT TO SECTION 11 HEREOF, AN OPINION OF COUNSEL (WHICH MAY BE COMPANY COUNSEL) REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE ACT, OR ANY APPLICABLE STATE SECURITIES LAWS.

WARRANT AGREEMENT

To Purchase Shares of the Common Stock of

PHATHOM PHARMACEUTICALS, INC.

Dated as of September 17, 2021 (the "Effective Date")

WHEREAS, Phathom Pharmaceuticals, Inc., a Delaware corporation (the "Company"), has entered into a Loan and Security Agreement of even date herewith (as amended and in effect from time to time, the "Loan Agreement") with Hercules Capital, Inc., a Maryland corporation, in its capacity as administrative and collateral agent (the "Warrantholder"), and the lender parties thereto;

WHEREAS, pursuant to the Loan Agreement and as additional consideration to the Warrantholder for, among other things, its agreements in the Loan Agreement, the Company has agreed to issue to the Warrantholder this Warrant Agreement, evidencing the right to purchase shares of the Company's Common Stock (this "Warrant", "Warrant Agreement", or this "Agreement", and together with any additional Warrants issued upon any permitted transfer of this Warrant hereunder, collectively, the "Warrants");

NOW, THEREFORE, in consideration of the Warrantholder having executed and delivered the Loan Agreement and provided the financial accommodations contemplated therein, and in consideration of the mutual covenants and agreements contained herein, the Company and the Warrantholder agree as follows:

SECTION 1. GRANT OF THE RIGHT TO PURCHASE COMMON STOCK.

(a) For value received, the Company hereby grants to the Warrantholder, and the Warrantholder is entitled, upon the terms and subject to the conditions hereinafter set forth, to subscribe for and purchase, from the Company, up to the number of fully paid and non-assessable shares of Common Stock (as defined below) as determined pursuant to Section 1(b) below, at a purchase price per share equal to the Exercise Price (as defined below). The number and Exercise Price of such shares are subject to adjustment as provided in Section 8. As used herein, the following terms shall have the following meanings:

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

"Charter" means the Company's Certificate of Incorporation or other constitutional document, as may be amended and in effect from time to time.

"Common Stock" means the Company's common stock, \$0.0001 par value per share, as presently constituted under the Charter, and any class and/or series of Company capital stock for

or into which such common stock may be converted or exchanged in a reorganization, recapitalization or similar transaction.

“Exercise Price” means \$33.43, subject to adjustment from time to time in accordance with the provisions of this Warrant.

“Liquid Sale” means the closing of a Merger Event in which the consideration received by the Company and/or its shareholders, as applicable, consists solely of cash and/or Marketable Securities.

“Marketable Securities” in connection with a Merger Event means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by the Warrantholder in connection with the Merger Event were the Warrantholder to exercise this Warrant on or prior to the closing thereof is then traded on a national securities exchange or over-the-counter market, and (iii) following the closing of such Merger Event, the Warrantholder would not be restricted from publicly re-selling all of the issuer’s shares and/or other securities that would be received by the Warrantholder in such Merger Event were the Warrantholder to exercise this Warrant in full on or prior to the closing of such Merger Event, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Merger Event.

“Merger Event” means any of the following: (i) a sale, lease or other transfer of all or substantially all assets of the Company, (ii) any merger or consolidation involving the Company in which the Company is not the surviving entity or in which the outstanding shares of the Company’s capital stock are otherwise converted into or exchanged for shares of capital stock or other securities or property of another entity (other than a merger or consolidation effected exclusively to change the Company’s domicile), or (iii) any sale by holders of the outstanding voting equity securities of the Company in a single transaction or series of related transactions of shares constituting a majority of the outstanding combined voting power of the Company.

“Purchase Price” means, with respect to any exercise of this Warrant, an amount equal to the then-effective Exercise Price multiplied by the number of shares of Common Stock as to which this Warrant is then exercised.

“Warrant Coverage” means 2.50% times the aggregate principal amount of Term Loan Advances (as defined in the Loan Agreement) made and funded by the Warrantholder under the Loan Agreement from time to time (but exclusive of any paid-in-kind interest that is capitalized as principal).

(b) Number of Shares. This Warrant shall be exercisable for a number of shares of Common Stock equal to the quotient derived by dividing (i) the Warrant Coverage by (ii) the Exercise Price, subject to adjustment from time to time in accordance with the provisions of this Warrant.

SECTION 2. TERM OF THE AGREEMENT.

The term of this Agreement and the right to purchase Common Stock as granted herein shall commence on the Effective Date and, subject to Section 8(a) below, shall be exercisable for a period ending upon the seventh (7th) anniversary of the Effective Date.

SECTION 3. EXERCISE OF THE PURCHASE RIGHTS.

- (a) **Exercise.** The purchase rights set forth in this Agreement are exercisable by the Warrantholder, in whole or in part, at any time, or from time to time, prior to the expiration of the term set forth in Section 2, by tendering to the Company at its principal office a notice of exercise in the form attached hereto as Exhibit I (the "Notice of Exercise"), duly completed and executed. Promptly upon receipt of the Notice of Exercise and the payment of the Purchase Price in accordance with the terms set forth below, and in no event later than three (3) business days thereafter, the Company or its transfer agent shall either (i) issue to the Warrantholder a certificate for the number of shares of Common Stock purchased or (ii) credit the same via book entry to the Warrantholder, and the Company shall execute the acknowledgment of exercise in the form attached hereto as Exhibit II (the "Acknowledgment of Exercise") indicating the number of shares which remain subject to future purchases under this Warrant, if any.

The Purchase Price may be paid at the Warrantholder's election either (i) by cash or check, or (ii) by surrender of all or a portion of the Warrant for shares of Common Stock to be exercised under this Agreement and, if applicable, an amended Agreement setting forth the remaining number of shares purchasable hereunder, as determined below ("Net Issuance"). If the Warrantholder elects the Net Issuance method, the Company will issue shares of Common Stock in accordance with the following formula:

$$A \quad X = \frac{Y(A-B)}{A}$$

Where: X = the number of shares of Common Stock to be issued to the Warrantholder.
Y = the number of shares of Common Stock requested to be exercised under this Agreement.

A = the then-current fair market value of one (1) share of Common Stock at the time of exercise of this Warrant.

B = the then-effective Exercise Price.

For purposes of the above calculation, the current fair market value of shares of Common Stock shall mean with respect to each share of Common Stock:

(i) at all times when the Common Stock is traded on a national securities exchange, inter-dealer quotation system or over-the-counter bulletin board service, the average of the closing prices over a five (5) day period ending three (3) days before the day the current fair market value of the securities is being determined;

(ii) if the exercise is in connection with a Merger Event, the fair market value of a share of Common Stock shall be deemed to be the per share value received by the holders of the outstanding shares of Common Stock pursuant to such Merger Event as determined in accordance with the definitive transaction documents executed among the parties in connection therewith; or

(iii) in cases other than as described in the foregoing clauses (i) and (ii), the current fair market value of a share of Common Stock shall be determined in good faith by the Company's Board of Directors.

Upon partial exercise by either cash or Net Issuance, prior to the expiration or earlier termination hereof, the Company shall promptly issue an amended Agreement representing the remaining

number of shares purchasable hereunder. All other terms and conditions of such amended Agreement shall be identical to those contained herein, including, but not limited to the Effective Date hereof.

- (b) **Exercise Prior to Expiration.** To the extent this Warrant is not previously exercised as to all shares of Common Stock subject hereto, and if the then-current fair market value of one share of Common Stock is greater than the Exercise Price then in effect, or, in the case of a Liquid Sale, where the value per share of Common Stock (as determined as of the closing of such Liquid Sale in accordance with the definitive agreements executed by the parties in connection with such Merger Event) to be paid to the holders thereof is greater than the Exercise Price then in effect, this Agreement shall be deemed automatically exercised on a Net Issuance basis pursuant to Section 3(a) (even if not surrendered) as of immediately before its expiration determined in accordance with Section 2. For purposes of such automatic exercise, the fair market value of one share of Common Stock upon such expiration shall be determined pursuant to Section 3(a). To the extent this Warrant or any portion hereof is deemed automatically exercised pursuant to this Section 3(b), the Company agrees to promptly notify the Warrantholder of the number of shares of Common Stock if any, the Warrantholder is to receive by reason of such automatic exercise, and to issue or cause its transfer agent to issue a certificate or a book-entry credit to the Warrantholder evidencing such shares.

SECTION 4.RESERVATION OF SHARES.

During the term of this Agreement, the Company will at all times have authorized and reserved a sufficient number of shares of its Common Stock to provide for the exercise of the rights to purchase Common Stock as provided for herein. If at any time during the term hereof the number of authorized but unissued shares of Common Stock shall not be sufficient to permit exercise of this Warrant in full, the Company will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes.

SECTION 5.NO FRACTIONAL SHARES OR SCRIP.

No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Agreement, but in lieu of such fractional shares the Company shall make a cash payment therefor in an amount equal to the product of (a) the Exercise Price then in effect multiplied by (b) the fraction of a share.

SECTION 6.NO RIGHTS AS SHAREHOLDER.

Without limitation of any provision hereof, the Warrantholder agrees that this Agreement does not entitle the Warrantholder to any voting rights or other rights as a shareholder of the Company prior to the exercise of any of the purchase rights set forth in this Agreement.

SECTION 7.WARRANTHOLDER REGISTRY.

The Company shall maintain a registry showing the name and address of the registered holder of this Agreement. The Warrantholder's initial address, for purposes of such registry, is set forth in Section 12(g) below. The Warrantholder may change such address by giving written notice of such changed address to the Company.

SECTION 8.ADJUSTMENT RIGHTS.

The Exercise Price and the number of shares of Common Stock purchasable hereunder are subject to adjustment from time to time, as follows:

(a) Merger Event. In connection with a Merger Event that is a Liquid Sale, this Warrant shall, on and after the closing thereof, automatically and without further action on the part of any party or other person, represent the right to receive the consideration payable on or in respect of all shares of Common Stock that are issuable hereunder as of immediately prior to the closing of such Merger Event less the Purchase Price for all such shares of Common Stock (such consideration to include both the consideration payable at the closing of such Merger Event and all deferred consideration payable thereafter, if any, including, but not limited to, payments of amounts deposited at such closing into escrow and payments in the nature of earn-outs, milestone payments or other performance-based payments), and such Merger Event consideration shall be paid to the Warrantholder as and when it is paid to the holders of the outstanding shares of Common Stock. In connection with a Merger Event that is not a Liquid Sale, the Company shall cause the successor or surviving entity to assume this Warrant and the obligations of the Company hereunder on the closing thereof, and thereafter this Warrant shall be exercisable for the same number and type of securities or other property as the Warrantholder would have received in consideration for the shares of Common Stock issuable hereunder had it exercised this Warrant in full as of immediately prior to such closing, at an aggregate Exercise Price no greater than the aggregate Exercise Price in effect as of immediately prior to such closing, and subject to further adjustment from time to time in accordance with the provisions of this Warrant. The provisions of this Section 8(a) shall similarly apply to successive Merger Events.

(b) Reclassification of Shares. Except for Merger Events subject to Section 8(a), if the Company at any time shall, by combination, reclassification, exchange or subdivision of securities or otherwise, change any of the securities as to which purchase rights under this Agreement exist into the same or a different number of securities of any other class or classes of securities, this Agreement shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities which were subject to the purchase rights under this Agreement immediately prior to such combination, reclassification, exchange, subdivision or other change. The provisions of this Section 8(b) shall similarly apply to successive combination, reclassification, exchange, subdivision or other change.

(c) Subdivision or Combination of Shares. If the Company at any time shall combine or subdivide its Common Stock, (i) in the case of a subdivision, the Exercise Price shall be proportionately decreased and the number of shares for which this Warrant is exercisable shall be proportionately increased, or (ii) in the case of a combination, the Exercise Price shall be proportionately increased and the number of shares for which this Warrant is exercisable shall be proportionately decreased.

(d) Dividends. If the Company at any time while this Agreement is outstanding and unexpired shall:

(i) pay a dividend with respect to the Common Stock payable in additional shares of Common Stock, then the Exercise Price shall be adjusted, from and after the date of determination of shareholders entitled to receive such dividend, to that price determined by multiplying the Exercise Price in effect immediately prior to such date of determination by a fraction (A) the numerator of which shall be the total number of shares of Common Stock outstanding immediately prior to such dividend or distribution, and (B) the denominator of which shall be the total number of shares of Common Stock outstanding immediately after such dividend or distribution, and the number of shares of Common Stock for which this Warrant is exercisable shall be proportionately increased; or

(ii) make any other dividend or distribution on or with respect to Common Stock, except any dividend or distribution (A) in cash, or (B) specifically provided for in any other clause of this Section 8, then, in each such case, provision shall be made by the Company such that the

Warrantholder shall receive upon exercise or conversion of this Warrant a proportionate share of any such dividend or distribution as though it were the holder of the Common Stock (or other stock for which the Common Stock is convertible) as of the record date fixed for the determination of the shareholders of the Company entitled to receive such dividend or distribution.

(e) Notice of Certain Events. If: (i) the Company shall declare any dividend or distribution upon its outstanding Common Stock, payable in stock, cash, property or other securities (provided that, and to the extent applicable under the Loan Agreement, the Warrantholder in its capacity as lender under the Loan Agreement consents to such dividend); (ii) the Company shall offer for subscription pro rata to the holders of its Common Stock any additional shares of stock of any class or other rights; (iii) there shall be any Merger Event; or (iv) there shall be any voluntary dissolution, liquidation or winding up of the Company; then, in connection with each such event, the Company shall give the Warrantholder notice thereof at the same time and in the same manner as it gives notice thereof to the holders of outstanding Common Stock. In addition, if at any time the number of shares of Common Stock (or other securities of any other class or classes of securities of the Company for which this Warrant is then exercisable) outstanding is reduced such that the number of shares of Common Stock or other securities issuable upon exercise of this Warrant shall exceed five percent (5%) of the then outstanding class of such securities, then, within three (3) business days of such event, the Company shall give the Warrantholder written notice thereof.

SECTION 9. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

(a) Reservation of Common Stock. The Company covenants and agrees that all shares of Common Stock that may be issued upon the exercise of the rights represented by this Warrant will, upon issuance, be validly issued and outstanding, fully paid and non-assessable, and will be free of any taxes, liens, charges or encumbrances of any nature whatsoever; provided, that the Common Stock issuable pursuant to this Agreement may be subject to restrictions on transfer under state and/or federal securities laws. The Company has made available to the Warrantholder true, correct and complete copies of its Charter and bylaws currently in effect. The issuance of certificates or book-entry credit for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Warrantholder for any issuance tax in respect thereof, or other cost incurred by the Company in connection with such exercise and related issuance of shares of Common Stock. The Company further covenants and agrees that the Company will, at all times during the term hereof, have authorized and reserved, free from preemptive rights, a sufficient number of shares of Common Stock to provide for the exercise of the rights represented by this Warrant.

(b) Due Authority. The execution and delivery by the Company of this Agreement and the performance of all obligations of the Company hereunder, including the issuance to the Warrantholder of the right to acquire the shares of Common Stock, have been duly authorized by all necessary corporate action on the part of the Company. This Agreement: (i) does not violate the Charter or the Company's current bylaws; (ii) does not contravene any law or governmental rule, regulation or order applicable to the Company; and (iii) except as could not reasonably be expected to have a Material Adverse Effect (as defined in the Loan Agreement), does not and will not contravene any provision of, or constitute a default under, any indenture, mortgage, contract or other instrument to which the Company is a party or by which it is bound. This Agreement constitutes a legal, valid and binding agreement of the Company, enforceable in accordance with its terms, except as may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting creditors' rights generally (including, without limitation, fraudulent conveyance laws) and by general principles of equity, regardless of whether considered in a proceeding in equity or at law.

(c) **Consents and Approvals.** No consent or approval of, giving of notice to, registration with, or taking of any other action in respect of any state, federal or other governmental authority or agency is required with respect to the execution, delivery and performance by the Company of its obligations under this Agreement, except for the filing of notices pursuant to Regulation D under the Act and any filing required by applicable state securities law, which filings will be effective by the time required thereby.

(d) **Exempt Transaction.** Subject to the accuracy of the Warrantholder's representations in Section 10, the issuance of the Common Stock upon exercise of this Agreement will constitute a transaction exempt from (i) the registration requirements of Section 5 of the Act, in reliance upon Section 4(a)(2) thereof, and (ii) the qualification requirements of the applicable state securities laws.

(e) **Information Rights.** At all times (if any) after the Loan Agreement has been terminated and prior to the earlier to occur of (i) the date on which all shares of Common Stock issued on exercise of this Warrant have been sold, or (ii) the expiration or earlier termination of this Warrant, when the Company shall not be required to file reports pursuant to Section 13 or 15(d) of the Exchange Act or shall not have timely filed all such required reports, the Warrantholder shall be entitled to the information rights contained in Section 7.1(c) of the Loan Agreement, and in any such event (i) Section 7.1(c) of the Loan Agreement is hereby incorporated into this Agreement by this reference as though fully set forth herein and (ii) any such information shall be subject to the confidentiality obligations of Section 11.13 of the Loan Agreement, which is hereby incorporated into this Agreement by this reference as though fully set forth herein and such confidentiality obligations shall survive for three years from the expiration of this Warrant.

(f) **Rule 144 Compliance.** The Company shall, at all times prior to the earlier to occur of (i) the date of sale or other disposition by the Warrantholder of this Warrant or all shares of Common Stock issued on exercise of this Warrant, or (ii) the expiration or earlier termination of this Warrant if the Warrant has not been exercised in full or in part on such date, use commercially reasonable efforts to timely file all reports required under the Exchange Act and otherwise timely take all actions reasonably necessary to permit the Warrantholder to sell or otherwise dispose of this Warrant and the shares of Common Stock issued on exercise hereof pursuant to Rule 144 promulgated under the Act ("**Rule 144**"), provided that the foregoing shall not apply in the event of a Merger Event following which the successor or surviving entity is not subject to the reporting requirements of the Exchange Act. If the Warrantholder proposes to sell Common Stock issuable upon the exercise of this Agreement in compliance with Rule 144, then, upon the Warrantholder's written request to the Company, the Company shall furnish to the Warrantholder, within five (5) business days after receipt of such request, a written statement confirming the Company's compliance with the filing and other requirements of such Rule 144.

SECTION 10. REPRESENTATIONS AND COVENANTS OF THE WARRANTHOLDER.

This Agreement has been entered into by the Company in reliance upon the following representations and covenants of the Warrantholder:

(a) **Investment Purpose.** This Warrant and the shares issued on exercise hereof will be acquired for investment and not with a view to the sale or distribution of any part thereof in violation of applicable federal and state securities laws, and the Warrantholder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) **Private Issue.** The Warrantholder understands that (i) the Common Stock issuable upon exercise of this Agreement is not, as of the Effective Date, registered under the Act or qualified under applicable state securities laws, and (ii) the Company's reliance on exemption from such registration is predicated on the representations set forth in this Section 10.

(c) Financial Risk. The Warrantholder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment, and has the ability to bear the economic risks of its investment.

(d) Accredited Investor. The Warrantholder is an “accredited investor” within the meaning of Rule 501 of Regulation D promulgated under the Act, as presently in effect (“Regulation D”).

(e) No Short Sales. The Warrantholder has not at any time on or prior to the Effective Date engaged in any short sales or equivalent transactions in the Common Stock. Warrantholder agrees that at all times from and after the Effective Date and on or before the expiration or earlier termination of this Warrant, it shall not engage in any short sales or equivalent transactions in the Common Stock.

SECTION 11. TRANSFERS.

Subject to compliance with applicable federal and state securities laws, this Agreement and all rights hereunder are transferable, in whole or in part, without charge to the holder hereof (except for transfer taxes) upon surrender of this Agreement properly endorsed. Each taker and holder of this Agreement, by taking or holding the same, consents and agrees that this Agreement, when endorsed in blank, shall be deemed negotiable, and that the holder hereof, when this Agreement shall have been so endorsed and its transfer recorded on the Company’s books, shall be treated by the Company and all other persons dealing with this Agreement as the absolute owner hereof for any purpose and as the person entitled to exercise the rights represented by this Agreement. The transfer of this Agreement shall be recorded on the books of the Company upon receipt by the Company of a notice of transfer in the form attached hereto as Exhibit III (the “Transfer Notice”), at its principal offices and the payment to the Company of all transfer taxes and other governmental charges imposed on such transfer. Until the Company receives such Transfer Notice, the Company may treat the registered owner hereof as the owner for all purposes. Notwithstanding anything herein or in any legend to the contrary, the Company shall not require an opinion of counsel in connection with any sale, assignment or other transfer by the Warrantholder of this Warrant (or any portion hereof or any interest herein) or of any shares of Common Stock issued upon any exercise hereof to an affiliate (as defined in Regulation D) of the Warrantholder, provided that such affiliate confirms in writing to the Company that such affiliate is an “accredited investor” as defined in Regulation D.

SECTION 12. MISCELLANEOUS.

(a) Effective Date. The provisions of this Agreement shall be construed and shall be given effect in all respects as if it had been executed and delivered by the Company on the date hereof. This Agreement shall be binding upon any successors or assigns of the Company.

(b) Remedies. In the event of any default hereunder, the non-defaulting party may proceed to protect and enforce its rights either by suit in equity and/or by action at law, including but not limited to an action for damages as a result of any such default, and/or an action for specific performance for any default where the Warrantholder will not have an adequate remedy at law and where damages will not be readily ascertainable.

(c) No Impairment of Rights. The Company will not, by amendment of its Charter or through any other means, avoid or seek to avoid the observance or performance of any of the terms of this Agreement, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate in order to protect the rights of the Warrantholder against impairment.

(d) Additional Documents. The Company agrees to supply such other documents as the Warrantholder may from time to time reasonably request.

(e) **Attorneys' Fees.** In any litigation, arbitration or court proceeding between the Company and the Warrantholder relating hereto, the prevailing party shall be entitled to reasonable attorneys' fees and expenses and all out-of-pocket costs of proceedings incurred in enforcing this Agreement. For the purposes of this Section 12(e), attorneys' fees shall include without limitation fees incurred in connection with the following: (i) contempt proceedings; (ii) discovery; (iii) any motion, proceeding or other activity of any kind in connection with an insolvency proceeding; (iv) garnishment, levy, and debtor and third party examinations; and (v) post-judgment motions and proceedings of any kind, including without limitation any activity taken to collect or enforce any judgment.

(f) **Severability.** In the event any one or more of the provisions of this Agreement shall for any reason be held invalid, illegal or unenforceable, the remaining provisions of this Agreement shall be unimpaired, and the invalid, illegal or unenforceable provision shall be replaced by a mutually acceptable valid, legal and enforceable provision, which comes closest to the intention of the parties underlying the invalid, illegal or unenforceable provision.

(g) **Notices.** Except as otherwise provided herein, any notice, demand, request, consent, approval, declaration, service of process or other communication that is required, contemplated, or permitted under this Agreement or with respect to the subject matter hereof shall be in writing, and shall be deemed to have been validly served, given, delivered, and received upon the earlier of: (i) personal delivery to the party to be notified, (ii) when sent by confirmed telex, electronic transmission or facsimile if sent during normal business hours of the recipient, if not, then on the next business day, (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (iv) one day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt, and shall be addressed to the party to be notified as follows:

If to the Warrantholder:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer and Michael Dutra
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301
Facsimile: 650-473-9194
Telephone: 650-289-3060

With a copy to (which shall not constitute notice):

DLA PIPER LLP (US)
401 B Street, Suite 1700
San Diego, California 92101-4297
Attn: Matt Schwartz, Esq.
Facsimile: 858-638-5134
Telephone: 858-638-6834

If to the Company:

PHATHOM PHARMACEUTICALS, INC.
Attention: General Counsel
100 Campus Drive, Suite 102
Florham Park, NJ 07932
Email: legal@phathompharma.com
Telephone: 877- 742-8466

With a copy to (which shall not constitute notice):

or to such other address as each party may designate for itself by like notice.

(h) Entire Agreement; Amendments. This Agreement constitutes the entire agreement and understanding of the parties hereto in respect of the subject matter hereof, and supersedes and replaces in their entirety any prior proposals, term sheets, letters, negotiations or other documents or agreements, whether written or oral, with respect to the subject matter hereof. None of the terms of this Agreement may be amended or waived except by an instrument executed by the Company and holders of Warrants exercisable for a majority of the total number of shares of Common Stock then issuable pursuant to all Warrants then outstanding. Any such amendment or waiver effected in accordance with this Section 12(h) or otherwise effected pursuant to the terms of this Warrant shall be binding upon each holder of Warrants.

(i) Headings. The various headings in this Agreement are inserted for convenience only and shall not affect the meaning or interpretation of this Agreement or any provisions hereof.

(j) Advice of Counsel. Each of the parties represents to each other party hereto that it has discussed (or had an opportunity to discuss) with its counsel this Agreement and, specifically, the provisions of Sections 12(n), 12(o), 12(p), 12(q) and 12(r).

(k) No Strict Construction. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

(l) No Waiver. No omission or delay by the Warrantholder at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by the Company at any time designated, shall be a waiver of any such right or remedy to which the Warrantholder is entitled, nor shall it in any way affect the right of the Warrantholder to enforce such provisions thereafter during the term of this Agreement.

(m) Survival. All agreements, representations and warranties contained in this Agreement or in any document delivered pursuant hereto shall be for the benefit of the Warrantholder and shall survive the execution and delivery of this Agreement and the expiration or other termination of this Agreement.

(n) Governing Law. This Agreement has been negotiated and delivered to the Warrantholder in the State of California, and shall be deemed to have been accepted by the Warrantholder in the State of California. Delivery of Common Stock to the Warrantholder by the Company under this Agreement is due in the State of California. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

(o) Consent to Jurisdiction and Venue. All judicial proceedings arising in or under or related to this Agreement may be brought in any state or federal court of competent jurisdiction located in the State of California. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (i) consents to personal jurisdiction in Santa Clara County, State of California; (ii) waives any objection as to jurisdiction or venue in Santa Clara County, State of California; (iii) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (iv) irrevocably

agrees to be bound by any judgment rendered thereby in connection with this Agreement. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 12(g), and shall be deemed effective and received as set forth in Section 12(g). Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

(p) Mutual Waiver of Jury Trial. Because disputes arising in connection with complex financial transactions are most quickly and economically resolved by an experienced and expert person and the parties wish applicable state and federal laws to apply (rather than arbitration rules), the parties desire that their disputes arising under or in connection with this Warrant be resolved by a judge applying such applicable laws. EACH OF THE COMPANY AND THE WARRANTHOLDER SPECIFICALLY WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY OF ANY CAUSE OF ACTION, CLAIM, CROSS-CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR ANY OTHER CLAIM (COLLECTIVELY, "CLAIMS") ASSERTED BY THE COMPANY AGAINST THE WARRANTHOLDER OR ITS ASSIGNEE OR BY THE WARRANTHOLDER OR ITS ASSIGNEE AGAINST THE COMPANY RELATING TO THIS WARRANT. This waiver extends to all such Claims, including Claims that involve persons or entities other than the Company and the Warrantholder; Claims that arise out of or are in any way connected to the relationship between the Company and the Warrantholder; and any Claims for damages, breach of contract, specific performance, or any equitable or legal relief of any kind, arising out of this Agreement.

(q) Arbitration. If the Mutual Waiver of Jury Trial set forth in Section 12(p) is ineffective or unenforceable, the parties agree that all Claims shall be submitted to binding arbitration in accordance with the commercial arbitration rules of JAMS (the "Rules"), such arbitration to occur before one arbitrator, which arbitrator shall be a retired California state judge or a retired Federal court judge. Such proceeding shall be conducted in Santa Clara County, State of California, with California rules of evidence and discovery applicable to such arbitration. The decision of the arbitrator shall be binding on the parties, and shall be final and nonappealable to the maximum extent permitted by law. Any judgment rendered by the arbitrator may be entered in a court of competent jurisdiction and enforced by the prevailing party as a final judgment of such court.

(r) Pre-arbitration Relief. In the event Claims are to be resolved by arbitration, either party may seek from a court of competent jurisdiction identified in Section 12(o), any prejudgment order, writ or other relief and have such prejudgment order, writ or other relief enforced to the fullest extent permitted by law notwithstanding that all Claims are otherwise subject to resolution by binding arbitration.

(s) Counterparts. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts (including by facsimile or electronic delivery (PDF), and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.

(t) Specific Performance. The parties hereto hereby declare that it is impossible to measure in money the damages which will accrue to the Warrantholder by reason of the Company's failure to perform any of the obligations under this Agreement and agree that the terms of this Agreement shall be specifically enforceable by the Warrantholder. If the Warrantholder institutes any action or proceeding to specifically enforce the provisions hereof, any person against whom such action or proceeding is brought hereby waives the claim or defense therein that the Warrantholder has an adequate remedy at law, and such person shall not offer in any such action or proceeding the claim or defense that such remedy at law exists.

(u) Lost, Stolen, Mutilated or Destroyed Warrant. If this Warrant is lost, stolen, mutilated or destroyed, the Company may, on such terms as to indemnity or otherwise as it may reasonably impose (which shall, in the case of a mutilated Warrant, include the surrender thereof), issue a new Warrant of

like denomination and tenor as this Warrant so lost, stolen, mutilated or destroyed. Any such new Warrant shall constitute an original contractual obligation of the Company, whether or not the allegedly lost, stolen, mutilated or destroyed Warrant shall be at any time enforceable by anyone.

(v) Legends. To the extent required by applicable laws, this Warrant and the shares of Common Stock issuable hereunder (and the securities issuable, directly or indirectly, upon conversion of such shares of Common Stock, if any) may be imprinted with a restricted securities legend in substantially the following form:

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION RELATED THERETO OR, SUBJECT TO SECTION 11 OF THE WARRANT AGREEMENT DATED SEPTEMBER 17, 2021, BETWEEN THE COMPANY AND HERCULES CAPITAL, INC., AN OPINION OF COUNSEL (WHICH MAY BE COMPANY COUNSEL) REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE ACT OR ANY STATE SECURITIES LAWS.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereto have caused this Warrant Agreement to be executed by its officers thereunto duly authorized as of the Effective Date.

COMPANY:

PHATHOM PHARMACEUTICALS, INC.

By: _____
Name: _____
Title: _____

WARRANTHOLDER:

HERCULES CAPITAL, INC.

By: _____
Name: _____
Title: _____

[Signature Page to Warrant Agreement]

EXHIBIT I

NOTICE OF EXERCISE

To: Phathom Pharmaceuticals, Inc.

- (1) The undersigned Warrantholder hereby elects to purchase [_____] shares of the Common Stock of Phathom Pharmaceuticals, Inc., pursuant to the terms of the Warrant Agreement dated the [__] day of September, 2021 (the "Warrant Agreement") between Phathom Pharmaceuticals, Inc. and the Warrantholder, and [CASH PAYMENT: tenders herewith payment of the Purchase Price in full, together with all applicable transfer taxes, if any.] [NET ISSUANCE: elects pursuant to Section 3(a) of the Warrant Agreement to effect a Net Issuance.]
- (2) Please issue a certificate or certificates or book-entry credit(s) representing said shares of Common Stock in the name of the undersigned or in such other name as is specified below.

(Name)

(Address)

WARRANTHOLDER: HERCULES CAPITAL, INC.

By: _____
Name: _____
Title: _____

1. ACKNOWLEDGMENT OF EXERCISE

The undersigned, Phathom Pharmaceuticals, Inc., hereby acknowledges receipt of the "Notice of Exercise" from Hercules Capital, Inc. to purchase [____] shares of the Common Stock of Phathom Pharmaceuticals, Inc. pursuant to the terms of the Warrant Agreement by and between Phathom Pharmaceuticals, Inc. and Hercules Capital, Inc. dated the [__] day of September, 2021 (the "Warrant Agreement"), and further acknowledges that [____] shares remain subject to purchase under the terms of the Warrant Agreement.

COMPANY: PHATHOM PHARMACEUTICALS, INC.

By: _____

Title: _____

Date: _____

EXHIBIT III
TRANSFER NOTICE

(To transfer or assign the foregoing Agreement execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Agreement and all rights evidenced thereby are hereby transferred and assigned to

(Please Print)

whose address is _____

Dated: _____

Holder's Signature: _____

Holder's Address: _____

Signature Guaranteed: _____

NOTE: The signature to this Transfer Notice must correspond with the name as it appears on the face of the Agreement, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Agreement.

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

I, Terrie Curran, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Phathom Pharmaceuticals, Inc.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) 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) (Paragraph omitted pursuant to SEC Release Nos. 33-8238/34-47986 and 33-8392/34-49313);
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2021

/s/ Terrie Curran

Terrie Curran
Chief Executive Officer and President
(Principal Executive Officer)

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

I, Anthony Guzzo, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Phathom Pharmaceuticals, Inc.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) 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) (Paragraph omitted pursuant to SEC Release Nos. 33-8238/34-47986 and 33-8392/34-49313);
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2021

/s/ Anthony Guzzo

Anthony Guzzo

Vice President and Chief Accounting Officer
(acting Principal Financial Officer)

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Phathom Pharmaceuticals, Inc. (the "Company") for the quarter ended September 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Terrie Curran, as Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 8, 2021

/s/ Terrie Curran

Terrie Curran

Chief Executive Officer and President

(Principal Executive Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Phathom Pharmaceuticals, Inc. (the "Company") for the quarter ended September 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Anthony Guzzo, as Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 8, 2021

/s/ Anthony Guzzo

Anthony Guzzo

Vice President and Chief Accounting Officer
(acting Principal Financial Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.