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 June 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	**82-4151574**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
100 Campus Drive, Suite 102 **Florham Park, New Jersey**	**07932**
(Address of principal executive offices)	**(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	☐	Accelerated filer	☐
Non-accelerated filer	☑	Smaller reporting company	☑
Emerging growth company	☑		

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

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

As of August 5, 2021, the registrant had 31,356,465 shares of common stock ($0.0001 par value) outstanding.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (unaudited)

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

	June 30, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 209,669	$ 287,496
Prepaid expenses and other current assets (including related party amounts of $0 and $82, respectively)	1,669	3,872
Total current assets	211,338	291,368
Property, plant and equipment, net	803	986
Operating lease right-of-use assets	2,147	2,373
Other long-term assets	291	384
Total assets	$ 214,579	$ 295,111
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable (including related party amounts of $124 and $173, respectively)	$ 5,401	$ 16,782
Accrued clinical trial expenses	14,238	19,997
Accrued expenses (including related party amounts of $1,505 and $734, respectively)	8,845	10,606
Accrued interest	302	312
Current portion of long-term debt	10,345	7,353
Operating lease liabilities, current	480	474
Total current liabilities	39,611	55,524
Long-term debt, net of discount	37,340	39,634
Operating lease liabilities	1,375	1,557
Other long-term liabilities	4,125	4,125
Total liabilities	82,451	100,840
Commitments and contingencies (Note 4)		
Stockholders' equity:		
Preferred stock, $0.0001 par value; authorized shares - 40,000,000 at June 30, 2021 and December 31, 2020 ; no shares issued and outstanding at June 30, 2021 and December 31, 2020	-	-
Common stock, $0.0001 par value; authorized shares — 400,000,000; issued shares — 31,329,613 and 31,262,769 at June 30, 2021 and December 31, 2020, respectively; outstanding shares — 29,186,169 and 28,516,010 at June 30, 2021 and December 31, 2020, respectively	3	3
Additional paid-in capital	589,007	579,755
Accumulated deficit	(456,882)	(385,487)
Total stockholders' equity	132,128	194,271
Total liabilities and stockholders' equity	$ 214,579	$ 295,111

See accompanying notes.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Operating expenses:				
Research and development (includes related party amounts of $905, $249, $1846, and $653, respectively)	$ 21,597	$ 14,859	$ 42,178	$ 30,724
General and administrative (includes related party amounts of $0, $34, $16, and $77, respectively)	13,722	5,162	26,725	9,672
Total operating expenses	35,319	20,021	68,903	40,396
Loss from operations	(35,319)	(20,021)	(68,903)	(40,396)
Other income (expense):				
Interest income	13	182	27	1,060
Interest expense	(1,256)	(1,262)	(2,528)	(2,000)
Change in fair value of warrant liabilities	—	—	-	95
Other income (expense)	10	—	9	(1)
Total other income (expense)	(1,233)	(1,080)	(2,492)	(846)
Net loss and comprehensive loss	$ (36,552)	$ (21,101)	$ (71,395)	$ (41,242)
Net loss per share, basic and diluted	$ (1.00)	$ (0.64)	$ (1.96)	$ (1.26)
Weighted-average shares of common stock outstanding, basic and diluted	36,636,164	32,997,099	36,468,498	32,733,750

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

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

	Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
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

See accompanying notes.

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

	Six Months Ended June 30,	
	2021	**2020**
Cash flows from operating activities		
Net loss	$ (71,395)	$ (41,242)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	256	129
Stock-based compensation	8,055	1,391
Amortization of debt discount	698	544
Change in fair value of warrant liabilities	0	(95)
Other	540	0
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets (includes the change in related party amounts of $82, and $0, respectively)	2,203	10,428
Accounts payable and accrued expenses (includes the change in related party amounts of $722 and $(181), respectively)	(12,860)	8,129
Accrued clinical trial expenses	(5,759)	—
Accrued interest	(10)	146
Operating right-of-use asset and lease liabilities	50	9
Other long-term assets	93	(200)
Net cash used in operating activities	(78,129)	(20,761)
Cash flows from investing activities		
Cash paid for property, plant and equipment	(214)	(733)
Net cash used in investing activities	(214)	(733)
Cash flows from financing activities		
Proceeds from issuance of common stock from exercise of stock options	516	—
Net proceeds from issuance of long-term debt	—	25,000
Net cash provided by financing activities	516	25,000
Net (decrease) increase in cash and cash equivalents	(77,827)	3,506
Cash and cash equivalents – beginning of period	287,496	243,765
Cash and cash equivalents – end of period	$ 209,669	$ 247,271
Supplemental disclosure of cash flow information		
Interest paid	$ 1,833	$ 1,309
Supplemental disclosure of noncash investing and financing activities		
Property and equipment purchases included in accounts payable and accrued liabilities	$ 3	$ 20
Final interest payment fee	$ —	$ 2,063
Settlement of ESPP liability in common stock	$ 358	$ —
Settlement of 401(k) liability in common stock	$ 323	$ —
Operating lease liabilities arising from obtaining right-of-use assets	$ —	$ 1,423
Conversion of Lender Warrants into equity	$ —	$ 318

See accompanying notes.

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.

Liquidity and Capital Resources

From inception to June 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 June 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. Additionally, 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.

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 (the "Loan Agreement") 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 Loan Agreement 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 June 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 June 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 six months ended June 30, 2021, the Company has excluded weighted-average unvested shares of 2,280,603 and 2,430,800, respectively, from the weighted-average number of common shares outstanding, compared to 3,555,407 and 3,818,756, 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 half 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):

	June 30, 2021	December 31, 2020
Computer equipment and software	$ 585	$ 516
Furniture and fixtures	751	747
Leasehold improvements	54	54
	1,390	1,317
Less: accumulated depreciation and amortization	(587)	(331)
Total property, plant and equipment, net	$ 803	$ 986

Depreciation and amortization expense for the three months ended June 30, 2021 and 2020, was approximately $131,000 and $77,000, respectively. Depreciation and amortization expense for the six months ended June 30, 2021 and 2020, was approximately $256,000 and $129,000, respectively. No property, plant or equipment was disposed of during the six months ended June 30, 2021 or the year ended December 31, 2020.

Accrued Expenses

Accrued expenses consist of the following (in thousands):

	June 30, 2021	December 31, 2020
Accrued research and development expenses	$ 3,501	$ 4,864
Accrued compensation expenses	3,884	4,587
Accrued professional & consulting expenses	1,436	1,123
Accrued other	24	32
Total accrued expenses	$ 8,845	$ 10,606

3. Related Party Transactions

Frazier is a principal stockholder of the Company and is represented on the Company's board of directors. 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 June 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 June 30, 2021 and 2020, the Company incurred $0 and $34,000, respectively, of shared operating expenses. For the six months ended June 30, 2021 and 2020, the Company incurred $16,000 and $77,000, 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 June 30, 2021 and December 31, 2020, the Company had $1.1 million and $0.4 million, respectively, outstanding accounts payable and accrued expenses related to these manufacturing services. For the three months ended June 30, 2021 and 2020, the Company incurred $0.7 million and $0.2 million, respectively, of expenses related to services performed by PCI. For the six months ended June 30, 2021 and 2020, the Company incurred $1.6 million and $0.7 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 June 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 six months ended June 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. 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 according to approved specifications at a fixed price per batch of bulk drug product 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 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 June 30, 2021 and December 31, 2020, the Company had $0.2 million and $0.2 million, respectively, in outstanding accounts payable and accrued expenses related to these bulk drug product costs. For the six months ended June 30, 2021 and 2020, the Company incurred $0.2 million and $0, respectively related to the Commercial Supply Agreement. The Company has a remaining minimum purchase obligation of approximately $2.0 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 June 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 six months ended June 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 June 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 3.8 years and 4.2 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 June 30, 2021 and 2020 was approximately $0.2 million and $0.1 million, respectively. The total rent expense for the six months ended June 30, 2021 and 2020 was approximately $0.4 million and $0.2 million, respectively.

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

	June 30, 2021	December 31, 2020
Assets:		
Operating lease right-of-use assets	2,147	2,373
Total right-of-use assets	$ 2,147	$ 2,373
Liabilities:		
Operating lease liabilities, current	480	474
Operating lease liabilities, non-current	1,375	1,557
Total operating lease liabilities	$ 1,855	$ 2,031

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

2021	246
2022	503
2023	516
2024	529
Thereafter	342
Total minimum lease payments	$ 2,136
Less: amount representing interest	(281)
Present value of operating lease liabilities	1,855
Less: operating lease liabilities, current	(480)
Operating lease liabilities	$ 1,375
Weighted-average remaining lease term (in years)	4.06
Weighted-average incremental borrowing rate	7.25%

Operating cash flows for the six months ended June 30, 2021 included $0.3 million in cash payments for operating leases. Operating cash flows for the six months ended June 30, 2020 included $0.7 million in cash payments for operating leases, $0.5 million of which were prepaid lease payments.

6. Debt

Total debt consists of the following (in thousands):

	June 30, 2021
Long-term debt, current portion	$ 10,345
Long-term debt, non-current portion	39,655
Unamortized debt discount	(2,315)
Long-term debt, net of debt discount	$ 47,685

On May 14, 2019, the Company entered into a loan and security agreement (the “Loan Agreement”, and all amounts borrowed thereunder the “Term Loans”) with Silicon Valley Bank (“SVB”), as administrative and collateral agent, and lenders including SVB and WestRiver Innovation Lending Fund VIII, L.P. (“WestRiver”). 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 Term Loans bear interest at a floating rate of the higher of the Wall Street Journal Prime rate plus 1.75% (5% at June 30, 2021) or 7.25%. Under the original Loan Agreement, 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 Loan Agreement. 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 a New Drug Application (“NDA”) with the U.S. Food and Drug Administration (“FDA”). The interest-only payment period could be further extended until November 30, 2022, if the Company receives 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 will be payable in equal monthly installments of principal, plus accrued and unpaid interest through the maturity date of May 1, 2024.

In addition, the Company is obligated to pay a final payment fee of 8.25% of the original principal amount of the Term Loans. As of June 30, 2021, the aggregate final payment fee for the Term Loans of $4.1 million has been recorded as an other long-term liability.

The Company may elect to prepay all or a portion of the Term Loans 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 may be borrowed again.

The borrowings under the Loan Agreement are collateralized by substantially all of the Company's assets, excluding intellectual property and certain other assets. The Loan Agreement includes affirmative and negative covenants. The affirmative covenants include, 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 include, 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 Loan Agreement also contains 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 begin to bear interest at a rate that is 4.00% above the rate effective immediately before the event of default and may be declared immediately due and payable by SVB, as collateral agent. As of June 30, 2021, the Company was in compliance with all applicable covenants under the Loan Agreement.

In connection with the Loan Agreement, the Company issued the 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 have been recorded as debt discount and are being amortized to interest expense using the effective interest method over the term of the Term Loans. During the three and six months ended June 30, 2021, the Company recognized $ 1.2 million and $2.5 million, respectively of interest expense, including amortization of the debt discount in connection with the Loan Agreement, compared to $1.3 million and $2.0 million, respectively, for the same periods in 2020. As of June 30, 2021, the Company had outstanding Term Loans of $50.0 million and accrued interest of $0.3 million.

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

Year ending December 31:	
2021	1,843
2022	23,667
2023	22,146
2024	12,904
Total principal and interest payments	60,560
Less interest and final payment fee	(10,560)
Total term loan borrowings	$ 50,000

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 June 30, 2021, 1,106,899 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 June 30, 2021, 1,036,545 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 June 30, 2021.

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

Balance at December 31, 2020	2,746,759
Share vesting	(603,315)
Balance at June 30, 2021	2,143,444

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:

	June 30, 2021
Common stock warrants	7,604,446
Stock options and performance-based units outstanding	4,419,189
Shares available for issuance under the 2019 Incentive Plan	1,997,169
Shares available for issuance under the ESPP Plan	858,783
Balance at June 30, 2021	14,879,587

Preferred Stock

The Company is authorized to issue up to 40 million shares of preferred stock. As of June 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 June 30, 2021, 1,997,169 shares of common stock remain available for issuance, which includes 1,358,708 stock options and 109,050 performance-based units granted during the six months ended June 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 U.S. Food and Drug Administration ("FDA") of vonoprazan for H. pylori and then, or concurrent with, erosive esophagitis. In 2021, the Company granted an additional 109,050 PSUs to employees. As of June 30, 2021, the PSU milestones had not been achieved. As of June 30, 2021, no related compensation cost had been recognized. The following table summarizes PSU activity under the 2019 Incentive Award Plan during the six months ended June 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	109,050	$ 38.17
Vested	-	-
Forfeited	(10,000)	$ 29.43
Unvested balance at June 30, 2021	319,050	$ 34.52

As of June 30, 2021, there was approximately $10.8 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 June 30, 2021, 858,783 shares of common stock remain available for issuance, which includes the 13,490 shares sold to employees during the six months ended June 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 $0.2 million and for the three and six months ended June 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:

	Six Months Ended June 30,	
	2021	2020
Assumptions:		
Expected term (in years)	0.75	—
Expected volatility	81.83%	0.00%
Risk free interest rate	0.10%	0.00%
Dividend yield	—	—

The estimated weighted-average fair value of ESPP awards during 2021 was $ $15.85. As of June 30, 2021, the total unrecognized compensation expense related to the ESPP was $0.2 million, which is expected to be recognized over a weighted-average period of approximately 0.5 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 discretionary match, which was settled by contributing 8,356 shares. During the three and six months ended June 30, 2021, the Company incurred $0.2 million and $0.6 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	1,511,500	38.77		
Options exercised and shares vested	(44,998)	11.48		
Options cancelled	(95,105)	33.88		
Balance at June 30, 2021	4,100,139	$ 27.60	8.85	$ 34,607
Options exercisable as of June 30, 2021	655,538	$ 15.36	7.71	$ 12,352

The estimated weighted-average fair value of employee and nonemployee director stock options granted during 2021 was $23.3. As of June 30, 2021, the Company had $53.0 million of unrecognized stock-based compensation expense, which is expected to be recognized over a weighted-average period of 3.1 years.

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

	Six Months Ended June 30,	
	2021	2020
Assumptions:		
Expected term (in years)	6.04	5.99
Expected volatility	67.38%	63.72%
Risk free interest rate	0.64%	0.82%
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 June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Research and development expense	$ 1,027	$ 124	$ 1,886	$ 238
General and administrative expense	3,210	704	6,169	1,153
Total	$ 4,237	$ 828	$ 8,055	$ 1,391

8. Subsequent Event

On July 2, 2021, the Company entered into a Commercial Supply Agreement (the “Supply Agreement”) with Catalent Pharma Solutions, LLC (“Catalent”), pursuant to which Catalent has agreed to supply to the Company commercial quantities of vonoprazan fumarate tablets (“Finished Tablets”).

Pursuant to the Supply Agreement, Catalent has agreed to supply the Company with, and the Company has agreed to purchase from Catalent, Finished Tablets at an agreed upon price per unit. The price per unit may be adjusted annually based on increases in costs incurred by Catalent. The Supply Agreement requires the Company to purchase a specified percentage of its requirements of Finished Tablets from Catalent, which percentage is subject to adjustment following the third (3rd) anniversary of the first day of the calendar quarter during which Catalent is scheduled to deliver to the Company the initial Finished Tablets intended for commercial sale, excluding validation batches (the “Commencement Date”).

Unless terminated earlier, the term of the Supply Agreement extends for a period of five (5) years from the Commencement Date. The Supply Agreement will extend automatically for additional two (2) year periods unless terminated by either party upon at least twenty four (24) months prior written notice. The Supply Agreement may also be terminated at any time upon written notice by either party if the other party has failed to remedy a material breach of the terms of the Supply Agreement within a specified period following receipt of written notice of such breach.

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 thirteen countries in Asia and Latin America. Vonoprazan generated over $670 million in net sales in its fifth full year on the market since its approval in Japan in late 2014. In May 2019, we in-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 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 November 2020, we requested additional QIDP and Fast Track designations to include amoxicillin capsules in addition to amoxicillin tablets. The FDA granted these additional Fast Track designations in January 2021 and these additional QIDP designations in May 2021. 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.

We expect to report top-line data from PHALCON-EE in the October 2021. We believe that the data from PHALCON-HP and the successful completion of PHALCON-EE, together with the existing clinical data, will support regulatory submissions for marketing approval with the FDA in September 2021 for vonoprazan triple therapy and vonoprazan dual therapy for the treatment of *H. pylori* infection, and in 2022 for vonoprazan for the treatment of erosive esophagitis. 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.

However, our assumptions used to determine expected timelines for clinical trials and regulatory filings 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 September 30, 2020, we 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, and maintenance of erosive esophagitis and relief of heartburn. 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 June 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 June 30, 2021, we had cash and cash equivalents of $210 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 will be sufficient to meet our anticipated cash requirements into the fourth quarter of 2022.

We do not have any products approved for sale and have incurred net losses since our inception. Our net losses for the six month periods ended June 30, 2021 and 2020 were $71.4 million and $41.2 million, respectively. As of June 30, 2021, we had an accumulated deficit of $456.9 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, which will not be for several years, if ever. 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

Interest expense consists of interest on our outstanding commercial bank debt at a floating per annum interest rate which was 7.25% as of June 30, 2021, and amortization of the commercial bank 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 fee.

Change in Fair Value of Warrant Liabilities

In connection with the entry into the Loan Agreement, 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 Six Months Ended June 30, 2021 and 2020

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

	Six Months Ended June 30,		
	2021	2020	Change
Operating expenses:			
Research and development	$ 42,178	$ 30,724	$ 11,454
General and administrative	26,725	9,672	17,053
Total operating expenses	68,903	40,396	28,507
Loss from operations	(68,903)	(40,396)	(28,507)
Other income (expense):			
Interest income	27	1,060	(1,033)
Interest expense	(2,528)	(2,000)	(528)
Change in fair value of warrant liabilities	—	95	(95)
Other income (expense)	9	(1)	10
Total other income (expense)	(2,492)	(846)	(1,646)
Net loss	$ (71,395)	$ (41,242)	$ (30,153)

Research and Development Expenses. Research and development expenses were $42.2 million and $30.7 million for the six months ended June 30, 2021 and 2020, respectively. The increase of $11.5 million consisted of $4.8 million of chemistry manufacturing and controls (“CMC”) costs related to vonoprazan, $3.4 million of personnel-related expenses, $3.0 million in clinical trial costs and $0.3 million of other research costs.

General and Administrative Expenses. General and administrative expenses were $26.7 million and $9.7 million for the six months ended June 30, 2021 and 2020, respectively. The increase of $17.0 million was due to increases of $10.2 million in personnel-related expenses, $4.9 million in professional services expenses for commercial, medical affairs and other services, $1.1 million in consulting fees and $0.8 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 $2.5 million for the six months ended June 30, 2021 consisted of interest expense on outstanding commercial bank debt. Other expense of $0.9 million for the six months ended June 30, 2020 consisted of $2.0 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 June 30, 2021 and 2020

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

	Three Months Ended June 30,		
	2021	**2020**	**Change**
Operating expenses:			
Research and development	$ 21,597	$ 14,859	$ 6,738
General and administrative	13,722	5,162	8,560
Total operating expenses	35,319	20,021	15,298
Loss from operations	(35,319)	(20,021)	(15,298)
Other income (expense):			
Interest income	13	182	(169)
Interest expense	(1,256)	(1,262)	6
Change in fair value of warrant liabilities	—	—	—
Other income (expense)	10	—	10
Total other income (expense)	(1,233)	(1,080)	(153)
Net loss	$ (36,552)	$ (21,101)	$ (15,451)

Research and Development Expenses. Research and development expenses were $21.6 million and $14.9 million for the three months ended June 30, 2021 and 2020, respectively. The increase of $6.7 million consisted of $2.8 million of clinical trial costs, $2.0 million of CMC costs related to vonoprazan and $1.9 million of personnel-related expenses.

General and Administrative Expenses. General and administrative expenses were $13.7 million and $5.2 million for the three months ended June 30, 2021 and 2020, respectively. The increase of $8.5 million was due to increases of $5.2 million in personnel-related expenses, $2.3 million in professional services expenses for commercial, medical affairs and other services, $0.5 million in consulting fees and $0.5 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 $1.2 million for the three months ended June 30, 2021 consisted of interest expense on outstanding commercial bank debt. Other expense of $1.1 million for the three months ended June 30, 2020 consisted of $1.3 million of interest expense on outstanding commercial bank debt and interest income of $0.2 million.

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 June 30, 2021, we had cash and cash equivalents of $210 million.

Commercial Bank Debt

On May 14, 2019, we entered into the Loan Agreement 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, which we collectively refer to as the Term Loans. As of June 30, 2021, we had outstanding Term Loans of $50.0 million and accrued interest of $0.3 million.

The Term Loans bear interest at a floating rate of the higher of the Wall Street Journal Prime rate plus 1.75% (5% at June 30, 2021) or 7.25%. Under the original Loan Agreement, the monthly payments consisted of interest-only through May 31, 2021. Pursuant to the first amendment to the Loan Agreement entered into on March 11, 2020, and the second amendment to the Loan Agreement 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 the Company 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 be further extended until November 30, 2022, if the Company receives 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 will be payable in equal monthly installments of principal, plus accrued and unpaid interest through the maturity date of May 1, 2024.

In addition, we are obligated to pay a final payment fee of 8.25% of the original principal amount of the Term Loans. We may elect to prepay all or a portion of the Term Loans 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 may be borrowed again. The borrowings under the Loan Agreement are collateralized by substantially all of our assets, excluding intellectual property and certain other assets. We have agreed not to encumber our intellectual property assets without SVB's prior written consent unless a security interest in the underlying intellectual property is necessary to have a security interest in the accounts and proceeds that are part of the assets securing the Term Loans, in which case our intellectual property will automatically be included within the assets securing the Term Loans.

The Loan Agreement contains certain customary affirmative and negative covenants and events of default. The affirmative covenants include, 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 include, 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 begin to bear interest at a rate that is 4.00% above the rate effective immediately before the event of default and may be declared immediately due and payable by SVB, as collateral agent. As of June 30, 2021, we were in compliance with all applicable covenants under the Loan Agreement.

In connection with the Loan Agreement, we issued the 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 Agreement℠, 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 six-month period ended June 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 will be sufficient to meet our anticipated cash requirements into the fourth quarter of 2022. We expect our current cash and cash equivalents will allow us to complete our ongoing Phase 3 clinical trial of vonoprazan for the treatment of erosive esophagitis and Phase 2 trial of vonoprazan for

on-demand treatment of non-erosive reflux disease. 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):

	Six Months Ended June 30,		
	2021	2020	$ Change
Net cash provided by (used in):			
Operating activities	$ (78,129)	$ (20,761)	$ (57,368)
Investing activities	(214)	(733)	519
Financing activities	516	25,000	(24,484)
Net increase (decrease) in cash	$ (77,827)	$ 3,506	$ (81,333)

Operating Activities

Net cash used in operating activities was approximately $78.1 million and $20.8 million for the six months ended June 30, 2021 and 2020, respectively. The net cash used in operating activities for the six months ended June 30, 2021 was due to approximately $61.8 million spent on ongoing research and development and general and administrative activities and a $16.3 million net change in operating assets and liabilities. The net change in operating assets and liabilities primarily related to a $18.6 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 $2.2 million decrease in prepaid assets and a $0.1 million decrease in other long-term assets. The net cash used in operating activities for the six months ended June 30, 2020 was due to approximately $39.3 million spent on ongoing research and development and general and administrative activities, partially offset by a $18.5 million net change in operating assets and liabilities. The net change in operating assets and liabilities primarily related to a $10.4 million decrease in prepaid clinical activities, and a $8.3 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 six months ended June 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 three months ended six months ended June 30, 2021 was due to issuance of common stock from exercise of stock options. Net cash provided by financing activities for the six months ended June 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 six months ended June 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 six months ended June 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 June 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 six months ended June 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 June 30, 2021, the net proceeds from our initial public offering have been applied as follows: $115.0 million towards the clinical development of vonoprazan and $45.8 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	9/25/2020	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	Second Amendment to the Loan and Security Agreement, dated March 11, 2021, by and among Silicon Valley Bank, SVB Innovation Credit Fund VIII, L.P. and the Registrant	10-Q	5/11/21	10.1	
10.2	Third Amendment to the Loan and Security Agreement, dated May 26, 2021, by and among Silicon Valley Bank, SVB Innovation Credit Fund VIII, L.P. and the Registrant				X
10.3#	Separation and Release Agreement dated June 4, 2021, between the Registrant and Todd Branning				X
10.4†	Commercial Supply Agreement with Catalent Pharma Solutions, LLC entered into on July 2, 2021				X
10.5#	Amended and Restated Non-Employee Director Compensation Policy				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.

# Indicates management contract or compensatory plan

† Certain portions of this exhibit, that are not material and would likely cause competitive harm to the registrant if publicly disclosed, have been redacted pursuant to Item 601(b)(10) of Regulation S-K

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: August 10, 2021

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

Date: August 10, 2021

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

SECOND AMENDMENTTO
LOAN AND SECURITY AGREEMENT

This Second Amendment to Loan and Security Agreement (this "**Amendment**") is enteredinto this 11th day of March, 2021, by and among (a) **SILICON VALLEY BANK**, a California corporation ("**SVB**"), in its capacity as administrative agent and collateral agent ("**Agent**"), (b) **SILICON VALLEY BANK**, a California corporation, as a lender, (c) **SVB INNOVATION CREDIT FUND VIII, L.P.**, a Delaware limited partnership ("**SVB Innovation**"), as a lender (SVB and SVB Innovation and each of the other " Lenders" from time to time a party hereto are referred to herein collectively as the "**Lenders**" and each individually as a "**Lender**"), and (d) **PHATHOM PHARMACEUTICALS, INC.**, a Delaware corporation ("**Borrower**"), whose address is 100 Campus Drive, Suite 102, Florham Park, New Jersey 07932.

RECITALS

A. Borrower, Agent and the Lenders have entered into that certain Loan and Security Agreement dated as of May 14, 2019, as amended by that certain First Amendment to Loan and Security Agreement dated as of March 11, 2020, by and among Borrower, Agent and the Lenders(as the same has been and may from time to time be further amended, modified, supplemented orrestated, the "**Loan Agreement**").

B. The Lenders have extended credit to Borrower for the purposes permitted in the Loan Agreement.

C. Borrower has requested that the Lenders amend the Loan Agreement to make certain revisions to the Loan Agreement as more fully set forth herein.

D. The Lenders have agreed to so amend certain provisions of the Loan Agreement, but only to the extent, in accordance with the terms, subject to the conditions and in reliance upon the representations and warranties set forth below.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and other good and valuableconsideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:

1. Definitions. Capitalized terms used but not defined in this Amendment shall havethe meanings given to them in the Loan Agreement.

2. Amendment to Loan Agreement.

2.1 Section 11 (Notice). Section 11 is amended by deleting the noticeinformation for Borrower, and replacing it with the following:

"If to Borrower Phathom Pharmaceuticals, Inc.100
Campus Drive, Suite 102

Florham Park, NJ 07932
Attn: Todd Branning
Email: tbranning@phathompharma.com”

2.2 Section 11 (Notice). Section 11 is amended by deleting the noticeinformation for WestRiver, and replacing it with the following:

“If to SVB Innovation: SVB Innovation Credit Fund VIII, L.P.

c/o SVB Capital 2770
Sand Hill Road
Menlo Park, California 94025
Attn: SVB Capital Finance and OperationsEmail:
svbcapitalcredit@svbank.com
svbcapcreditfinance@svb.com”

2.3 Section 14 (Definitions). The following new term and its definition areinserted to appear alphabetically in Section 14.1 thereof:

“ “**SVB Innovation**” is SVB Innovation Credit Fund VIII, L.P., a Delawarelimited partnership.”

2.4 Section 14 (Definitions). The term “WestRiver” and its definition aredeleted in their entirety from Section 14.1 thereof.

2.5 Section 14 (Definitions). The following terms and their respectivedefinitions set forth in Section 14.1 are amended in their entirety and replaced with the following:

“ “**First Extension Event**” means (a) Borrower has provided Agent, on or prior to August 1, 2021, with evidence reasonably satisfactory to Agent in Agent’s reasonable discretion that Borrower has received positive data with respect to Borrower’ s phase 3 clinical trial for Vonoprazan in treatment of Helicobacter Pylori Infection sufficient to file an NDA with the FDA and (b) the Term B Loan Advance has been made.”

“ “**Lender Intercreditor Agreement**” is, collectively, any and all intercreditor agreement, master arrangement agreement or similar agreement by and between SVB Innovation and SVB, as each may be amended from time to time in accordance with the provisions thereof.”

“ “**Repayment Schedule**” means the period of time equal to thirty-four (34) consecutive months, which shall be reduced to a period of time equal to twenty- nine (29) consecutive months upon the occurrence of the First Extension Event, and which shall be further reduced to a period of time equal to eighteen (18) calendar months upon the occurrence of the Second Extension Event.”

“ “**Term Loan Amortization Date**” is August 1, 2021, which shall be extended to January 1, 2022 upon the occurrence of the First Extension Event, and

which shall be further extended to December 1, 2022 upon the occurrence of the Second Extension Event."

" "**Warrant**" means, collectively, (a) that certain warrant to purchase stockdated as of May 14, 2019 between Borrower and SVB and (b) that certain warrantto purchase stock dated as of May 14, 2019 between Borrower and SVB Innovation, in each case, as may be amended, modified, supplemented and/or restated from time to time."

2.6 **Schedule 1 (Lenders and Commitments)**. The Schedule 1 (Lenders and Commitments) of the Loan Agreement is amended in its entirety and replaced with the Schedule 1 (Lenders and Commitments) appearing on Schedule 1 hereto.

2.7 **Exhibit B (Compliance Certificate)**. The Compliance Certificate appearing as Exhibit B of the Loan Agreement is amended in its entirety and replaced with the Compliance Certificate appearing on Schedule 2 hereto.

3. Limitation of Amendments.

3.1 The amendments set forth in Section 2 above are effective for the purposesset forth herein and shall be limited precisely as written and shall not be deemed to (a) be a consentto any amendment, waiver or modification of any other term or condition of any Loan Document,or (b) otherwise prejudice any right or remedy which Agent or the Lenders may now have or mayhave in the future under or in connection with any Loan Document.

3.2 This Amendment shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreementsset forth in the Loan Documents, except as herein amended, are hereby ratified and confirmed andshall remain in full force and effect.

4. Representations and Warranties. To induce Agent and the Lenders to enter intothis Amendment, Borrower hereby represents and warrants to Agent and the Lenders as follows:

4.1 Immediately after giving effect to this Amendment (a) the representations and warranties contained in the Loan Documents are true, accurate and complete in all material respects as of the date hereof (except to the extent such representations and warranties relate to an earlier date, in which case they are true and correct as of such date), and (b) no Event of Default has occurred and is continuing;

4.2 Borrower has the power and authority to execute and deliver this Amendment and to perform its obligations under the Loan Agreement, as amended by this Amendment;

4.3 The organizational documents of Borrower delivered to Agent on or prior to the date hereof remain true, accurate and complete and have not been amended, supplemented or restated and are and continue to be in full force and effect;

4.4 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, have been duly authorized;

4.5 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not and will not contravene (a) any material Requirement of Law, (b) any material agreement with a Person binding on Borrower, (c) any applicable material order, judgment or decree of any court or other governmental or public body or authority, or subdivision thereof, binding on Borrower, or (d) the organizational documents of Borrower;

4.6 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not require any order, consent, approval, license, authorization or validation of, or filing, recording or registration with, or exemption by any governmental or public body or authority, or subdivision thereof, binding on Borrower, except as already has been obtained or made (or are being obtained pursuant to Section 6.1(b) of the Loan Agreement); and

4.7 This Amendment has been duly executed and delivered by Borrower and isthe binding obligation of Borrower, enforceable against Borrower in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, liquidation, moratorium or other similar laws of general application and equitable principles relating to or affecting creditors' rights.

5. **[Reserved**.]

6. **Post-Closing Conditions**. Within thirty (30) days of the date of this Amendment, Borrower shall deliver to Bank evidence satisfactory to Bank that the insurance endorsements required by Section 6.5 of the Loan Agreement are in full force and effect, together with appropriate evidence showing lender loss payable and/or additional insured clauses or endorsements in favor of Bank.

7. **Integration**. This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Amendment and the Loan Documents merge into this Amendmentand the Loan Documents.

8. **Counterparts.** This Amendment may be executed in any number of counterpartsand all of such counterparts taken together shall be deemed to constitute one and the same instrument.

9. **Effectiveness**. This Amendment shall be deemed effective upon (a) the due execution and delivery to Agent of this Amendment by each party hereto and (b) Borrower's payment to Agent of Agent's and the Lenders' reasonable legal fees and expenses incurred in connection with this Amendment.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be dulyexecuted and delivered as of the date first written above.

BORROWER:

PHATHOM PHARMACEUTICALS, INC.

By /s/ Terrie Curran Name: Terrie Curran
Title: Chief Executive Officer and President

AGENT:

SILICON VALLEY BANK, as Agent
By /s/ Kristine Rohmer Name: Kristine Rohmer
Title: Vice President

LENDERS:

SILICON VALLEY BANK
By /s/ Kristine Rohmer Name: Kristine Rohmer
Title: Vice President

SVB INNOVATION CREDIT FUND VIII, L.P.
By: SVB Innovation Credit Partners VIII, LLC, a Delaware limited liability company, its General Partner

By /s/ J.P. Michael Name: J.P. Michael
Title: Senior Managing Director

SCHEDULE 1
LENDERS AND COMMITMENTS TERM LOAN COMMITMENTS

Lender	**Term Loan Commitment**	**Term Loan Commitment Percentage**
Silicon Valley Bank	$25,000,000.00	50.0%
SVB Innovation Credit Fund VIII, L.P.	$25,000,000.00	50.0%
TOTAL	**$50,000,000.00**	**100.0000%**

Schedule 2

EXHIBIT B

COMPLIANCE CERTIFICATE

TO: SILICON VALLEY BANK, as Agent, SVB, and SVB INNOVATION Date: FROM: PHATHOM PHARMACEUTICALS, INC.

The undersigned authorized officer of PHATHOM PHARMACEUTICALS, INC. ("**Borrower**") certifies solely as an officer of Borrower, and not in any individual capacity, that under the terms and conditions of the Loan and Security Agreement among Borrower, SVB, and SVB Innovation (the "**Loan Agreement**"):

(1) Borrower is in compliance for the period ending with all required covenants except as noted below, (2) there are no Events of Default except as noted below, (3) all representations and warranties in the Agreement are true and correct in all material respects on this date except as noted below; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date, (4) Borrower, and each of its Subsidiaries, has timely filed all required foreign, federal, state and local Tax returns and reports, and Borrower has timely paid all foreign, federal, state and local Taxes, assessments, deposits and contributions owed by Borrower except as otherwise permitted pursuant to the terms of Section 5.8 of the Agreement or as noted below, and
(5) no Liens have been levied or claims made against Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Agent except as noted below, and (6) no Liens have been levied or claims made against Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Agent except as noted below.

Attached are the required documents supporting the certification. The undersigned certifies solely as an officer of Borrower, and not in any individual capacity, that these are prepared in accordance with GAAP consistently applied from one period to the next except as explained in an accompanying letter or footnotes. The undersigned acknowledges that no borrowings may be requested at any time or date of determination that Borrower is not in compliance with any of the terms of the Agreement (subject to Section 3.2(b) with respect to representations and warranties, as applicable), and that compliance is determined not just at the date this certificate is delivered. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

Please indicate compliance status by circling Yes/No under "Complies" column.

Reporting Covenants	**Required**	**Complies**	
Financial statements with Compliance Certificate	Monthly within 30 days; upon IPO, quarterly within 45 days (Q4 within 90 days)	Yes	No
Annual financial statement (CPA Audited)	FYE within 180 days (beginning FY 2019)	Yes	No
Filed 10-Q, 10-K and 8-K	Within 5 days after filing with SEC	Yes	No
Board-Approved Projections	FYE within 60 days and within 7 days of changes	Yes	No

Other Matters

Have there been any amendments of or other changes to the capitalization table of Borrower and to the Operating Documents of Borrower or any of its Subsidiaries? If yes, provide copies of any such amendments or changes with this Compliance Certificate. Yes No

The following are the exceptions with respect to the certification above: (If no exceptions exist, state “Noexceptions to note.”)

PHATHOM PHARMACEUTICALS, INC.

By: _____
Name: _____
Title: _____

AGENT USE ONLY

Received by: _____
AUTHORIZED SIGNER

Date: _____

Verified: _____
AUTHORIZED SIGNER

Date:

Compliance Status: Yes No

THIRD AMENDMENTTO
LOAN AND SECURITY AGREEMENT

This Third Amendment to Loan and Security Agreement (this "**Amendment**") is entered into this 26th day of May, 2021, by and among (a) **SILICON VALLEY BANK**, a California corporation ("**SVB**"), in its capacity as administrative agent and collateral agent ("**Agent**"), (b) **SILICON VALLEY BANK**, a California corporation, as a lender, (c) **SVB INNOVATION CREDIT FUND VIII, L.P.**, a Delaware limited partnership ("**SVB Innovation**"), as a lender (SVB and SVB Innovation and each of the other " Lenders" from time to time a party hereto are referred to herein collectively as the "**Lenders**" and each individually as a "**Lender**"), and (d) **PHATHOM PHARMACEUTICALS, INC.**, a Delaware corporation ("**Borrower**"), whose address is 100 Campus Drive, Suite 102, Florham Park, New Jersey 07932.

RECITALS

A. Borrower, Agent and the Lenders have entered into that certain Loan and SecurityAgreement dated as of May 14, 2019, as amended by that certain First Amendment to Loan and Security Agreement dated as of March 11, 2020, by and among Borrower, Agent and the Lenders, and as further amended by that certain Second Amendment to Loan and Security Agreement datedas of March 11, 2021, by and among Borrower, Agent and the Lenders (as the same has been andmay from time to time be further amended, modified, supplemented or restated, the "**Loan Agreement**").

B. The Lenders have extended credit to Borrower for the purposes permitted in the Loan Agreement.

C. Borrower has requested that the Lenders amend the Loan Agreement to make certain revisions to the Loan Agreement as more fully set forth herein.

D. The Lenders have agreed to so amend certain provisions of the Loan Agreement, but only to the extent, in accordance with the terms, subject to the conditions and in reliance upon the representations and warranties set forth below.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:

1. Definitions. Capitalized terms used but not defined in this Amendment shall have the meanings given to them in the Loan Agreement.

2. Amendment to Loan Agreement.

2.1 Section 6.6(a). Section 6.6(a) is amended in its entirety and replaced with the following:

" (a) Maintain all of its and all of its Subsidiaries' cash and Cash Equivalents with SVB and SVB's Affiliates. In addition, Borrower shall conduct all of its primary banking facilities with SVB, including, without limitation, letters of credit and business credit cards (other than the Permitted American Express Credit Card)."

2.2 **Section 14** (**Definitions**). The definition of "Permitted Indebtedness" in Section 14.1 is amended by (i) deleting the word "and" appearing at the end of clause (i) thereof,
(ii) deleting the "." at the end of clause (j) thereof and adding in lieu thereof the text "; and", and
(iii) inserting the following new clause (k) to appear immediately following clause (j) thereof:

" (k) unsecured Indebtedness in connection with Borrower's business credit card maintained with American Express in an aggregate amount not to exceed Two Million Dollars ($2,000,000.00) (the "**Permitted American Express Credit Card**")."

2.3 **Section 14** (**Definitions**). The following new term and its respective definition is hereby inserted to appear alphabetically in Section 14.1 thereof:

" "**Permitted American Express Credit Card**" is defined in clause (k) of the definition of Permitted Indebtedness."

3. Limitation of Amendments.

3.1 The amendments set forth in Section 2 above are effective for the purposes set forth herein and shall be limited precisely as written and shall not be deemed to (a) be a consent to any amendment, waiver or modification of any other term or condition of any Loan Document, or (b) otherwise prejudice any right or remedy which Agent or the Lenders may now have or may have in the future under or in connection with any Loan Document.

3.2 This Amendment shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreements set forth in the Loan Documents, except as herein amended, are hereby ratified and confirmed and shall remain in full force and effect.

4. Representations and Warranties. To induce Agent and the Lenders to enter into this Amendment, Borrower hereby represents and warrants to Agent and the Lenders as follows:

4.1 Immediately after giving effect to this Amendment (a) the representations and warranties contained in the Loan Documents are true, accurate and complete in all material respects as of the date hereof (except to the extent such representations and warranties relate to an earlier date, in which case they are true and correct as of such date), and (b) no Event of Default has occurred and is continuing;

4.2 Borrower has the power and authority to execute and deliver this Amendment and to perform its obligations under the Loan Agreement, as amended by this Amendment;

4.3 The organizational documents of Borrower delivered to Agent on or prior to the date hereof remain true, accurate and complete and have not been amended, supplemented or restated and are and continue to be in full force and effect;

4.4 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, have been duly authorized;

4.5 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not and will not contravene (a) any material Requirement of Law, (b) any material agreement with a Person binding on Borrower, (c) any applicable material order, judgment or decree of any court or other governmental or public body or authority, or subdivision thereof, binding on Borrower, or (d) the organizational documents of Borrower;

4.6 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not require any order, consent, approval, license, authorization or validation of, or filing, recording or registration with, or exemption by any governmental or public body or authority, or subdivision thereof, binding on Borrower, except as already has been obtained or made (or are being obtained pursuant to Section 6.1(b) of the Loan Agreement); and

4.7 This Amendment has been duly executed and delivered by Borrower and is the binding obligation of Borrower, enforceable against Borrower in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, liquidation, moratorium or other similar laws of general application and equitable principles relating to or affecting creditors' rights.

5. **[Reserved**.]

6. **Integration**. This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Amendment and the Loan Documents merge into this Amendmentand the Loan Documents.

7. **Counterparts.** This Amendment may be executed in any number of counterpartsand all of such counterparts taken together shall be deemed to constitute one and the same instrument.

8. **Effectiveness**. This Amendment shall be deemed effective upon (a) the due execution and delivery to Agent of this Amendment by each party hereto and (b) Borrower's payment to Agent of Agent's and the Lenders' reasonable legal fees and expenses incurred in connection with this Amendment.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be dulyexecuted and delivered as of the date first written above.

BORROWER:

PHATHOM PHARMACEUTICALS, INC.

By /s/ Terrie Curran

Name: Terrie Curran
Title: Chief Executive Officer and President

AGENT:

SILICON VALLEY BANK, as Agent

By /s/ Kristine Rohmer

Name: Kristine RohmerTitle:
Vice President

LENDERS:

SILICON VALLEY BANK

By /s/ Kristine Rohmer

Name: Kristine RohmerTitle:
Vice President

SVB INNOVATION CREDIT FUND VIII, L.P.
By: SVB Innovation Credit Partners VIII, LLC, aDelaware
limited liability company, its General Partner

By /s/ J.P.
Michael
Name: J.P. Michael
Title: Senior Managing Director

Exhibit 10.3

SEPARATION AGREEMENT AND RELEASE OF CLAIMS

This Separation Agreement and Release of Claims (the "***Agreement***") is entered into by and among Todd Branning ("***Executive***") and Phathom Pharmaceuticals, Inc. (the "***Company***"), effective as of the Effective Date (as defined below).

RECITALS

WHEREAS, Executive is a party to that certain offer letter dated June 25, 2020, with the Company (the "***Offer Letter***");

WHEREAS, Executive and the Company have agreed that Executive's employment with the Company terminated effective as of June 4, 2021 (the "***Termination Date***"); and

WHEREAS, Executive acknowledges that, unless he executes and does not revoke this Agreement, he will not be eligible for the Termination Benefits (as defined below).

NOW THEREFORE, in consideration of, and subject to, the Termination Benefits payable to Executive described in Section 3 below, the adequacy of which is hereby acknowledged by Executive, and which Executive acknowledges that he would not otherwise be entitled to receive, Executive and the Company hereby agree as follows:

AGREEMENT

1. Effective Date. This Agreement shall not become effective unless both of the following events have occurred: (a) execution of this Agreement by Executive, and (b) expiration of the revocation period applicable under Section 4(b) below without Executive having given notice of revocation. The date on which this Agreement becomes effective shall be referred to in this Agreement as the "***Effective Date***." Unless the Effective Date occurs on or before the date that is sixty (60) days following the Termination Date, this Agreement shall be null and void. The parties agree that any material or immaterial changes to this Agreement shall not extend the deadline for the occurrence of the Effective Date.

2. Termination of Employment.

(a) The Termination Date will be the termination date of Executive's employment with the Company and any of its affiliates for all purposes, including active participation in and coverage under all benefit plans and programs sponsored by or through the Company and its affiliates, except as provided in this Agreement. Executive hereby confirms his termination from all positions he holds with the Company and any of its affiliates, including his position as Chief Financial Officer of the Company, effective as of the Termination Date. In accordance with applicable law, following the Termination Date, the Company will issue to Executive his final paycheck, reflecting his earned but unpaid base salary through the Termination Date.

(b) The Company will reimburse Executive for any and all reasonable and necessary business expenses incurred by Executive in connection with the performance of his job duties prior to the Termination Date in accordance with the Company's policies, which expenses shall be submitted to the Company with supporting receipts and/or documentation no later than thirty (30) days after the Termination Date.

(c) Subject to Section 3(d) below, Executive's entitlement to health benefits from the Company, and eligibility to participate in the Company's health benefit plans, shall cease on the last day of the calendar month during which the Termination Date occurs, except to the extent Executive elects to and is eligible to receive continued healthcare coverage pursuant to the provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("***COBRA***"), for himself and any covered dependents. Executive's entitlement to other benefits from the Company, and eligibility to participate in the Company's other benefit plans and programs, shall cease on the Termination Date.

3. Termination Benefits. In consideration for Executive's agreement to be bound by the terms of this Agreement, including but not limited to the release of claims in Section 4, but subject to Executive's compliance with Section 5, including Section 5(d) regarding the return of Company property, the Company agrees to provide Executive with the following termination benefits (the "***Termination Benefits***"):

(a)Executive shall be entitled to continued payment of Executive's base salary at the rate in effect on the Termination Date for a period of nine (9) months following the Termination Date, in accordance with the Company's then-current payroll policies and practices. The payments under this Section 3(a) shall commence with the first payroll period following the Effective Date (the "***Payment Date***"), and the first payment shall include all accrued amounts from the Termination Date;

(b) Executive shall be entitled to payment of a pro-rated target bonus for 2021, reflecting the portion of 2021 that has elapsed prior to the Termination Date, in the amount of $72,191.78, payable in a lump sum on the Payment Date;
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(c) Executive holds stock options (the "***Stock Options***") to purchase shares of the Company's common stock issued to Executive by the Company pursuant to certain stock option agreements (the "***Stock Option Agreements***"). As of the Termination Date, all of the Stock Options are unvested. Effective as of the Effective Date, (i) the vesting of such number of Stock Options as would have vested during the nine (9) month period following the Termination Date in accordance with the vesting schedule set forth in the Stock Option Agreements shall vest on an accelerated basis (the "***Accelerated Equity***"), and (ii) all of Executive's vested Stock Options as of the Termination Date (after giving effect to any Accelerated Equity vesting on the Effective Date), may be exercised by Executive until December 31, 2021. Executive acknowledges that all of his Stock Options are non-qualified stock options for tax purposes. Other than the Accelerated Equity, subject to Section 3(e) below, Executive hereby agrees and acknowledges that, notwithstanding any provisions in any other agreement between Executive and the Company to the contrary, including the Stock Option Agreements and the equity plan pursuant to which they were granted, on the Termination Date, any portion of the Stock Options and all other equity awards not eligible to vest pursuant to the preceding sentence (including any and all outstanding performance stock units held by Executive) held by Executive and outstanding as of the Termination Date shall be cancelled, surrendered and forfeited by Executive for no consideration immediately upon the Termination Date;

(d) For the nine (9) month period beginning on the Termination Date (or, if earlier, (i) the date on which the applicable continuation period under COBRA expires, or (ii) the date on which Executive becomes eligible to receive the equivalent or increased healthcare coverage by means of subsequent employment or self- employment) (such period, the "***COBRA Coverage Period***"), the Company shall pay for or reimburse Executive on a monthly basis for an amount equal to (x) the monthly premium Executive and/or Executive's covered dependents, as applicable, are required to pay for continuation coverage pursuant to COBRA for Executive and/or Executive's eligible dependents, as applicable, who were covered under the Company's health plans as of the Termination Date (calculated by reference to the premium as of the Termination Date) less (y) the amount Executive would have had to pay to receive group

health coverage for Executive and/or Executive's covered dependents, as applicable, based on the cost sharing levels in effect on the Termination Date. If the Company cannot provide the foregoing benefits in a manner that is exempt from Section 409A of the Internal Revenue Code of 1986, as amended (the "***Code***"), or that is otherwise compliant with applicable law (including, without limitation, Section 2716 of the Public Health Service Act), instead of providing the payments or reimbursements as set forth above, the Company shall instead pay to Executive the foregoing monthly amount as a taxable monthly payment for the COBRA Coverage Period (or any remaining portion thereof). Executive shall be solely responsible for all matters relating to continuation of coverage pursuant to COBRA, including, without limitation, the election of such coverage and the timely payment of premiums. Executive shall notify the Company immediately if he becomes eligible to receive the equivalent or increased healthcare coverage by means of subsequent employment or self-employment; and

(e)In the event a "Change in Control" (as defined in the Offer Letter) occurs on or prior to September 4, 2021, Executive shall be eligible to receive the "CIC Severance Benefits" (as defined in the Offer Letter) in accordance with the terms of the Offer Letter to the extent such CIC Severance Benefits exceed the Termination Benefits provided pursuant to this Agreement (and subject to reduction for any Termination Benefits previously provided pursuant to this Agreement).

The Termination Benefits shall be the exclusive severance benefits to which Executive is entitled, unless Executive has breached the provisions of this Agreement, in which case Section 5(e) shall apply. Executive understands that Executive will not be entitled to the Termination Benefits under this Agreement if the Effective Date does not occur on or before the date that is sixty (60) days following the Termination Date, or in the event Executive breaches the terms of this Agreement. Executive acknowledges that, other than the compensation set forth in Section 2 above paid to him as provided therein and the Termination Benefits set forth in this Section 3, he has or will have received all wages, accrued but unused vacation or paid time off, and other benefits due him as a result of his employment or service with and termination from the Company.

4. Release.

(a) Executive agrees not to sue, or otherwise file any claim against, the Company or its parent companies, subsidiaries or affiliates, and any of their respective successors, assigns, directors, officers, managers, employees, attorneys, insurers, or agents, each in their respective capacities as such (collectively, the "***Company Parties***"), for any reason whatsoever based on anything that has occurred at any time up to and including the execution date of this Agreement as follows:

(i) On behalf of Executive and his executors, administrators, heirs and assigns, Executive hereby releases and forever discharge the Company Parties, and all persons acting by, through, under or in concert with them, or any of them, of and from any and all manner of action or actions, cause or causes of action, in law or in equity, suits, debts, liens, contracts, agreements, promises, liability, claims, demands, damages, loss, cost or expense, of any nature whatsoever, known or unknown, fixed or contingent (hereinafter called "***Claims***"), which Executive now has or may hereafter have against any of the Company Parties by reason of any matter, cause, or thing whatsoever from the beginning of time through and including the execution date of this Agreement, including, without limiting the generality of the foregoing: any Claims arising directly or indirectly out of, relating to, or in any other way involving in any manner whatsoever Executive's employment by the Company or its affiliates or the separation thereof, including without limitation any and all Claims arising under federal, state, or local laws relating to employment; any Claims of any kind that may be brought in any court or administrative agency; any Claims arising under the Age Discrimination in Employment Act, the Older Workers Benefits Protection Act, the Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1991, the Equal Pay Act, the Civil Rights Act of 1866, Section 1981, 42 U.S.C. § 1981, the Family and Medical Leave Act of 1993, the Americans

with Disabilities Act of 1990, the False Claims Act, the Employee Retirement Income Security Act, the Worker Adjustment and Retraining Notification Act, the Fair Labor Standards Act, the Sarbanes-Oxley Act of 2002, the National Labor Relations Act of 1935, the Uniformed Services Employment and Reemployment Rights Act of 1994, Fair Credit Reporting Act, New Jersey's Conscientious Employee Protection Act, the New Jersey Soldiers' and Sailors' Civil Relief Act, Millville Dallas Airmotive Plant Job Loss Notification Act, New Jersey Family Leave Act, New Jersey Law Against Discrimination, New Jersey Security and Financial Empowerment Act, New Jersey State Wage and Hour Law, New Jersey Paid Sick Leave Law, and New Jersey State Wage Payment Law, or any similar state law, each of the foregoing as may have been amended, and any other federal, state, or local statute, regulation, ordinance, constitution, or order concerning labor or employment, termination of labor or employment, wages and benefits, retaliation, leaves of absence, or any other term or condition of employment; Claims for breach of contract; Claims for unfair business practices; Claims arising in tort, including, without limitation, Claims of wrongful dismissal or discharge, discrimination, harassment, retaliation, fraud, misrepresentation, defamation, libel, infliction of emotional distress, violation of public policy, and/or breach of the implied covenant of good faith and fair dealing; and Claims for damages or other remedies of any sort, including, without limitation, compensatory damages, punitive damages, injunctive relief and attorney's fees.

(ii) Notwithstanding the generality of the foregoing, Executive does not release any Claims that cannot be released as a matter of law including, without limitation, (A) Executive's right to file for unemployment insurance benefits or any state disability insurance benefits pursuant to the terms of applicable state law; (B) Executive's right to file claims for workers' compensation insurance benefits under the terms of any worker's compensation insurance policy or fund of the Company; (C) Executive's right to file a charge of discrimination, harassment, interference with leave rights, failure to accommodate, or retaliation with the Equal Employment Opportunity Commission or any other federal, state or local government agency, or to cooperate with or participate in any investigation conducted by such agency; provided, however, that Executive hereby releases Executive's right to receive damages in any such proceeding brought by Executive or on Executive's behalf; (D) Executive's right to communicate directly with the U.S. Securities and Exchange Commission, the U.S. Commodity Futures Trading Commission, the U.S. Department of Justice or similar agency, or to cooperate with or participate in any investigation by such agency; or (E) Executive's right to make any disclosure that are protected under the whistleblower provisions of applicable law. For the avoidance of doubt, Executive does not need to notify or obtain the prior authorization of the Company to exercise any of the foregoing rights. Furthermore, Executive does not release hereby any rights that Executive may have relating to (x) indemnification by the Company or its affiliates under any indemnification agreement with the Company, the Company's Bylaws or any applicable law or under any applicable insurance policy with respect to Executive's liability as an employee of the Company; (y) Executive's vested accrued benefits under the Company's respective benefits and compensation plans; and (z) any Claims for breach of this Agreement.

(b) Executive acknowledges that he was presented with this Agreement on the Termination Date. Executive agrees that he has had at least twenty-one (21) calendar days in which to consider whether to execute the Agreement, no one hurried Executive into executing the Agreement during that period and no one coerced Executive into executing the Agreement. Executive understands that the Company's obligations under the Agreement will not become effective or enforceable until the eighth (8th) calendar day after the date Executive signs the Agreement provided that Executive has timely delivered it to the Company, and that in the seven (7) day period following the date Executive delivers a signed copy of the Agreement to the Company, Executive understands that Executive may revoke his acceptance of the Agreement. Executive understands that the Termination Benefits will become available to him at such time after the Effective Date as provided in this Agreement. Executive further understands that the offer of the Termination Benefits and this Agreement will expire in the event the Effective Date has not occurred on or before the sixtieth (60th) calendar day after the Termination Date.

(c) Executive represents and warrants that he is the sole owner of all Claims relating to his employment or service with the Company and/or with any predecessor of the Company and that he has not assigned or transferred any Claims relating to his employment or service to any other person or entity. Executive understands and agrees that the Agreement will not be construed at any time as an admission of liability or wrongdoing by either the Company or Executive.

5. Restrictive Covenants.

(a) Executive hereby expressly reaffirms his obligations under the Company's Proprietary Information and Inventions Assignment Agreement between Executive and the Company, which is attached hereto as Exhibit A and incorporated herein by reference ("***PIIA***"), and agrees that such obligations shall survive the Termination Date.

(b) Executive agrees that for one (1) year immediately following the Termination Date, Executive shall not interfere with the business of the Company by (i) soliciting or attempting to solicit any employee or consultant of the Company to terminate such employee's or consultant's employment or service in order to become an employee, consultant or independent contractor to or for any other person or entity or (ii) soliciting or attempting to solicit any vendor, supplier, customer or other person or entity either directly or indirectly, to direct his, her or its purchase of the Company's products and/or services to any person, firm, corporation, institution or other entity in competition with the business of the Company.

(c) Executive agrees that Executive will not make any negative or disparaging statements or comments about Company, its employees, officers, directors, shareholders, vendors, products or services, business, technologies, market position or performance. The Company agrees that it shall not, and shall cause its directors and executive officers not to, make any negative or disparaging statements or comments about Executive. Nothing in this Section 5(c) will prohibit Executive or the Company from providing truthful information in response to a subpoena or other legal process.

(d) By signing below, Executive represents and warrants that he has returned to the Company all Company documents (and all copies thereof) and other Company property that Executive had in his possession at any time, including but not limited to Company files, notes, drawings, records, business plans and forecasts, financial information, specification, computer-recorded information, tangible property (including, but not limited to, computers, laptops, pagers, etc.), credit cards, entry cards, identification badges and keys and any materials of any kind which contain or embody any proprietary or confidential information of Company (and all reproductions thereof). Executive understands that, even if Executive does not sign this Agreement, he is still bound by any and all confidential/proprietary/trade secret information, non-disclosure and inventions assignment agreement(s) signed by Executive in connection with his employment with Company, including the PIIA, pursuant to the terms of such agreement(s). Executive's compliance with this Section 5(d) shall be a condition to his receipt of the Termination Benefits.

(e) In addition to all other rights and remedies available to the Company under law or in equity, the Company shall be entitled to withhold all Termination Benefits from Executive in the event of his breach of this Section 5.

(f) Nothing herein shall be construed to prohibit Executive from communicating directly with, cooperating with, or providing information to, any government regulator, including, but not limited to, the U.S. Securities and Exchange Commission, the U.S. Commodity Futures Trading Commission, or the U.S. Department of Justice. Executive acknowledges that the Company has provided Executive with the following notice of immunity rights in compliance with the requirements of the Defend Trade Secrets Act: (i) Executive shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of proprietary information that is made in confidence to a Federal, State,

or local government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, (ii) Executive shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of proprietary information that is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal, and (iii) if Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the proprietary information to Executive's attorney and use the proprietary information in the court proceeding, if Executive files any document containing the proprietary information under seal, and does not disclose the proprietary information, except pursuant to court order.

(g) For purposes of this Section 5, the term "***Company***" means not only the Company, but also as any company, partnership or entity which, directly or indirectly, controls, is controlled by or is under common control with such entities.

6. Cooperation. As a condition of his receipt of the Termination Benefits, Executive agrees that, upon reasonable notice and without the necessity of Company obtaining a subpoena or court order, he will provide reasonable cooperation to Company in connection with any suit, action or proceeding (or any appeal from any suit, action or proceeding), or the decision to commence on behalf of the Company any suit, action or proceeding, any investigation and/or any defense of any claims asserted against the Company or any of the Company's current or former directors, officers, employees, partners, stockholders, agents or representatives of any of the foregoing, and any ongoing or future investigation or dispute or claim of any kind involving the Company that relates to events occurring during his employment as to which he may have relevant information and any other matter for which he was responsible or had knowledge of through the Termination Date. Such cooperation may include, but will not be limited to, providing background information within Executive's knowledge; aiding in the drafting of declarations; executing declarations or similar documents; testifying or otherwise appearing at investigation interviews, depositions, arbitrations or court hearings; and preparing for the above-described or similar activities. Upon the reasonable request of Company, Executive agrees to cooperate with the transition of his job responsibilities following the Termination Date and cooperate in providing information on matters on which he was involved while an employee.

7. Section 409A.

(a) To the extent applicable, this Agreement shall be interpreted in accordance with Section 409A of the Code and Department of Treasury regulations and other interpretive guidance issued thereunder. The intent of the parties is that payments and benefits under this Agreement comply with, or be exempt from Section 409A of the Code and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be in compliance with such intention. To the extent that any provision in this Agreement is ambiguous as to its compliance with or exemption from Section 409A of the Code, the provision shall be read in such a manner that no payments payable under this Agreement shall be subject to an "additional tax" as defined in Section 409A(a)(1)(B) of the Code. For purposes of Section 409A of the Code, any right to a series of installment payments under this Agreement shall be treated as a right to a series of separate payments.

(b)The parties acknowledge that the Termination Date will constitute the date of Executive's "separation from service" (as defined in Treasury Regulation Section 1.409A-1(h)) ("***Separation from Service***").

(c)If Executive is a "specified employee" (as defined in Section 409A of the Code), as determined by the Company in accordance with Section 409A of the Code, on the Termination Date, to the extent that the payments or benefits under this Agreement are "non-qualified deferred compensation" subject to Section 409A of the Code and the delayed payment or distribution of all or any portion of such

amounts to which Executive is entitled under this Agreement is required in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, then such portion deferred pursuant to this Section 8(c) shall be paid or distributed to Executive in a lump sum on the earlier of (i) the date that is six (6) months and one day following Executive's Separation from Service, (ii) the date of Executive's death, or (iii) the earliest date as is permitted under Section 409A of the Code. Any remaining payments due under this Agreement shall be paid as otherwise provided herein.

(d) Any reimbursement of expenses or in-kind benefits payable under this Agreement shall be made in accordance with Treasury Regulation Section 1.409A-3(i)(1)(iv) and shall be paid on or before the last day of Executive's taxable year following the taxable year in which Executive incurred the expenses. The amount of expenses reimbursed or in-kind benefits payable in one year shall not affect the amount eligible for reimbursement or in-kind benefits payable in any other taxable year of Executive's, and Executive's right to reimbursement for such amounts shall not be subject to liquidation or exchange for any other benefit.

9. Arbitration and Venue. Executive and the Company agree that any and all disputes, claims, and causes of action, in law or equity, in any way arising out of or relating to the terms of this Agreement, Executive's employment relationship with the Company, or the termination of Executive's employment with the Company, shall be resolved, to the fullest extent permitted by law, by final, binding and confidential arbitration in the State of New Jersey, conducted before a single neutral arbitrator selected and administered in accordance with the employment arbitration rules & procedures or then applicable equivalent rules of JAMS (the "***JAMS Rules***") and the Federal Arbitration Act, 9 U.S.C. Sec. 1, et seq. A copy of the JAMS Rules may be found on the JAMS website at www.jamsadr.com and will be provided to Executive by the Company upon request. Judgment may be entered on the arbitrator's award in any court having jurisdiction. Nothing in this Section 9 is intended to prevent either Executive or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. For purposes of settling any dispute or controversy arising hereunder or for the purpose of entering any judgment upon an award rendered by the arbitrator, the Company and Executive hereby consent to the jurisdiction of any or all of the following courts: (i) the United States District Court for the District of New Jersey or (ii) any of the courts of the State of New Jersey. The Company and Executive hereby waive, to the fullest extent permitted by applicable law, any objection which it or he may now or hereafter have to such courts' jurisdiction and any defense of inconvenient forum with respect to such courts. The Company and Executive hereby agree that a judgment upon an award rendered by the arbitrator may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. This Section 9 shall not apply to any claims of violation of any federal or state employment discrimination laws. BY AGREEING TO THIS ARBITRATION PROCEDURE, EXECUTIVE AND THE COMPANY WAIVE THE RIGHT TO RESOLVE ANY SUCH DISPUTE, CLAIM OR DEMAND THROUGH A TRIAL BY JURY OR JUDGE OR BY ADMINISTRATIVE PROCEEDING IN ANY JURISDICTION.

10. Notices. All notices or other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given when delivered personally or one (1) business day after being sent by a nationally recognized overnight delivery service, charges prepaid. Notices also may be given electronically via PDF and shall be effective on the date transmitted if confirmed within forty-eight (48) hours thereafter by a signed original sent in the manner provided in the preceding sentence. Notice to Executive shall be sent to his most recent residence and personal email address on file with the Company. Notice to the Company shall be sent to its physical address set forth on the first page hereto and addressed to the Chief Administrative Officer at the email address provided by the Company for such person.

11. Entire Agreement. This Agreement, the PIIA and the Stock Option Agreements (to the extent governing the Accelerated Equity) constitute the entire agreement and understanding between the

parties as to the subject matter herein and supersede all prior or contemporaneous agreements whether written or oral, including, without limitation, the Offer Letter (except as expressly provided in Section 3(e) above). The invalidity or unenforceability of any provision or provisions of this Agreement will not affect the validity or enforceability of any other provision hereof, which will remain in full force and effect. The terms in this Agreement may only be modified in writing and signed by Executive and an authorized officer of the Company. In the event of any conflict between any of the terms in this Agreement and the terms of any other agreement between Executive and the Company, the terms of this Agreement will control.

12. Severability. Should any provision of the Agreement be determined by an arbitrator, court of competent jurisdiction or government agency to be wholly or partially invalid or unenforceable, the legality, validity and enforceability of the remaining parts, terms or provisions are intended to remain in full force and effect. Specifically, should a court, arbitrator or agency conclude that a particular claim may not be released as a matter of law, it is the intention of the parties that the general release and the waiver of unknown claims above will otherwise remain effective to release any and all other claims. Executive acknowledges that he has obtained sufficient information to intelligently exercise his own judgment regarding the terms of the Agreement before executing the Agreement.

13. Governing Law. This Agreement will be governed by and construed in accordance with the laws of the United States of America and the State of New Jersey applicable to contracts made and to be performed wholly within such State, and without regard to the conflicts of laws principles thereof.

14. Non-transferability of Interest. None of the rights of Executive to receive any form of compensation payable pursuant to this Agreement shall be assignable or transferable except through a testamentary disposition or by the laws of descent and distribution upon the death of Executive. Any attempted assignment, transfer, conveyance, or other disposition (other than as aforesaid) of any interest in the rights of Executive to receive any form of compensation to be made by the Company pursuant to this Agreement shall be void.

15. Construction. The language in all parts of this Agreement shall in all cases be construed simply, according to its fair meaning, and not strictly for or against any of the parties hereto. Without limitation, there shall be no presumption against any party on the ground that such party was responsible for drafting this Agreement or any part thereof. Where the context so requires, the use of the masculine gender shall include the feminine and/or neuter genders and the singular shall include the plural, and vice versa, and the word "person" shall include any corporation, firm, partnership or other form of association.

16. Withholding and Other Deductions. All compensation payable to Executive hereunder shall be subject to such deductions as the Company is from time to time required to make pursuant to law, governmental regulation or order.

17. Knowing and Voluntary. Executive represents and agrees that, prior to signing this Agreement, Executive has had the opportunity to discuss the terms of this Agreement with legal counsel of his choosing. Executive further represents and agrees that he is entering into this Agreement knowingly and voluntarily. Executive affirms that no promise was made to cause him to enter into this Agreement, other than what is promised in this Agreement. Executive further confirms that he has not relied upon any other statement or representation by anyone other than what is in this Agreement as a basis for his agreement. Executive acknowledges and agrees that neither the Company nor the Company's counsel has provided any legal or tax advice to Executive and that Executive is free to, and is hereby advised to, consult with a legal or tax advisor of his choosing.

18. Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one instrument. Execution and delivery of this Agreement by facsimile or other electronic signature is legal, valid and binding for all purposes.

[Signature page follows]

EXECUTIVE'S ACCEPTANCE OF AGREEMENT

BEFORE SIGNING HIS NAME TO THIS AGREEMENT, EXECUTIVE STATES THE FOLLOWING: EXECUTIVE HAS READ THE AGREEMENT, HE UNDERSTANDS IT AND HE KNOWS THAT HE IS GIVING UP IMPORTANT RIGHTS. HE HAS OBTAINED SUFFICIENT INFORMATION TO INTELLIGENTLY EXERCISE HIS OWN JUDGMENT. HE HAS BEEN ADVISED THAT HE SHOULD CONSULT WITH AN ATTORNEY BEFORE SIGNING IT, AND HE HAS SIGNED THE AGREEMENT KNOWINGLY AND VOLUNTARILY.

Executed this 22nd day of June, 2021.
/s/ Todd Branning
Todd Branning

Agreed and Accepted

Phathom Pharmaceutical Inc.

/s/ Joe Hand
By: Joe Hand
Title: Chief Administrative Officer

Date: 23 June, 2021

Exhibit A

Proprietary Information and Inventions Assignment Agreement

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED FROM THIS EXHIBIT BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE REGISTRANT IF PUBLICLY DISCLOSED. THE OMISSIONS HAVE BEEN INDICATED BY "[***]."

EXECUTION VERSION

COMMERCIAL SUPPLY AGREEMENT
((Vonoprazan Fumarate) finished packaged tablets)

This Commercial Supply Agreement ("**Agreement**") is made as of this 30th day of June 2021 ("**Effective Date**"), by and between Phathom Pharmaceuticals, Inc., an Illinois company, with a place of business at 2150 E. Lake Cook Road, Suite 800 Buffalo Grove, Illinois 60089, USA ("**Client**"), and Catalent Pharma Solutions, LLC, a Delaware limited liability company, having a place of business at 14 Schoolhouse Road, Somerset, New Jersey 08873, USA ("**Catalent**").

RECITALS

A. Client is a company that develops, markets and sells pharmaceutical products;

B. Catalent is a leading provider of advanced technologies, and development, manufacturing and packaging services for pharmaceutical, biotechnology and consumer healthcare companies; and

C. Client desires to engage Catalent to provide certain services to Client in connection with the Processing of Client's Product, and Catalent desires to provide such services, all pursuant to the terms and conditions set forth in this Agreement.

THEREFORE, in consideration of the mutual covenants, terms and conditions set forth below, the parties agree as follows:

ARTICLE 1
DEFINITIONS

The following terms have the following meanings in this Agreement:

1.1 "**Acknowledgement**" has the meaning set forth in Section 4.2(B).

1.2 "**Affiliate(s)**" means to any individual, corporation, partnership, limited liability company, association, trust, unincorporated entity, or other legal entity (each a "**Person**"), any other Person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with such Person. For the purposes of this definition, "**control**" (including, with correlative meanings, "controlled by" and "under common control with") shall mean possession, directly or indirectly, of the power to direct the management and policies of a Person, whether through ownership of at least fifty percent (50%) of the voting interest in such Person, through contract, or otherwise.

1.3“**Agreement**” has the meaning set forth in the introductory paragraph and includes all its Attachments and other appendices (all of which are incorporated herein by reference) and any amendments to any of the foregoing made as provided herein or therein.

1.4 “**API**” means the compound Vonoprazan Fumarate, as further described in the Specifications.

1.5 “**Applicable Laws**” means, with respect to Client, all laws, ordinances, rules and regulations, currently in effect or enacted or promulgated during the Term, and as amended from time to time, of each jurisdiction in which API, Bulk Product, or Product is produced, packaged, marketed, distributed, used or sold, together with all policies, practices, protocols, standards or guidelines of any Regulatory Authority having jurisdiction over Client or Product in such jurisdiction which, although not necessarily having the force of law, are regarded by such Regulatory Authority as requiring compliance as if they had the force of law; and with respect to Catalent, (a) all laws, ordinances, rules and regulations applicable to the services conducted under this Agreement or otherwise bearing on the performance of this Agreement, and the relevant Purchase Order, currently in effect or enacted or promulgated during the Term, and as amended from time to time, of the jurisdiction in which Catalent Processes Product, and (b) cGMP (as defined below) and other regulatory standards or requirements of Regulatory Authorities.

1.6 “**Batch**” means a defined quantity, mutually agreed to by the parties in writing, of Product that has been or is being Processed in accordance with Applicable Laws and the Specifications, as further set forth in Attachment C.

1.7 “**Bulk Product**” means the bulk pharmaceutical product containing the API, as more specifically described in the Specifications.

1.8 “**Business Day**” means a day other than Saturday, Sunday or any other day on which commercial banks located in New York, New York, USA are authorized or obligated by Applicable Law to close.

1.9 “**Catalent**” has the meaning set forth in the introductory paragraph, or any successor or permitted assign.

1.10 “**Catalent Defective Processing**” has the meaning set forth in Section 5.2.

1.11 “**Catalent Indemnitees**” has the meaning set forth in Section 13.2.

1.12 “**Catalent IP**” has the meaning set forth in Section 11.1.

1.13 “**cGMP**” means current Good Manufacturing Practices promulgated by the Regulatory Authorities in (a) the jurisdictions included in Applicable Laws, and (b) jurisdictions within the Territory where the respective final Products are sold or otherwise marketed provided that Catalent is informed about such territories in accordance with the Quality Agreement. In the United States, this includes 21 C.F.R. Parts 210 and 211, as amended; and in Europe, this includes 2003/94/EEC Directive (as supplemented by Volume 4 of EudraLex published by the European Commission), as amended, if and as implemented in the relevant constituent country.

1.14 "**Client**" has the meaning set forth in the introductory paragraph, or any successor or permitted assign.

1.15 "**Client Indemnitees**" has the meaning set forth in Section 13.1.

1.16 "**Client Inventions**" has the meaning set forth in Section 11.1.

1.17 "**Client IP**" has the meaning set forth in Section 11.1.

1.18 "**Client-supplied Materials**" means any materials to be supplied by or on behalf of Client to Catalent for Processing, as provided in Attachment B, including API, Bulk Product, and reference standards.

1.19"**Commencement Date**" means the first date on which Catalent is scheduled to deliver (pursuant to Section 6.1) to Client Product intended for commercial sale, excluding validation Batches.

1.20 "**Contract Year**" means each consecutive twelve (12)-month period beginning on the first day of the calendar quarter in which the Commencement Date falls, or anniversary thereof, as applicable.

1.21 "**Defective Product**" has the meaning set forth in Section 5.2.

1.22 "**Effective Date**" has the meaning set forth in the introductory paragraph.

1.23 "**Europe**" means Albania, Andorra, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Monaco, Montenegro, Netherlands, North Macedonia (former Yugoslavic Republic of Macedonia), Norway, Poland, Portugal, Romania, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, and Vatican City (Holy See) and any other countries notified by Client in writing from time to time.

1.24 "**Exception Notice**" has the meaning set forth in Section 5.2.

1.25 "**Facility**" means Catalent's facility located in **[***]** and/or **[***]**; or such other facility as agreed by the parties in writing.

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

1.27 "**Firm Commitment**" has the meaning set forth in Section 4.1.

1.28 "**Invention**" has the meaning set forth in Section 11.1.

1.29 "**Losses**" has the meaning set forth in Section 13.1.

1.30 "**Package**" or "**Packaging**" or "**Packaged**" means the primary and/or secondary packaging of Bulk Product in accordance with the Specifications.

1.31 "**Process**" or "**Processing**" means the compounding, filling or pressing, producing and bulk packaging and Packaging of Client-supplied Materials and Raw Materials into Bulk Product or Packaged Product by Catalent, in accordance with Applicable Laws, the Quality Agreement, the Specifications, any instructions provided by Client, and under the terms of this Agreement, as well as any testing or quality-related activities required by this Agreement or the Quality Agreement in connection with the foregoing.

1.32 "**Processing Date**" means the day on which the first step of physical Processing of a Batch is scheduled to occur, as identified in an Acknowledgement.

1.33 "**Process Inventions**" has the meaning set forth in Section 11.1.

1.34 "**Product**" means the Bulk Product that has been Processed.

1.35 "**Product Maintenance Services**" has the meaning set forth in Section 2.3.

1.36 "**Purchase Order**" has the meaning set forth in Section 4.2(A).

1.37 "**Quality Agreement**" has the meaning set forth in Section 9.6.

1.38 "**Raw Materials**" means all raw materials, supplies, components and packaging necessary to Process and ship Product in accordance with the Specifications, as provided in Attachment B, but excluding Client-supplied Materials.

1.39 "**Recall**" has the meaning set forth in Section 9.5.

1.40 "**Regulatory Approval**" means any approvals, permits, product and/or establishment licenses, registrations or authorizations, including approvals pursuant to U.S. Investigational New Drug Applications, New Drug Applications and Abbreviated New Drug Applications, as applicable, of any Regulatory Authorities that are necessary or advisable in connection with the development, manufacture, testing, use, storage, exportation, importation, transport, promotion, marketing, distribution or sale of API, Bulk Product, or Product in the Territory.

1.41 "**Regulatory Authority**" means the international, federal, state or local governmental or regulatory bodies, agencies, departments, bureaus, courts or other entities in the Territory that are responsible for (A) the regulation (including pricing) of any aspect of pharmaceutical or medicinal products intended for human use or (B) health, safety or environmental matters generally. In the United States, the term Regulatory Authority shall include the FDA, and in Europe, the term Regulatory Authority shall include the EMA.

1.42 "**Representatives**" of an entity mean such entity's duly-authorized officers, directors, employees, agents, accountants, attorneys or other professional advisors.

1.43 "**Review Period**" has the meaning set forth in Section 5.2.

1.44 "**Rolling Forecast**" has the meaning set forth in Section 4.1.

1.45 "**Specifications**" means the approved procedures, requirements, manufacturing instructions, standards, quality control testing and other data and the scope of services, the current

version of which is set forth in Attachment B, which version will be finalized pursuant to the Quality Agreement prior to performance of the Validation Services. Once finalized, the Specifications may be modified from time to time in accordance with Article 8 and the Quality Agreement.

1.46 "**Term**" has the meaning set forth in Section 16.1.

1.47"**Territory**" means United States, Europe and Canada, and any other country that the parties agree in writing to add to this definition of Territory in an amendment to this Agreement, except shall not include countries that are targeted by the comprehensive sanctions, restrictions or embargoes administered by the United Nations, European Union, United Kingdom, or the United States. Catalent shall not be obliged to Process Products for sale in any of such countries if it is prevented from doing so, or would be required to obtain or apply for special permission to do so, due to any restrictions (such as embargoes) imposed on it by any governmental authorities, including without limitation those imposed by the U.S. Office of Foreign Asset Control.

1.48 "**Unit Pricing**" has the meaning set forth in Section 7.1(B).

1.49 "**Validation Services**" has the meaning set forth in Section 2.1.

1.50 "**Vendor**" has the meaning set forth in Section 3.2(B).

ARTICLE 2
VALIDATION, PROCESSING & RELATED SERVICES

2.1 Validation Services. Catalent shall perform the Product qualification, validation and stability services pursuant to a validation services plan substantially in accordance with the services described in Attachment A (the "**Validation Services**"), which plan shall be finalized promptly following the Effective Date. The Validation Services shall be performed in accordance with the Specifications, Applicable Laws and the terms and conditions of this Agreement.

2.2 Supply and Purchase of Product. Catalent shall Process Product in accordance with the Specifications, Applicable Laws and the terms and conditions of this Agreement. During each of the **[***]**, Client and its Affiliates shall purchase from Catalent no less than **[***]** of all of Client's and its Affiliates' requirements of Product **[***]**; provided that the foregoing shall cease to apply commencing on the first date of any Failure to Supply. During the **[***]**, Client and its Affiliates shall purchase from Catalent no less than **[***]** of all of Client's and its Affiliates' requirements of Product **[***]**; provided that the foregoing percentage will be increased to **[***]** if Catalent **[***]**; and provided further that the foregoing shall cease to apply commencing on the first date of any Failure to Supply. For the avoidance of doubt, neither Client nor its Affiliates shall market or sell the Product outside of the Territory.

Each party shall have the right to cause any of its Affiliates to perform any of its obligations, or exercise some or all of its rights, hereunder, and the other party shall accept such performance as if it were performance by such party. In each such case, the party permitting such delegation or exercise by such Affiliate shall remain responsible for and be guarantor of the performance by such Affiliate. Each party shall each cause its respective Affiliates to comply with the provisions of this Agreement in connection with such performance or exercise. In such event, each reference

to a party in this Agreement shall be deemed to include a reference to each Affiliate engaged in such performance or exercise.

A. Alternative Source of Supply. The parties will discuss appropriate methods to ensure consistency of supply of the Product for the Territory, including completing the qualification, at Client's cost, of (i) a secondary facility in the Catalent network and/or (ii) a third-party site outside the Catalent network as an alternate source of supply if there is a Failure to Supply by Catalent and the primary Catalent Facility cannot supply the Product. For avoidance of doubt, Client shall have the right to qualify a third party as an alternate source of supply of the Product at any time during the Term.

B. Failure of Supply. A "**Failure to Supply**" shall occur if at any time during the Term Catalent: (i) during any single Contract Year **[***]**, delivers Product pursuant to a Purchase Order **[***]**, or (ii) at any time during the Term, is unable to deliver Product pursuant to a Purchase Order **[***]**. Once the parties mutually agree that the Catalent Facility is able to supply Product again, Client shall cease issuing purchase orders for Product from any third party alternate supplier, within a commercially reasonable period of time and in no event later than **[***]**. Notwithstanding anything in this Agreement to the contrary, Catalent shall not be required to transfer any Catalent Confidential Information or other confidential or proprietary materials or information of Catalent to any third party. Notwithstanding the foregoing, Client shall not be entitled to exercise the remedies in this Section 2.2(B) or terminate this Agreement in accordance with the terms of this Agreement, upon Catalent's inability to supply Product as a result of **[***]**.

2.3 Product Maintenance Services. Client will receive the following product maintenance services (the "**Product Maintenance Services**"): one (other than for-cause audits) annual audit (as further described in Section 9.4); regulatory inspections (as further described in Section 9.3); one annual Product review (within the meaning of 21 CFR § 211.180); drug master file updates for the Territory, if applicable; access to document library over and above the Quality Agreement, including additional copies of Batch paperwork or other Batch documentation; assistance in preparing Regulatory submissions; Product document and sample storage relating to cGMP requirements; vendor re-qualification; maintenance, updates and storage of master Batch records and audit reports. For avoidance of doubt, the following services and items are not included in Product Maintenance **[***]**.

2.4 Other Related Services. Catalent shall provide such Product-related services, other than Validation Services, Processing or Product Maintenance Services, as agreed to in writing by the parties from time to time. Such writing shall include the scope and fees for any such services and be appended to this Agreement. The terms and conditions of this Agreement shall govern and apply to such services.

ARTICLE 3
MATERIALS

3.1 Client-supplied Materials.

A. Client shall supply to Catalent for Processing, at Client's cost (except as otherwise set forth in this Agreement), all Client-supplied Materials, in quantities sufficient to meet Client's Purchase Orders for Product under this Agreement. Client shall deliver such items and associated

certificates of analysis to the Facility no later than **[***]** before the delivery date for the applicable Products agreed in the Acknowledgement (as defined in Section 4.3(B)). Client shall be responsible at its expense for securing any necessary DEA, export or import, similar clearances, permits or certifications required in respect of such supply. Catalent shall use such items solely for Processing. Prior to delivery of any such items, Client shall provide to Catalent a copy of all associated material safety data sheets, safe handling instructions and health and environmental information and any regulatory certifications or authorizations relating to such Client-supplied Materials that may be required under Applicable Laws for Processing of Product under this Agreement, and shall promptly provide any updates thereto.

B. Within **[***]** after receipt of Client-supplied Materials **[***]**, Catalent shall **[***]** to confirm that they meet the associated specifications or certificate of analysis or otherwise. Thereafter during the Term, within **[***]** after receipt of Client-supplied Materials, Catalent shall inspect such items to **[***]**. Notwithstanding anything to the contrary in this Section 3.1, Catalent shall **[***]**, as required under Applicable Law. Except as set forth in this Section 3.1(B), above, unless otherwise expressly required by the Specifications, Catalent shall have no obligation to test such items to confirm that they meet the associated specifications or certificate of analysis or otherwise. In the event that Catalent detects a nonconformity with Specifications, Catalent shall give Client prompt written notice of such nonconformity. Catalent shall not be liable for any defects in Product as a result of defective Client-supplied Materials, unless Catalent failed to properly perform any of the foregoing obligations or caused such defects. Catalent shall follow Client's reasonable written instructions in respect of return or disposal of defective Client-supplied Materials, at Client's reasonable cost.

C. Client shall retain title to Client-supplied Materials at all times and shall bear the risk of loss thereof except to the extent caused by Catalent, subject to Article 14. Within **[***]** after the end of each month during the Term, Catalent shall provide a monthly report (in a form mutually agreed upon by the parties) identifying, on a component-by-component basis for each item of Client-supplied Materials, **[***]** (such aggregate amount in clause (ii) is referred to herein as the "**Pre-Processing Losses**"). In the event that, during any such calendar month, the Pre-Processing Losses **[***]**, as reflected on the monthly report for such month, Catalent shall promptly credit to Client the value of such Pre-Processing Losses, which shall be applied to subsequent Purchase Orders under this Agreement.

D. The parties shall determine target yield of API supplied by Client for Processing of Bulk Product **[***]** (each such determined yield, the "**Calculated Bulk Product Target Yield**"). Catalent shall use reasonable efforts to minimize waste and loss of API and Bulk Product. Notwithstanding anything to the contrary in this Section 3.1, in no event shall the actual yield for Bulk Product be **[***]**. In addition, Catalent shall Process at least **[***]** (the "**Packaged Product Target Yield**", and together with the Calculated Bulk Product Target Yield, the "**Target Yield**"). Catalent shall bear any and all costs and expenses in connection with any failure to meet **[***]**. Catalent shall use commercially reasonable efforts to improve yields in the Processing. From time to time, the parties shall meet to discuss and set targets and goals of yield improvements. Within **[***]** following the end of each Contract Year, Catalent shall provide a written report of Catalent's actual yield for such Contract Year. Catalent shall include with such report any reasonable documentation in support of the actual yield. If the actual yield for all Batches of Product during any applicable Contract Year is **[***]**, Catalent's sole liability and Client's exclusive remedy for such shortfall in the actual yield shall be **[***]**.

E. Within **[***]**, Catalent shall provide a written report (in form and substance as mutually agreed upon by the parties) documenting and identifying, on a component-by-component basis for each item listed on Attachment D, for such Contract Year, the yield loss (the "**Annual Loss Report**"), and calculating the aggregate amount thereof. To the extent that such aggregate amount in such report is **[***]**and Catalent has not previously credited such amount pursuant to Section 3.1(C), Catalent shall promptly credit to Client the aggregate value of all yield losses for the Contract Year, which shall be applied to subsequent Purchase Orders under this Agreement; provided, however, that in the event such credit is not sufficient to offset against subsequent Purchase Orders prior to or after expiration of the Term or earlier termination of this Agreement, Catalent shall pay the balance of such excess within **[***]** after delivery of the written report provided by Client pursuant to this Section 3.1(E).

3.2 Raw Materials.

A. Catalent shall be responsible for procuring, inspecting and releasing adequate Raw Materials as necessary to meet the Firm Commitment unless otherwise agreed to by the parties in writing. Catalent shall not be liable for any delay in delivery of Product if (i) Catalent is unable, despite using reasonable efforts, to obtain, in a timely manner, a particular Raw Material necessary for Processing of such Product; (ii) due to reasons outside of Catalent's reasonable control, provided that Catalent placed orders for such Raw Materials promptly following receipt of Client's Firm Commitment; and (iii) Client-requested label changes result in lead time delay. In the event that any Raw Material becomes subject to purchase lead time beyond the Firm Commitment time frame, the parties will negotiate in a commercially reasonable manner an appropriate amendment to this Agreement, including Section 4.2.

B. In certain instances, Client may require a specific supplier, manufacturer or vendor ("**Vendor**") to be used for Raw Material. In such an event, (i) such Vendor will be identified in the Specifications and (ii) if such Vendor has not previously been qualified by Catalent for the supply of the specified Raw Material, the Raw Materials from such Vendor shall be deemed Client-supplied Materials for purposes of this Agreement; provided, however, Catalent shall remain responsible for procuring, inspecting and releasing such Raw Material as described in Section 3.2(A), unless otherwise agreed to by the parties in writing. If the cost (as pre-approved in writing by Client) of the Raw Material from any such Vendor is greater than Catalent's costs for the same Raw Material of equal quality from other vendors, Catalent shall add the difference between Catalent's cost of the Raw Material and the Vendor's cost of the Raw Material to the Unit Pricing. Client will be responsible for all costs (as pre-approved in writing by Client) associated with qualification of any such Vendor who has not been previously qualified by Catalent.

C. In the event of (i) a Specification change for any reason, (ii) obsolescence of any Raw Material or (iii) termination or expiration of this Agreement, for any reason other than by Client pursuant to Section 16.2(A) or (B), Client shall bear the cost of any unused Raw Materials (including packaging), so long as Catalent purchased such Raw Materials in quantities consistent with Client's most recent Firm Commitment and the vendor's minimum purchase obligations and Catalent delivers such Raw Materials to Client or Client's designee.

3.3 Artwork and Labeling. Client shall provide or approve, prior to the procurement of applicable Raw Material, all artwork, advertising and labeling information necessary for Processing, if any. Such artwork, advertising and labeling information is and shall remain the

exclusive property of Client, and Client shall be solely responsible for the content thereof. Such artwork, advertising and labeling information or any reproduction thereof may not be used by Catalent in any manner other than performing its obligations hereunder. The parties acknowledge that delays with respect to the approval of artwork and labeling may result in the revision of the delivery date.

ARTICLE 4
PURCHASE ORDERS & FORECASTS

4.1 Forecast. On or before the **[***]**, Client shall furnish to Catalent a written **[***]** rolling forecast of the quantities of Product that Client intends to order from Catalent during such period ("**Rolling Forecast**"). The first **[***]** of such Rolling Forecast shall constitute a binding (on each of the parties) order for the quantities of Product specified therein ("**Firm Commitment**") and the following **[***]** of the Rolling Forecast shall be non-binding, good faith estimates.

4.2 Purchase Orders.

A. From time to time as provided in this Section 4.3(A), Client shall submit to Catalent a binding, non-cancelable purchase order for Product specifying the number of Batches to be Processed, the Batch size (to the extent the Specifications permit Batches of different sizes) and the requested delivery date for each Batch ("**Purchase Order**"). Concurrently with the submission of each Rolling Forecast, Client shall submit a Purchase Order for the Firm Commitment. Purchase Orders for quantities of Product in excess of the Firm Commitment shall be submitted by Client at least **[***]** in advance of the delivery date requested in the Purchase Order.

B. Promptly (but not later than **[***]**) following receipt of a Purchase Order, Catalent shall issue a written acknowledgement ("**Acknowledgement**") that it accepts or rejects such Purchase Order. Each acceptance Acknowledgement shall either confirm the delivery date set forth in the Purchase Order or set forth a reasonable alternative delivery date (such date not to be later than **[***]** after the delivery date set forth in such Purchase Order), provided the Client-supplied Materials have been provided to Catalent **[***]** prior to the delivery date and the Purchase Order is not in excess of the Firm Commitment, and shall include the delivery date. Subject to Section 4.3(C), Catalent may reject any Purchase Order in excess of the Firm Commitment or otherwise not given in accordance with this Agreement. Catalent shall accept any Purchase Orders that are consistent with the Firm Commitment and Section 4.3(C).

C. Notwithstanding Section 4.3(B), Catalent shall supply Client with, and shall use commercially reasonable efforts to supply Client in excess of, quantities of Product which are up to **[***]** of the quantities specified in the Firm Commitment, subject to Catalent's other supply commitments and manufacturing, packaging and equipment capacity.

D. In the event of a conflict between the terms of any Purchase Order or Acknowledgement and this Agreement, the terms of this Agreement shall control.

4.3 Catalent's Cancellation of Purchase Orders. Notwithstanding Section 4.4, if Client refuses or fails to timely supply conforming Client-supplied Materials in accordance with Section 3.1 to the extent required for Catalent's Processing of amounts set forth in a Purchase Order, Catalent reserves the right to cancel all, or any part of, such Purchase Order upon written notice to Client,

and Catalent shall have no further obligations or liability with respect to such Purchase Order. Any such cancellation of Purchase Orders shall not constitute a breach of this Agreement by Catalent.

4.4 Client's Modification or Cancellation of Purchase Orders.

A. Client may modify the delivery date or quantity of Product in a Purchase Order only by submitting a written change order to Catalent at least **[***]** in advance of the earliest delivery date covered by such change order. Such change order shall be effective and binding against Catalent only upon the written approval of Catalent, and notwithstanding the foregoing, Client shall remain responsible for the Firm Commitment.

B. if Client fails to place Purchase Orders sufficient to satisfy the Firm Commitment, Catalent shall notify Client of such deficiency, and Client shall have **[***]** after receipt of such notice to submit any missing Purchase Orders (or shortfall portions thereof). In the event that Client still fails to submit Purchase Orders to satisfy the Firm Commitment within such **[***]** period, Client shall remain obligated to pay to Catalent in accordance with Article 7 the Unit Pricing for all Units that would have been Processed if Client has placed Purchase Orders sufficient to satisfy the Firm Commitment except to the extent Client's failure to submit such Purchase Orders to satisfy the Firm Commitment is the result of Catalent's inability to perform under such Purchase Orders or is otherwise caused by Catalent, or Catalent is able to use the Raw Materials, labor, and capacity that it would have used to perform under such Purchase Orders for services performed for Persons other than Client.

4.5 Unplanned Delay or Elimination of Processing. Catalent shall fill all Purchase Orders, subject to the terms and conditions of this Agreement. If Catalent determines that any Processing will be delayed or eliminated for any reason, Catalent shall notify Client with as much advance notice as practicable, but in no event later than **[***]** after such determination.

4.6 Observation of Processing. In addition to Client's audit right pursuant to Section 2.3 or 9.4, Client may send up to **[***]** Representatives to a Facility to observe the performance of Processing activities relating to this Agreement for **[***]**, per calendar year (unless otherwise agreed by Catalent in writing), upon at least **[***]**, at reasonable times during regular business hours. Such Representatives shall abide by all Catalent safety rules and other applicable employee policies and procedures, and Client shall be responsible for such compliance. Client shall indemnify and hold harmless Catalent for any action, omission or other activity of such Representatives while on Catalent's premises as set forth in Section 13.2. Client's Representatives who are not employees of Client shall be required to sign Catalent's standard visitor confidentiality agreement prior to being allowed access to the Facility.

ARTICLE 5
TESTING; SAMPLES; RELEASE

5.1 Batch Release. Within **[***]** after Catalent completes Processing of a Batch, Catalent shall provide Client with copies of Batch records prepared in accordance with the Specifications; provided that, if testing reveals an out-of-Specification result, or process deviation discovered during review, Catalent shall provide such Batch records within **[***]** following resolution of the out-of-Specification result or deviation. After Catalent completes Processing of a Batch, Catalent shall also provide Client or its designee with Catalent's certificate of analysis and certificate of

compliance, and any other documents required pursuant to the Quality Agreement, including Batch records and deviation reports, for such Batch. Issuance by Catalent, and Client's signed acknowledgment and acceptance, of a certificate of compliance and any other documents required pursuant to the Quality Agreement, including Batch records and deviation reports, constitutes release of the Batch by Catalent to Client (subject to Section 5.2 and 5.4). Client shall be responsible for final release of Product to the market (including any additional testing, as applicable), at its cost.

5.2 Testing; Rejection. No later than **[***]** after receipt of the Batch and the certificate of analysis and certificate of compliance and any other documents required pursuant to the Quality Agreement, including Batch records and deviation reports, for such Batch ("**Review Period**"), Client or its designee shall notify Catalent whether the Batch conforms to Specifications. Upon receipt of notice from Client that a Batch meets Specifications, or upon failure of Client to respond by the end of the Review Period, the Batch shall be deemed accepted by Client and Client shall have no right to reject such Batch, *provided, however,* Client may revoke its acceptance after the expiration of the Review Period but before the date that is **[***]**, if Client discovers Defective Product that could not have been reasonably discovered or detected by Client through its reasonable testing or inspection of the Product upon delivery and provides an Exception Notice to Catalent within **[***]** of Client's discovery of such Defective Product. If Client or its designee timely notifies Catalent in writing (an "**Exception Notice**") that a Batch does not conform to the Specifications or otherwise does not meet the warranty set forth in Section 12.1 ("**Defective Product**"), and provides a sample of the alleged Defective Product, Catalent shall conduct an appropriate investigation in its discretion to determine whether or not it agrees with Client that Product is Defective Product and to determine the cause of any nonconformity. If the cause of nonconformity is attributable to Catalent's material breach of this Agreement or negligence or willful misconduct ("**Catalent Defective Processing**"), then Section 5.4 shall apply. For avoidance of doubt, where the cause of nonconformity cannot be determined or assigned, it shall be deemed not Catalent Defective Processing. In the event a series of failures to meet Specifications or in-process requirements occurs during a production campaign, Client has the authority to request a halt in production until the root cause and a mutually agreeable resolution is found and necessary mitigation steps taken in accordance with the Quality Agreement to reasonably assure continuation will not replicate the original events or create new ones.

5.3 Discrepant Results. If the parties disagree as to whether Product is Defective Product or whether the cause of the nonconformity is Catalent Defective Processing, and this is not resolved within **[***]** of the Exception Notice date, the parties shall escalate discussions to the appropriate level of management. Such escalation of discussions will occur within **[***]** following the Exception Notice. Resolution of such disputes that cannot be resolved after good-faith discussions between the parties shall be resolved by an independent third-party laboratory or consultant, mutually agreed upon by the parties, within **[***]** of the Exception Notice as set forth in the Quality Agreement.

5.4 Defective Processing. In the event of Catalent Defective Processing, Catalent shall, at Client's option, either (A) **[***]** or (B) **[***]**. In the event of any Defective Product attributable to Catalent Defective Processing, Client shall be entitled to make appropriate adjustments to the requirement obligations in Section 2.2 and the Firm Commitment reflected in the immediately following Rolling Forecast submitted by Client to the extent reasonably necessary to account for any modified requirements of Client as a result of not having received such Defective Product.

ARTICLE 6
DELIVERY

6.1 Delivery. Catalent shall deliver Product Ex Works (Incoterms 2020) at the Facility promptly following Catalent's release of Product, provided that Catalent will bear all risk of loss of such Product until it is loaded onto Client's carrier, subject to Article 14. Catalent shall segregate and store all Product until it is loaded onto Client's carrier. To the extent not already held by Client, title to Product shall transfer to Client upon Catalent's tender of delivery. If Catalent provides storage services, title to such items shall pass to Client upon transfer to storage. Client shall qualify one or more carriers to ship Product and then designate the priority of such qualified carriers to Catalent. In the event Catalent arranges shipping or performs similar loading and/or logistics services for Client at Client's written request, such services are performed by Catalent as a convenience to Client only and do not alter the above and Catalent will use Client's carrier unless Client otherwise agrees in writing. Catalent shall not be responsible for Product in transit after it is loaded onto Client's carrier, including any cost of insurance or other transport fees for Product, or any risks associated with transit or customs delays, storage and handling.

6.2 Storage Fees. If Client fails to take delivery of any Product within **[***]** of the mutually agreed upon in writing scheduled delivery date, Catalent shall store such Product and have the right to invoice Client on the first day of each month following such scheduled delivery date for reasonable administration and storage costs in accordance with Attachment C.

ARTICLE 7
PAYMENTS

7.1 Fees. In consideration for Catalent performing services hereunder:

A. Client shall pay to Catalent the fees for Validation Services set forth on Attachment A. Catalent shall submit an invoice to Client for such fees upon the completion of the relevant phase of the Validation Services.

B. Unit Pricing. Client shall pay Catalent the unit pricing for Product set forth on Attachment C ("**Unit Pricing**"), as may be adjusted pursuant to Section 7.2 or 8.2, and subject to any credit set forth in this Agreement. Catalent shall submit an invoice to Client for such fees upon tender of delivery of Product as provided in Section 6.1.

C. Product Maintenance. Client shall pay Catalent the fees for Product Maintenance Services set forth on Attachment C. Catalent shall submit an invoice to Client for such fees upon the Effective Date or Commencement Date, as applicable and as may be required during the Term.

D. Other Fees. Client shall pay Catalent for all other fees and expenses of Catalent owing in accordance with the terms of this Agreement, including pursuant to Sections 2.4, 6.2 and 16.3. Catalent shall submit an invoice to Client for such fees as and when appropriate.

7.2 Unit Pricing Increase. Commencing in calendar year 2022, the Unit Pricing (except to the extent consisting of the price of Raw Materials and components) may be adjusted on an annual basis, effective on the first (1st) day of the first full calendar quarter of each Contract Year upon not less than one hundred twenty (120) days' prior written notice from Catalent to Client, to reflect increases or decreases in labor, utilities and overhead and shall be in an amount equal to the change

in the Producer Price Index ("PPI"), "Pharmaceutical Preparation Manufacturing" (Series ID: PCU325412325412), not seasonally adjusted, as published by the U.S. Department of Labor, Bureau of Labor Statistics. Such adjustment shall not exceed **[***]**. In addition, documented (in writing) price increases or decreases for Raw Materials and components **[***]** to be mutually agreed upon by the parties in writing, and in accordance with the efforts of the Joint Steering Committee ("**JSC**") as set forth in Section 8.2.

7.3 Payment Terms. Payment of all undisputed Catalent invoices shall be due **[***]**. Client shall make payment in U.S. dollars. If any payment for any undisputed amount is not received by Catalent within **[***]** its due date, then Catalent may, in addition to any other remedies available at equity or in law, charge interest on the outstanding sum from the due date (both before and after any judgment) at **[***]** until paid in full (or, if less, the maximum amount permitted by Applicable Laws).

7.4 Taxes. All taxes, duties and other amounts assessed (excluding tax based on net income and franchise taxes) on Client-supplied Materials, services or Product prior to or upon provision or sale to Catalent or Client, as the case may be, are the responsibility of Client, and Client shall reimburse Catalent for all such taxes, duties or other expenses paid by Catalent or such sums will be added to invoices directed at Client, where applicable. If any deduction or withholding in respect of tax or otherwise is required by law to be made from any of the sums payable hereunder, Client will pay such deduction or withholding tax to the appropriate Regulatory Authority on behalf of Catalent; or in the event such payment by Client is not practicable, shall reimburse Catalent for the cost of any such deduction or withholding tax by such greater sum as will leave Catalent, after deduction or withholding as is required to be made, with the same amount as it would have been entitled to receive in the absence of any such requirement to make a deduction or withholding. Notwithstanding the foregoing, prior to deducting or withholding any amounts from any payment hereunder in respect of taxes, Client will use commercially reasonable efforts to give advance notice to Catalent and take such steps as Catalent may reasonably request and otherwise cooperate with Catalent to reduce or eliminate such deduction or withholding, including by reasonably cooperating in order to execute and file any forms or certificates reasonably required to claim an available reduced rate of, or exemption from, withholding taxes.

7.5 Client and Third-Party Expenses. Except for Raw Materials and other third-party expenses for which Catalent is expressly responsible hereunder, Client shall be responsible for one hundred percent (100%) of its own and all third-party expenses associated with the development, Regulatory Approvals and commercialization of Product, including regulatory filings and post-approval marketing studies. For clarity, Catalent is responsible for all regulatory fees that relate to the qualification and use of the Facility in connection with the development, manufacture, testing, use, storage, exportation, importation, transport of pharmaceutical products generally.

7.6 Development Batches. Each Batch Processed under this Agreement, including those necessary to support the validation portion of Client's submissions for Regulatory Approvals, will be considered to be a "development batch" unless and until Processing has been validated. Client shall be responsible for the cost of each such pre-validation Batch, even if such Batch fails to meet the Specifications, unless Catalent did not follow mutually agreed upon directions or instructions for Processing such Batch or was grossly negligent or engaged in willful misconduct in the Processing of the out-of-Specification Batch. Catalent and Client shall cooperate in good faith to resolve any problems causing such out-of-Specification Batch.

ARTICLE 8
CHANGES TO SPECIFICATIONS

8.1 All Specifications and any changes thereto agreed to by the parties from time to time shall be in writing, dated and signed by the parties. Any change to the Process shall be deemed a Specification change. No change in the Specifications shall be implemented by Catalent, whether requested by Client or requested or required by any Regulatory Authority, until the parties have agreed in writing to such change, the implementation date of such change ("**Change Date**"), and any increase or decrease in costs, expenses or fees associated with such change (including any change to Unit Pricing) ("**Change Costs**"). Catalent shall respond promptly to any request made by Client for a change in the Specifications, and both parties shall use commercially reasonable efforts to agree to the terms of such change in a timely manner; provided, however, that in the case of any change that is requested by Client in response to (i) requirements imposed by a Regulatory Authority or Applicable Laws, or (ii) a safety or toxicity issue, the only terms of such change that Catalent may object to are the Change Date, the Change Costs and any requested change that would reasonably be expected to affect Catalent's other customers or regulatory status, and Catalent shall use commercially reasonable, good faith efforts to resolve any such objection in an expedited manner. As soon as possible after a request is made for any change in Specifications, Catalent shall notify Client of the costs associated with such change and shall provide such supporting documentation as Client may reasonably require. Client shall pay all reasonable costs associated with such agreed upon changes. If there is a conflict between the terms of this Agreement and the terms of the Specifications, this Agreement shall control. Catalent reserves the right to postpone effecting changes to the Specifications until such time as the parties agree to and execute the required written amendment.

8.2 Catalent and Client shall use commercially reasonable efforts to continually improve the net cost of Processing and to develop cost reduction initiatives as part of an overall cost improvement program, taking into account the total manufacturing environment including technology, industry standards, specifications, Raw Materials, inventory and forecasting. After the Effective Date, Catalent and Client shall establish the JSC that will meet from time to time to review and share ideas for these improvements. Through the JSC, the parties shall promptly notify one another regarding any such potential cost reduction efforts that are identified. In addition, Client may propose to Catalent certain changes to the Specifications or the manufacturing process that it reasonably believes will improve the manufacturing process or lower costs or that Client otherwise wishes to implement in connection with the Product or the Processing thereof. Upon Client's request, Catalent shall review any such proposed change by Client and the parties will discuss in good faith potential implementation of such change. The parties shall mutually agree on which changes, if any, shall be further developed or implemented in accordance with the change control procedures set forth in the Quality Agreement. Except as the parties may otherwise agree in writing, Catalent and Client shall share in any cost savings resulting from the implementation thereof based on **[***]**. Notwithstanding anything to the contrary, each party may withhold its consent to implementation of any cost saving changes in its sole discretion. Promptly following such implementation, the Unit Pricing for the Product payable by Client as set forth on Attachment C shall be reduced to reflect Client's share of such cost savings.

ARTICLE 9
RECORDS; REGULATORY MATTERS

9.1 Recordkeeping. Catalent shall maintain materially complete and accurate Batch, laboratory data, reports and other technical records relating to Processing in accordance with Catalent standard operating procedures and Applicable Laws, as wells as records and documentation relating to yield calculations. Such information shall be maintained for a period of at least two (2) years from the relevant finished Product expiration date or longer if required under Applicable Laws or the Quality Agreement, provided that prior to Catalent's destruction of any such books, records, data or information, Catalent shall provide Client with written notice thereof and, if requested by Client, shall transfer such documentation to Client, at Client's reasonable cost. Without limiting the foregoing, at any time, upon request by Client, and at Client's reasonable cost, Catalent shall provide Client with copies of, such records.

9.2 Regulatory Compliance. Catalent shall obtain and maintain all permits, certifications, and licenses with respect to general Facility operations required by any Regulatory Authority in the jurisdiction in which Catalent Processes Product or which are otherwise required for Catalent's performance under this Agreement. Client shall obtain and maintain all other Regulatory Approvals, authorizations and certificates, including those necessary for Catalent to commence Processing. Client shall not identify Catalent in any regulatory filing or submission without Catalent's prior written consent; provided that Catalent hereby consents to Client identifying Catalent in the following regulatory submissions: new drug applications with the U.S. FDA, marketing authorization applications with the EMA and in the United Kingdom and Switzerland, new drug submission with Health Canada, and any amendments or supplements to any of the foregoing. Such consent shall not be unreasonably withheld and shall be memorialized in a writing signed by authorized Representatives of both parties. Upon Catalent's written request, Client shall provide Catalent with a copy of any identified documents included in Regulatory Approvals that reference activities to be performed by Catalent, but only to the extent necessary for Catalent perform its obligations under this Agreement. If Client is unable to provide such information, to the extent required for such performance in accordance with the immediately foregoing sentence (other than for Product ordered prior to Regulatory Approval in anticipation of launch), Catalent shall have no obligation to deliver Product to Client. During the Term, Catalent will assist Client with all regulatory matters relating to Processing, at Client's request and reasonable expense, unless otherwise covered by any fees payable under Section 7.1. The parties intend and commit to cooperate to allow each party to satisfy its obligations under Applicable Laws relating to Processing under this Agreement.

9.3 Governmental Inspections and Requests. Catalent shall permit any Regulatory Authority to conduct inspections of any Facility as such Regulatory Authority may request, including pre-approval inspections, and shall cooperate with such Regulatory Authority with respect to such inspections and any related matters, in each case that is related to the Product or its Processing. Catalent shall promptly (but not later than **[***]** after notification) advise Client if an authorized agent of any Regulatory Authority notifies Catalent that it intends to or will visit the Facility for the purpose of reviewing the Processing, or of any written or oral inquiries or communications (including Form 483 letters) from any Regulatory Authority concerning or relating to, or that reasonably could be expected to impact, the Product, including Catalent's quality systems used in connection with such Processing, including during any pre-approval inspection. Catalent shall permit Client or its Representative to be present at the Facility during any inspection concerning

or relating to, or that reasonably could be expected to impact, the Product to the extent not prohibited by Applicable Laws or the applicable Regulatory Authority. Within **[***]** of its receipt, Catalent shall provide Client with a copy of any applicable report or correspondence issued by or provided to such Regulatory Authority in connection with such visit or inquiry, redacted as appropriate to protect any confidential information of Catalent and Catalent's other customers. Client acknowledges that it may not direct the manner in which Catalent fulfills its obligations to permit inspection by and to communicate with Regulatory Authorities. Catalent shall permit, and shall cause its Affiliates and Representatives to permit, the relevant Regulatory Authority to inspect its facilities in connection with the Product, provided that Client has provided advanced written notification to Catalent that Client has filed with a new Territory. **[***]**. Catalent shall, prior to any correspondence or submission delivered to such Regulatory Authority (bearing in mind any time period limitations in responding to any such Regulatory Authority), permit Client to review and provide comments thereto, to the extent concerning or relating to, or that reasonably could be expected to impact, the Product or its Processing, and, prior to responding to any reports, requests, directive or other communications issued by any Regulatory Authority concerning or relating to, or that reasonably could be expected to impact, the Product or its Processing, Catalent shall take under consideration and use good faith efforts to implement any comments or recommendations provided by Client with respect thereto direct towards the Product or its Processing prior to submitting such response to the applicable Regulatory Authority. In addition, Catalent shall promptly notify and, at Client's written request, provide Client copies of any request, directive or other communication of any Regulatory Authority concerning or relating to, or that reasonably could be expected to impact, the Product or its Processing.

9.4 Client Facility Audits. During the Term, Client's Representatives shall be granted access, as mutually agreed to in advance by the parties, at reasonable times during regular business hours, to (A) the portion of a Facility where Catalent performs Processing, (B) relevant personnel involved in Processing and (C) Processing records described in Section 9.2, in each case solely for the purpose of verifying that Catalent is Processing in accordance with cGMPs, the Specifications, the Quality Agreement, and the Product master Batch records. Client may not conduct an audit under this Section 9.4 more than **[***]**; *provided*, that Client will have the right to conduct additional inspections in the event there is a material quality or compliance issue concerning Product or its Processing. Client's Quality Assurance Manager will arrange Client audits with Catalent Quality Management. Audits shall be designed to minimize disruption of operations at the Facility. Any audit conducted by Client pursuant to this Section shall be conducted by no more than **[***]** of Client's Representatives and have a duration of no more than **[***]** Business Days. Client's Representatives who are not employees of Client shall be required to sign Catalent's standard visitor confidentiality agreement prior to being allowed access to the Facility. Such Representatives shall comply with the Facility's rules and regulations. Client shall indemnify and hold harmless Catalent for any action or activity of such Representatives while on Catalent's premises as set forth in Section 13.2. Catalent agrees that Client shall have the right to conduct the first such audit within **[***]** following the commencement of the Processing of Product, subject to any in-person audit limitations that may be in effect at the Facility. If any such limitations are in effect, the parties will work in good faith towards a mutually acceptable solution taking into account the expected duration of in-person audit limitations and regulatory requirements applicable to Client regarding the Product.

9.5 Recall. If a Regulatory Authority orders or requires the recall, field alert, Product withdrawal or field correction ("**Recall**") of any Product supplied hereunder or if either Catalent

or Client believes a Recall may be necessary with respect to any Product supplied under this Agreement, the party receiving the notice from the Regulatory Authority or that holds such belief shall promptly (within **[***]**) notify the other party in writing. Catalent will not act to initiate a Recall without the express prior written approval of Client, unless otherwise required by Applicable Laws. If Client believes a Recall may be necessary with respect to any Product supplied under this Agreement, Client shall promptly notify Catalent and Catalent shall provide all necessary cooperation and assistance to Client. With respect to any Recall, Catalent shall provide all necessary cooperation and assistance to Client. Client shall provide Catalent with an advance copy of any proposed submission to a Regulatory Authority in respect of any Recall, and shall reasonably consider any comments from Catalent. The cost of any Recall shall be borne by Client, and Client shall reimburse Catalent for reasonable expenses incurred by Catalent in connection with any Recall, except to the extent such Recall is caused by Catalent's gross negligence, willful misconduct, breach of its manufacturing obligations under this Agreement, or violation of Applicable Laws, then such portion of such cost (including the cost of replacing the applicable Products, including Client-supplied Materials) shall be borne by Catalent. For purposes hereof, such Catalent cost shall be limited to reasonable, actual and documented costs incurred by Client to execute such Recall, including the reasonable cost of shipment of recalled Product and if applicable, replacement of the Product subject to Recall both in accordance with Article 5.

9.6 Quality Agreement. On or before the Effective Date, the parties have entered into a quality agreement with respect to the manufacturing activities subject to this Agreement (the "**Quality Agreement**"). The Quality Agreement shall in no way determine liability or financial responsibility of the parties for the responsibilities set forth therein. In the event of a conflict between any of the provisions of this Agreement and the Quality Agreement with respect to quality-related activities, including compliance with cGMP, the provisions of the Quality Agreement shall govern. In the event of a conflict between any of the provisions of this Agreement and the Quality Agreement with respect to any other matters, including allocation of risk, liability and financial responsibility, the provisions of this Agreement shall govern.

ARTICLE 10
CONFIDENTIALITY AND NON-USE

10.1 For purposes hereof, all information furnished by or on behalf of Catalent or Client, its Affiliates or any of its or their respective Representatives or any other Confidential Information (as such term is defined in the MNDA) shall be governed by the Mutual Non-Disclosure Agreement entered into by the parties and dated December 10, 2019 (the "**MNDA**"), provided that, notwithstanding anything to the contrary in the MNDA, (i) the Permitted Use shall be deemed to include use by Catalent for solely as necessary for the performance of its Processing activities conducted under this Agreement and use by Client in connection with the exploitation of Products, (ii) the term of confidentiality and non-use obligations shall not expire until the fifth (5th) anniversary of the expiration or termination of this Agreement, and (iii) the MNDA may not be assigned or transferred except together with the assignment or transfer of this Agreement and the MNDA must be assigned or transferred to the same assignee or transferee of this Agreement in such assignment or transfer. Notwithstanding anything to the contrary in the foregoing, Catalent and its Affiliates will remain subject to the MNDA after any such assignment or transfer.

ARTICLE 11
INTELLECTUAL PROPERTY

11.1 For purposes hereof, "**Client IP**" means all intellectual property and embodiments thereof owned by or licensed to Client as of the date hereof or developed by Client other than in connection with this Agreement; "**Catalent IP**" means all intellectual property and embodiments thereof owned by or licensed to Catalent as of the date hereof or developed by Catalent other than in connection with this Agreement; "**Invention**" means any intellectual property developed by either party or jointly by the parties in connection with this Agreement; "**Client Inventions**" means any Invention that relates to the Client IP, Bulk Product, Product, or API; and "**Process Inventions**" means any Invention, other than a Client Invention, that relates to the Catalent IP or developing, formulating, manufacturing, filling, processing, packaging, analyzing or testing pharmaceutical products generally. All Client IP and Client Inventions shall be owned solely by Client, and Catalent hereby assigns to Client all right, title, and interest therein. No right therein is granted to Catalent under this Agreement, except that Catalent shall have a non-exclusive, non-transferable, non-sublicenseable, royalty-free license to such items solely to the extent necessary to perform its obligations under this Agreement. All Catalent IP and Process Inventions shall be owned solely by Catalent and no right therein is granted to Client under this Agreement. Catalent shall not incorporate any Catalent IP or Process Inventions into the Product or Bulk Product or manufacturing thereof. To the extent the services require Catalent to incorporate any Catalent IP or Process Inventions into the Product or Bulk Product or the manufacturing process thereof, Catalent shall obtain Client's written consent prior to doing so, and the parties shall amend the Agreement to grant Client a non-exclusive license under and to all such Catalent IP or Process Inventions, under mutually agreeable, reasonable commercial terms.

11.2 Reserved Rights. Notwithstanding anything to the contrary herein, no license, sublicense or other rights granted under Section 11.1 includes (or shall be construed to grant) any license, sublicense, right, immunity or authorization, either expressly, by implication, by estoppel or otherwise, under any intellectual property rights that are not expressly licensed hereunder.

ARTICLE 12
REPRESENTATIONS AND WARRANTIES

12.1 Catalent. Catalent represents, warrants and undertakes to Client that:

A. Product shall have been Processed in accordance with Applicable Laws and in conformance with the Specifications and shall, at the time of delivery by Catalent as provided in Section 6.1, not be adulterated, misbranded or mislabeled within the meaning of Applicable Laws; *provided*, that Catalent shall not be liable for defects attributable to Client-supplied Materials (including artwork, advertising and labeling);

B. Catalent has all necessary authority to use, and to permit Client to use pursuant to the terms of this Agreement, any Catalent IP utilized with the Product or Processing under this Agreement; to Catalent's knowledge, there are no patents owned or controlled by others related to the Catalent IP or manufacturing methods (other than manufacturing methods provided to Catalent by Client or otherwise prescribed by Client) utilized with the Product that would be infringed or misused by Catalent's performance under this Agreement; and, to Catalent's knowledge, there are no trade secrets or other proprietary rights of others related to the Catalent IP or manufacturing

methods (other than manufacturing methods provided to Catalent by Client or otherwise prescribed by Client) utilized with the Product that would be infringed or misappropriated by Catalent's performance under this Agreement;

C. Neither Catalent nor its Affiliates will in the performance of its obligations under this Agreement use the services of any person debarred or suspended under 21 U.S.C. §335(a), excluded from a federal healthcare program, debarred from federal contracting, or convicted or plead nolo contendere to any felony or to any violation of laws relating to fraud, and Catalent will comply in all material respects with Applicable Laws relating to Catalent's performance under this Agreement. If during the Term Catalent becomes aware of any non-compliance with this Section 12.1(C), Catalent shall notify Client immediately. In either such event, Client will have the right to terminate this Agreement upon written notice to Catalent if such non-compliance is not cured within sixty (60) days following the date Catalent first becomes aware of such non-compliance;

D. All services provided by Catalent to Client under this Agreement shall be carried out in a diligent, professional manner in accordance with Catalent's standard operating procedures. All necessary consents, approvals and authorizations required to be obtained by Catalent in order to perform its obligations under this Agreement have been obtained; and

E. No transactions or dealings under this Agreement shall be conducted with or for an individual or entity that is designated as the target of any sanctions, restrictions or embargoes administered by the United Nations, European Union, United Kingdom, or the United States.

12.2 Client. Client represents, warrants and undertakes to Catalent that:

A. all Client-supplied Materials shall have been produced, manufactured, prepared, preserved, packaged and stored in accordance with Applicable Laws (including cGMP where applicable), shall comply with all applicable specifications, including the Specifications, shall not be adulterated, misbranded or mislabeled within the meaning of Applicable Laws, and shall have been provided in accordance with the terms and conditions of this Agreement;

B. the content of all artwork, advertising and labeling provided to Catalent shall comply with all Applicable Laws;

C. all Product delivered to Client by Catalent shall be held, used and disposed of by or on behalf of the Client in accordance with all Applicable Laws, and Client will otherwise comply with all Applicable Laws relating to Client's performance under this Agreement;

D. Client will not release any Batch of Product if the required certificates of conformance indicate that Product does not comply with the Specifications or if Client does not hold all necessary Regulatory Approvals to market and sell the Product;

E. Client has all necessary authority to use, and to permit Catalent to use pursuant to the terms of this Agreement all intellectual property related to Product or Client-supplied Materials (including artwork), and any Client IP, in each case provided by Client to Catalent for Processing of Products under this Agreement; there are no issued patents owned by others related to such Client IP utilized with the Product that would be infringed or misused by Client's performance of this Agreement or Catalent's Processing of Products in accordance with the Specifications and this Agreement; and, to Client's knowledge, there are no trade secrets or other proprietary rights of

others related to such Client IP utilized with the Product that would be infringed or misappropriated by Client's performance of this Agreement or Catalent's Processing of Product in accordance with the Specifications and this Agreement; and

F. Client has all authorizations and permits required to deliver API (or have delivered) to Catalent's Facility.

12.3 Mutual Representations. Furthermore, each party hereby represents, warrants and undertakes to the other party that:

A. Such party (1) is duly organized, validly existing and in good standing under the laws of the state in which it is organized, and (2) has the power and authority and the legal right to own and operate its property and assets, and to carry on its business as it is now being conducted;

B. Such party (1) has the power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder and (2) has taken all necessary action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;

C. This Agreement has been duly executed and delivered on behalf of such party, and constitutes a legal, valid, binding obligation, enforceable against such party in accordance with its terms;

D. The execution and delivery of this Agreement and the performance of such party's obligations hereunder (1) do not, to the best of such party's knowledge, conflict with or violate any requirement of Applicable Laws; and (2) do not materially conflict with, or constitute a material default or require any consent under, any contractual obligation of such party;

E. No transactions or dealings under this Agreement shall be conducted with or for an individual or entity that is designated as the target of any sanctions, restrictions or embargoes administered by the United Nations, European Union, United Kingdom, or the United States; and

F. In the performance of its obligations under this Agreement, it will not: (1) provide or promise to provide, directly or indirectly, any unlawful contribution, gift, entertainment, or other unlawful payment to any foreign or domestic government employee relating to political activity; (2) take any action, directly or indirectly, that violates Foreign Corrupt Practices Act ("**FCPA**"), or any other applicable anticorruption law of any foreign jurisdiction, including, without limitation, "use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay, or authorization of the payment of any money, or offer, gift, promise to give, or authorization of the giving of anything of value" to any "foreign official" (as is defined in the FCPA), any foreign political party or official thereof, or any candidate for foreign political office, to influence their acts or decisions in their official capacity, to induce them to do or omit from doing any act in violation of their lawful duty, or to secure any improper advantage in order to assist in obtaining business, or retaining business, or directing business to any person; and (3) make or propose to make any bribe, payoff, influence payment, kickback, unlawful rebate, or other similar unlawful payment of any nature, including to healthcare providers or those employed by any governmental institutions.

12.4 Limitations. THE REPRESENTATIONS AND WARRANTIES SET FORTH IN THIS ARTICLE ARE THE SOLE AND EXCLUSIVE REPRESENTATIONS AND WARRANTIES MADE BY EACH PARTY TO THE OTHER PARTY, AND NEITHER PARTY MAKES ANY OTHER REPRESENTATIONS, WARRANTIES, OR GUARANTEES OF ANY KIND WHATSOEVER, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE.

ARTICLE 13
INDEMNIFICATION

13.1 Indemnification by Catalent. Catalent shall indemnify, defend, and hold harmless Client, its Affiliates, and their respective directors, officers and employees ("**Client Indemnitees**") from and against any and all suits, claims, losses, demands, liabilities, damages, costs and expenses (including reasonable attorneys' fees and reasonable investigative costs) in connection with any suit, demand or action by any third party ("**Losses**") to the extent arising out of or resulting from (A) any breach of Catalent's representations, warranties or obligations set forth in this Agreement, (B) any negligence or willful misconduct by Catalent or any of its Affiliates in connection with the performance of its obligations under this Agreement, or (C) **[***]**; in each case except to the extent that any of the foregoing arises out of or results from any Client Indemnitee's negligence, willful misconduct or breach of this Agreement.

13.2 Indemnification by Client. Client shall indemnify, defend, and hold harmless Catalent, its Affiliates, and their respective directors, officers and employees ("**Catalent Indemnitees**") from and against any and all Losses to the extent arising out of or resulting from (A) any breach of Client's representations, warranties or obligations set forth in this Agreement, (B) any manufacture, packaging, sale, promotion, distribution or use of or exposure to Product or Client-supplied Materials, including product liability or strict liability, (C) Client's exercise of control over the Processing, to the extent that Client's written instructions or directions violate Applicable Laws, (D) the conduct of any clinical trials utilizing Product or API, (E) any negligence or willful misconduct by Client or its Affiliates in connection with the performance of its obligations under this Agreement, including its representatives during any audit of the Facility, (F) **[***]**, or (G) any negligence or willful misconduct by Client, in each case except to the extent that any of the foregoing arises out of or results from any Catalent Indemnitee's negligence, willful misconduct or breach of this Agreement or is subject to Catalent's indemnification obligations under Sections 13.1.

13.3 Indemnification Procedures. The indemnified party shall (A) promptly notify the indemnifying party of any claim or liability of which the indemnified party becomes aware (including a copy of any related complaint, summons, notice or other instrument); provided, that failure to provide such notice within a reasonable period of time shall not relieve the indemnifying party of any of its obligations hereunder except to the extent the indemnifying party is prejudiced by such failure, (B) allow the indemnifying party to conduct and control the defense of any such claim or liability and any related settlement negotiations (at the indemnifying party's expense), and (C) cooperate with the indemnifying party in the defense of any such claim or liability and any related settlement negotiations (at the indemnifying party's expense). The indemnifying party shall have discretion to settle any action subject to indemnification under this Agreement; provided that the indemnifying party shall not enter into any settlement that would adversely affect the

indemnified party's rights hereunder, or impose any obligations on the indemnified party, without the indemnified party's written consent, which shall not be unreasonably withheld or delayed.

ARTICLE 14
LIMITATIONS OF LIABILITY

14.1 OTHER THAN WITH RESPECT TO CLAIMS FOR LOST, DAMAGED OR DESTROYED CLIENT-SUPPLIED MATERIALS (WHETHER OR NOT SUCH CLIENT-SUPPLIED MATERIALS ARE USED OR INCORPORATED INTO PRODUCT) ARISING FROM CATALENT'S GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR FRAUD, CATALENT'S LIABILITY UNDER THIS AGREEMENT FOR ANY AND ALL CLAIMS FOR LOST, DAMAGED OR DESTROYED CLIENT-SUPPLIED MATERIALS (WHETHER OR NOT SUCH CLIENT-SUPPLIED MATERIALS ARE USED OR INCORPORATED INTO PRODUCT) SHALL NOT EXCEED (I) **[***]** WHERE SUCH CLAIM ARISES FROM CATALENT'S PROCESSING OF THE CLIENT-SUPPLIED MATERIALS IN THE PERFORMANCE OF SERVICES AND (II) **[***]** WHERE THE CLAIM ARISES FROM OUTSIDE OF CATALENT'S PROCESSING OF THE CLIENT-SUPPLIED MATERIALS IN THE PERFORMANCE OF SERVICES; *PROVIDED, HOWEVER*, CATALENT'S TOTAL AGGREGATE LIABILITY UNDER THIS SECTION 14.1 FOR ANY AND ALL CLAIMS FOR LOST, DAMAGED OR DESTROYED CLIENT-SUPPLIED MATERIALS (WHETHER OR NOT SUCH CLIENT-SUPPLIED MATERIALS ARE USED OR INCORPORATED INTO PRODUCT) MADE BY CLIENT **[***]** SHALL NOT EXCEED **[***]**.

14.2 CATALENT'S TOTAL AGGREGATE LIABILITY UNDER THIS AGREEMENT WITH RESPECT TO THE AGGREGATE CLAIMS BY CLIENT **[***]** SHALL NOT EXCEED **[***]**.

14.3 EXCEPT FOR BREACHES OF ARTICLE 10 FOR WHICH CATALENT'S LIABILITY FOR INDIRECT DAMAGES UNDER THIS QUOTATION OR QAR SHALL NOT EXCEED **[***]**, NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OR LOSS OF REVENUES, PROFITS OR DATA (COLLECTIVELY, "**INDIRECT DAMAGES**") ARISING OUT OF PERFORMANCE UNDER THIS AGREEMENT, WHETHER IN CONTRACT, IN CIVIL LIABILITY OR IN TORT, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. FOR PURPOSES OF CLARITY, INDEMNIFIABLE LOSSES UNDER ARTICLE 13 SHALL NOT BE CHARACTERIZED AS CONSEQUENTIAL TO CLIENT OR CATALENT SOLELY ON THE BASIS THAT SUCH LOSSES ARISE FROM DAMAGES SUFFERED BY A THIRD PARTY.

ARTICLE 15
INSURANCE

15.1 Each party shall, at its own cost and expense, obtain and maintain in full force and effect during the Term the following: (A) Commercial General Liability Insurance with a per-occurrence limit of not less than **[***]**; and (B) Products Liability Insurance with a per-occurrence limit of not less than **[***]**. Catalent shall, at its own cost and expense, obtain and maintain in full force and effect during the Term, Completed Operations Liability Insurance with a per-occurrence limit of not less than **[***]**, Workers' Compensation Insurance with statutory limits and Employers

Liability Insurance with limits of not less than **[***]** per accident. Client shall maintain Stock Throughput Insurance with limits of not less than **[***]** per conveyance and **[***]** per location. Each party may self-insure all or any portion of the required insurance as long as, together with its Affiliates, its US GAAP net worth is greater than **[***]**. Each required insurance policy, other than self-insurance, shall be obtained from an insurance carrier with an A.M. Best rating of at least A- VII. If any of the required policies of insurance are written on a claims-made basis, such policies shall be maintained throughout the Term and for a period of at least three (3) years thereafter. Upon the other party's reasonable written request from time to time, each party shall promptly furnish to the other party a certificate of insurance or other evidence of the required insurance.

ARTICLE 16
TERM AND TERMINATION

16.1 Term. This Agreement shall commence on the Effective Date and shall continue until the end of the fifth (5th) Contract Year, unless earlier terminated in accordance with Section 16.2 (as may be extended in accordance with this Section, the "**Term**"). The Term shall automatically be extended for successive two (2) year periods unless and until one party gives the other party at least twenty-four (24) months' prior written notice of its desire to terminate as of the end of the then-current Term.

16.2 Termination. This Agreement may be terminated immediately without further action:

A. by either party if the other party files a petition in bankruptcy, or enters into an agreement with its creditors, or applies for or consents to the appointment of a receiver, administrative receiver, trustee or administrator, or makes an assignment for the benefit of creditors, or suffers or permits the entry of any order adjudicating it to be bankrupt or insolvent and such order is not discharged within sixty (60) days, or takes any equivalent or similar action in consequence of debt in any jurisdiction;

B. by either party if the other party materially breaches any of the provisions of this Agreement and such breach is not cured within sixty (60) days after the giving of written notice requiring the breach to be remedied; *provided*, that in the case of a failure of Client to make payments in accordance with the terms of this Agreement, Catalent may terminate this Agreement if such payment breach is not cured within ten (10) days of receipt of notice of non-payment from Catalent; provided that, if the basis for such termination is disputed by either party, such termination shall not be effective if and until final resolution pursuant to Section 18.10 that this Agreement is terminated as a result of such material breach; or

C. by Client upon six (6) months' prior written notice to Catalent in the event that Client or its licensees shall withdraw, or be required by the FDA or other Regulatory Authority in Europe to withdraw the Product from the market in any country in the Territory for any reason for a period that is, or is reasonably expected to be, greater than ninety (90) days.

16.3 Effect of Termination. Expiration or termination of this Agreement shall be without prejudice to any rights or obligations that accrued to the benefit of either party prior to such expiration or termination. In the event of a termination of this Agreement:

A. Catalent shall promptly return to Client, at Client's expense and direction, any remaining inventory of Product or Client-supplied Materials; *provided*, that all outstanding undisputed amounts in invoices have been paid in full;

B. Client shall pay Catalent all invoiced undisputed amounts due and payable hereunder, plus, upon receipt of invoice therefor, for any (i) Product that has been shipped pursuant to Purchase Orders but not yet invoiced, (ii) Product Processed pursuant to Purchase Orders that has been completed but not yet shipped, and (iii) in the event that this Agreement is terminated for any reason other than by Client pursuant to Section 16.2(A) or (B), all Product in process of being Processed pursuant to Purchase Orders (or, alternatively, Client may instruct Catalent to complete such work in process, and the resulting completed Product shall be governed by clause (ii));

C. in the event that this Agreement is terminated for any reason other than by Client pursuant to Section 16.2(A) or (B), Client shall pay Catalent for all Firm Orders, costs and expenses incurred, and all noncancelable commitments made in connection with Catalent's performance of this Agreement, so long as such costs, expenses or commitments were made by Catalent consistent with Client's most recent Firm Commitment and the vendor's minimum purchase obligations;

D. in the event that this Agreement is terminated by either party for any reason, for up to a period of **[***]** following such termination, Catalent shall, to the extent not already undertaken and at the written request of Client as of the applicable date of notice of termination, reasonably assist Client to qualify an alternate supplier on behalf of Client pursuant to the terms set forth in Section 2.2.

16.4 Survival. The rights and obligations of the parties shall continue under Articles 11 (Intellectual Property), 13 (Indemnification), 14 (Limitations of Liability), 17 (Notice), 18 (Miscellaneous); under Articles 10 (Confidentiality and Non-Use) and 15 (Insurance), in each case to the extent expressly stated therein; and under Sections 3.1(C), 3.1(D), 3.1(E), 7.3 (Payment Terms), 7.4 (Taxes), 7.5 (Client and Third Party Expenses), 9.1 (Recordkeeping), 9.5 (Recall), 12.4 (Limitations), 16.3 (Effect of Termination) and 16.4 (Survival), in each case in accordance with their respective terms if applicable, notwithstanding expiration or termination of this Agreement.

ARTICLE 17
NOTICE

All notices and other communications hereunder shall be in writing and shall be deemed given: (A) when delivered personally or by hand; (B) when delivered by facsimile transmission (receipt verified); (C) when received or refused, if sent by registered or certified mail (return receipt requested), postage prepaid; or (D) when delivered, if sent by express courier service; in each case to the parties at the following addresses (or at such other address for a party as shall be specified by like notice; *provided*, that notices of a change of address shall be effective only upon receipt thereof):

To Client:	Phathom Pharmaceuticals, Inc. 2150 E. Lake Cook Road, Suite 800 Buffalo Grove, Illinois 60089 Attn: Vice President, Manufacturing and Supply Chain
With a copy to:	Phathom Pharmaceuticals, Inc. 100 Campus Drive, Suite 102 Florham Park, New Jersey 07932 Attn: General Counsel (Legal Department) Email: **[***]**
To Catalent:	Catalent Pharma Solutions, LLC 1100 Enterprise Drive Winchester, Kentucky 40391 Attn: General Manager Facsimile: **[***]**
With a copy to:	Catalent Pharma Solutions, LLC 14 Schoolhouse Road Somerset, New Jersey 08873 Attn: General Counsel (Legal Department) Facsimile: **[***]** Email: **[***]**

ARTICLE 18
MISCELLANEOUS

18.1 Entire Agreement; Amendments. This Agreement, together with the Quality Agreement, constitutes the entire understanding between the parties, and supersedes any contracts, agreements or understandings (oral or written) of the parties, with respect to the subject matter hereof, including, for avoidance of doubt, that certain quotation letter (PHA-QTE 9155764 Version number: 06), executed on June 12th, 2020. For the avoidance of doubt, this Agreement does not supersede the MNDA. No term of this Agreement may be amended except upon written agreement of both parties, unless otherwise expressly provided in this Agreement.

18.2 Captions; Certain Conventions. The captions in this Agreement are for convenience only and are not to be interpreted or construed as a substantive part of this Agreement. Unless otherwise expressly provided herein or the context of this Agreement otherwise requires, (A) words of any gender include each other gender, (B) words such as “herein”, “hereof”, and “hereunder” refer to this Agreement as a whole and not merely to the particular provision in which such words appear, (C) words using the singular shall include the plural, and vice versa, (D) the words “include(s)” and “including” shall be deemed to be followed by the phrase “but not limited to”, “without limitation” or words of similar import, (E) the word “or” shall be deemed to include the word “and” (e.g., “and/or”), and (F) references to “Article,” “Section,” “subsection,” “clause” or other subdivision, or to an Attachment or other appendix, without reference to a document are to the specified provision or Attachment of this Agreement. This Agreement shall be construed as if it were drafted jointly by the parties.

18.3 Further Assurances. The parties agree to execute, acknowledge and deliver such further instruments and to take all such other incidental acts as may be reasonably necessary or appropriate to carry out the purpose and intent of this Agreement.

18.4 No Waiver. Failure by either party to insist upon strict compliance with any term of this Agreement in any one or more instances will not be deemed to be a waiver of its rights to insist upon such strict compliance with respect to any subsequent failure.

18.5 Severability. If any term of this Agreement is declared invalid or unenforceable by a court or other body of competent jurisdiction, the remaining terms of this Agreement will continue in full force and effect.

18.6 Independent Contractors. The relationship of the parties is that of independent contractors, and neither party will incur any debts or make any commitments for the other party except to the extent expressly provided in this Agreement. Nothing in this Agreement is intended to create or will be construed as creating between the parties the relationship of joint ventures, co-partners, employer/employee or principal and agent. Neither party shall have any responsibility for the hiring, termination or compensation of the other party's employees or contractors or for any employee benefits of any such employee or contractor.

18.7 Successors and Assigns. This Agreement will be binding upon and inure to the benefit of the parties, their successors and permitted assigns. Neither party may assign this Agreement, in whole or in part, without the prior written consent of the other party, except that either party may, without the other party's consent (but subject to written notice), assign this Agreement in its entirety to an Affiliate or to a successor, surviving or acquiring entity, of substantially all of the business or assets of the assigning party or the assigning party's business unit responsible for performance under this Agreement. Any purported assignment or transfer inconsistent with this Section 18.7 will be null and void.

18.8 No Third-Party Beneficiaries. This Agreement shall not confer any rights or remedies upon any Person other than the parties named herein and their respective successors and permitted assigns.

18.9 Governing Law. This Agreement, and all claims or causes of action (whether in contract, tort, or statute) that may be based upon, arise out of, or relate to this Agreement, or the negotiation, execution, or performance of this Agreement (including any claim or cause of action based upon, arising out of, or related to any representation or warranty made in or in connection with this Agreement or as an inducement to enter into this Agreement), shall be governed by and enforced in accordance with, the internal laws of the State of New York, USA, without giving effect to any laws, rules, or provisions of the State of New York that would cause the application of the laws rules or provisions of any jurisdiction other than the State of New York. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to this Agreement.

18.10 Alternative Dispute Resolution. Any dispute that arises between the parties in connection with this Agreement shall first be presented to the senior executives of the parties for consideration and resolution. If such executives cannot reach a resolution of the dispute within a reasonable time, then such dispute shall be resolved by binding alternative dispute resolution in accordance

with the then existing commercial arbitration rules of the American Arbitration Association. Arbitration shall be conducted in the jurisdiction of the defendant party, in the English language.

18.11 Prevailing Party. In any dispute resolution proceeding between the parties in connection with this Agreement, the prevailing party will be entitled to recover its reasonable attorney's fees and costs in such proceeding from the other party.

18.12 Publicity. Neither party will make any press release or other public disclosure regarding this Agreement or the transactions contemplated hereby without the other party's express prior written consent, except as required under Applicable Laws, by any governmental agency or by the rules of any stock exchange on which the securities of the disclosing party are listed, in which case the party required to make the press release or public disclosure shall provide the other party with a draft of such form, nature and extent of the press release or public disclosure prior to issuing the press release or making the public disclosure, and shall consider in good faith any comments provided by the non-disclosing party.

18.13 Right to Dispose and Settle. If Catalent requests in writing from Client direction with respect to disposal of any inventories of Product, Client-supplied Materials, equipment, samples or other items belonging to Client and is unable to obtain a response from Client within ninety (90) days after making such request, Catalent shall be entitled in its sole discretion to (A) dispose of all such items and (B) set-off any and all amounts due to Catalent or any of its Affiliates from Client against any credits Client may hold with Catalent or any of its Affiliates.

18.14 Force Majeure. Except as to payments required under this Agreement, neither party shall be liable in damages for any delay or default in such party's performance hereunder if such default or delay is caused by events beyond such party's reasonable control, which may include acts of God, law or regulation or other action or failure to act of any government or agency thereof, war or insurrection, civil commotion, destruction of production facilities or materials by earthquake, fire, flood or weather, epidemic or failure of public utilities; provided, that the party seeking relief under this Section 18.14 shall immediately notify the other party of such cause(s) beyond such party's reasonable control. The party that may invoke this Section 18.14 shall use commercially reasonable efforts to resume performance of its ongoing obligations to the other party as soon as practicable. If the cause(s) shall continue unabated for ninety (90) days, then both parties shall meet to discuss and negotiate in good faith what modifications to this Agreement should result from such cause(s); and if the parties are not able to agree upon such modifications within thirty (30) days after such ninety (90) day period, either party may terminate this Agreement upon written notice delivered by such party to the other party.

18.15 Counterparts. This Agreement may be executed in one or more counterparts, each of which will be deemed an original but all of which together will constitute one and the same instrument. Any photocopy, facsimile or electronic reproduction of the executed Agreement shall constitute an original.

[Signature page follows]

IN WITNESS WHEREOF, the parties have caused their respective duly authorized representatives to execute this Agreement effective as of the Effective Date.

CATALENT PHARMA SOLUTIONS, LLC	**PHATHOM PHARMACEUTICALS, INC.**
By:_____	By:_____
Name:_____	Name:_____
Title:_____	Title:_____

ATTACHMENT A

VALIDATION SERVICES

[***]

ATTACHMENT B

SPECIFICATIONS

I. Client-supplied Materials (and associated specifications)

[***]

II. Raw Materials (and associated specifications)

[***]

III. Current Product Specifications (including Batch size)

[***]

ATTACHMENT C

UNIT PRICING AND FEES

[***]

ATTACHMENT D

CLIENT-SUPPLIED MATERIALS

[***]

Exhibit 10.5

PHATHOM PHARMACEUTICALS, INC.

AMENDED AND RESTATED NON-EMPLOYEE DIRECTOR COMPENSATION PROGRAM

Non-employee members of the board of directors (the "***Board***") of Phathom Pharmaceuticals, Inc. (the "***Company***") shall receive cash and equity compensation as set forth in this Non-Employee Director Compensation Program (this "***Program***"). This Program has been adopted under the Company's 2019 Incentive Award Plan (the "***Equity Plan***") and shall be effective on the Effective Date. The cash and equity compensation described in this Program shall be paid or be made, as applicable, automatically and without further action of the Board, to each member of the Board who is not an employee of the Company or any parent or subsidiary of the Company (each, a "***Non-Employee Director***") who is entitled to receive such cash or equity compensation, unless such Non-Employee Director declines the receipt of such cash or equity compensation by written notice to the Company. This Program shall remain in effect until it is revised or rescinded by further action of the Board. This Program may be amended, modified or terminated by the Board at any time in its sole discretion. The terms and conditions of this Program shall supersede any prior cash and/or equity compensation arrangements for service as a member of the Board between the Company and any of its Non-Employee Directors. No Non-Employee Director shall have any rights hereunder, except with respect to stock options granted pursuant to the Program. Capitalized terms not otherwise defined herein shall have the meanings ascribed in the Equity Plan.

1. Cash Compensation.

(a) Annual Retainers. Each Non-Employee Director shall receive an annual retainer of $40,000 for service on the Board.

(b) Additional Annual Retainers. In addition, each Non-Employee Director shall receive the following additional annual retainers, as applicable:

(i) Chairperson of the Board. A Non-Employee Director serving as Chairperson of the Board shall receive an additional annual retainer of $40,000 for such service.

(ii) Audit Committee. A Non-Employee Director serving as Chairperson of the Audit Committee shall receive an additional annual retainer of $20,000 for such service. A Non-Employee Director serving as a member of the Audit Committee (other than the Chairperson) shall receive an additional annual retainer of $10,000 for such service.

(iii) Compensation Committee. A Non-Employee Director serving as Chairperson of the Compensation Committee shall receive an additional annual retainer of $15,000 for such service. A Non-Employee Director serving as a member of the Compensation Committee (other than the Chairperson) shall receive an additional annual retainer of $7,500 for such service.

(iv) Nominating and Corporate Governance Committee. A Non-Employee Director serving as Chairperson of the Nominating and Corporate Governance Committee shall receive an additional annual retainer of $10,000 for such service. A Non-Employee Director serving as a member of the Nominating and Corporate Governance Committee (other than the Chairperson) shall receive an additional annual retainer of $5,000 for such service.

(c) Payment of Retainers. The annual retainers described in Sections 1(a) and 1(b) shall be earned on a quarterly basis based on a calendar quarter and shall be paid by the Company in arrears on a semi-annual basis not later than the forty-fifth day following the end of every other calendar quarter (i.e., August 15 and February 15). In the event a Non-Employee Director does not serve as a Non-Employee

Director, or in the applicable positions described in Section 1(b), for an entire calendar quarter, the retainer paid to such Non-Employee Director shall be prorated for the portion of such calendar quarter actually served as a Non-Employee Director, or in such position, as applicable.

2. Equity Compensation. Non-Employee Directors shall be granted the equity awards described below. The awards described below shall be granted under and shall be subject to the terms and provisions of the Equity Plan, or any other applicable Company equity incentive plan then-maintained by the Company, and shall be granted subject to the execution and delivery of award agreements, including attached exhibits, in substantially the forms previously approved by the Board. All applicable terms of the Equity Plan apply to this Program as if fully set forth herein, and all grants of stock options hereby are subject in all respects to the terms of the Equity Plan and the applicable award agreement. For the avoidance of doubt, the share numbers in this Program already give effect to the forward stock split of the Company's common stock to be effected by the Company in connection with its initial public offering.

(a) Initial Awards. Each Non-Employee Director who is initially elected or appointed to the Board after the Effective Date shall receive an option under the Equity Plan, or any other applicable Company equity incentive plan then-maintained by the Company, to purchase 20,000 shares of the Company's common stock on the date of such initial election or appointment. The awards described in this Section 2(a) shall be referred to as "***Initial Awards***." No Non-Employee Director shall be granted more than one Initial Award.

(b) Subsequent Awards. A Non-Employee Director who (i) is serving on the Board as of the date of any annual meeting of the Company's stockholders after the Effective Date and has been serving as a Non-Employee Director for at least six months as of the date of such meeting, and (ii) will continue to serve as a Non-Employee Director immediately following such meeting, shall be automatically granted an option under the Equity Plan, or any other applicable Company equity incentive plan then-maintained by the Company, to purchase 12,500 of the Company's common stock on the date of such annual meeting. The awards described in this Section 2(b) shall be referred to as "***Subsequent Awards***." For the avoidance of doubt, a Non-Employee Director elected for the first time to the Board at an annual meeting of the Company's stockholders shall only receive an Initial Award in connection with such election, and shall not receive any Subsequent Award on the date of such meeting as well.

(c) Termination of Employment of Employee Directors. Members of the Board who are employees of the Company or any parent or subsidiary of the Company who subsequently terminate their employment with the Company and any parent or subsidiary of the Company and remain on the Board will not receive an Initial Award pursuant to Section 2(a) above, but to the extent that they are otherwise entitled, will receive, after termination from employment with the Company and any parent or subsidiary of the Company, Subsequent Awards as described in Section 2(b) above.

(d) Terms of Awards Granted to Non-Employee Directors

(i) Purchase Price. The per share exercise price of each option granted to a Non-Employee Director shall equal the Fair Market Value of a share of common stock on the date the option is granted.

(ii) Vesting. One-third of each Initial Award shall vest and become exercisable on the one (1)-year anniversary of the date of grant, and the remainder will vest in substantially equal quarterly installments over the twenty-four (24) months following the date of grant, subject to the Non-Employee Director continuing in service on the Board through each such vesting date. Each Subsequent Award shall vest and/or become exercisable on the first to occur of (A) the first anniversary of the date of grant or (B) the next occurring annual meeting of the Company's stockholders, subject to the

Non-Employee Director continuing in service on the Board through such vesting date. Unless the Board otherwise determines, no portion of an Initial Award or Subsequent Award which is unvested and/or exercisable at the time of a Non-Employee Director's termination of service on the Board shall become vested and/or exercisable thereafter. Upon a Change in Control, all outstanding equity awards granted under the Equity Plan, and any other equity incentive plan maintained by the Company, that are held by a Non-Employee Director shall become fully vested and/or exercisable, irrespective of any other provisions of the Plan or any award agreement.

(iii) Term. The term of each stock option granted to a Non-Employee Director shall be ten (10) years from the date the option is granted.

3. Compensation Limits. Notwithstanding anything to the contrary in this Program, all compensation payable under this Program will be subject to any limits on the maximum amount of Non-Employee Director compensation set forth in the Equity Plan, as in effect from time to time.

4. Reimbursements. The Company shall reimburse each Non-Employee Director for all reasonable, documented, out-of-pocket travel and other business expenses incurred by such Non-Employee Director in the performance of his or her duties to the Company in accordance with the Company's applicable expense reimbursement policies and procedures as in effect from time to time.

* * * * *

Exhibit 31.1

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: August 10, 2021

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

Exhibit 31.2

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: August 10, 2021

/s/ Anthony Guzzo
Anthony Guzzo
Vice President and Chief Accounting Officer
(acting Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Phathom Pharmaceuticals, Inc. (the "Company") for the quarter ended June 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: August 10, 2021

/s/ Terrie Curran
Terrie Curran
Chief Executive Officer and President

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.

Exhibit 32.2

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Phathom Pharmaceuticals, Inc. (the "Company") for the quarter ended June 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Todd P. Branning, 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: August 10, 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.