UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2022

OR

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

For the transition period from _____ to _____

Commission File Number: 001-38853

NGM BIOPHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**26-1679911**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

333 Oyster Point Boulevard
South San Francisco, CA 94080
(Address of principal executive offices including zip code)

(650) 243-5555
(Registrant's telephone number, including area code)

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

Title of Each Class	Trading Symbol	Name of Each Exchange on which Registered
Common Stock, par value $0.001 per share	NGM	The Nasdaq Stock Market LLC

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

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

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

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

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

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

As of August 1, 2022, the registrant had 80,365,889 shares of common stock, $0.001 par value per share, outstanding.

Table of Contents

		Page
PART I.	FINANCIAL INFORMATION	1
Item 1.	Financial Statements	1
	Condensed Consolidated Balance Sheets as of June 30, 2022 (Unaudited) and December 31, 2021	1
	Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2022 and 2021 (Unaudited)	2
	Condensed Consolidated Statements of Comprehensive Loss for the three and six months ended June 30, 2022 and 2021 (Unaudited)	3
	Condensed Consolidated Statements of Stockholders' Equity for the three and six months ended June 30, 2022 and 2021 (Unaudited)	4
	Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2022 and 2021 (Unaudited)	6
	Notes to Condensed Consolidated Financial Statements (Unaudited)	7
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	24
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	39
Item 4.	Controls and Procedures	40
PART II.	OTHER INFORMATION	41
Item 1.	Legal Proceedings	41
Item 1A.	Risk Factors	41
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	83
Item 3.	Defaults Upon Senior Securities	83
Item 4.	Mine Safety Disclosures	83
Item 5.	Other Information	83
Item 6.	Exhibits	84
Signatures		85

PART I—FINANCIAL INFORMATION

Item 1. Financial Statements

NGM BIOPHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except per share amounts)
(Unaudited)

	June 30, 2022	December 31, 2021*
Assets		
Current assets:		
Cash and cash equivalents	$ 63,379	$ 151,795
Short-term marketable securities	234,429	214,458
Related party receivable from collaboration	6,674	4,945
Prepaid expenses and other current assets	14,357	8,082
Total current assets	318,839	379,280
Property and equipment, net	8,480	10,071
Operating lease right-of-use asset	3,087	4,045
Restricted cash	1,499	1,499
Other non-current assets	5,466	7,492
Total assets	$ 337,371	$ 402,387
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 6,873	$ 5,246
Accrued liabilities	23,940	33,258
Operating lease liability, current	5,229	5,077
Contract liabilities	6,497	17,774
Total current liabilities	42,539	61,355
Operating lease liability, non-current	2,751	5,385
Total liabilities	45,290	66,740
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Preferred stock, $0.001 par value; 10,000 shares authorized; no shares issued or outstanding as of June 30, 2022 and December 31, 2021, respectively	—	—
Common stock, $0.001 par value; 400,000 shares authorized; 79,463 and 77,962 shares issued and outstanding as of June 30, 2022 and December 31, 2021, respectively	79	78
Additional paid-in capital	791,014	754,664
Accumulated other comprehensive loss	(1,077)	(129)
Accumulated deficit	(497,935)	(418,966)
Total stockholders' equity	292,081	335,647
Total liabilities and stockholders' equity	$ 337,371	$ 402,387

See accompanying notes to these unaudited condensed consolidated financial statements.

*The condensed consolidated balance sheet as of December 31, 2021 has been derived from the audited financial statements as of that date.

NGM BIOPHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Related party revenue	$ 8,293	$ 16,773	$ 29,241	$ 38,348
Operating expenses:				
Research and development	45,433	43,570	88,239	84,269
General and administrative	9,927	9,823	20,650	18,544
Total operating expenses	55,360	53,393	108,889	102,813
Loss from operations	(47,067)	(36,620)	(79,648)	(64,465)
Interest income, net	543	115	719	229
Other income (expense), net	5	(187)	(40)	—
Net loss	$ (46,519)	$ (36,692)	$ (78,969)	$ (64,236)
Net loss per share, basic and diluted	$ (0.59)	$ (0.48)	$ (1.00)	$ (0.84)
Weighted average shares used to compute net loss per share, basic and diluted	79,270	77,096	78,650	76,568

See accompanying notes to these unaudited condensed consolidated financial statements.

NGM BIOPHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(In thousands)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Net loss	$ (46,519)	$ (36,692)	$ (78,969)	$ (64,236)
Other comprehensive (loss) gain, net of tax:				
Net unrealized (loss) gain on available-for-sale marketable securities	(400)	23	(948)	1
Total comprehensive loss	$ (46,919)	$ (36,669)	$ (79,917)	$ (64,235)

See accompanying notes to these unaudited condensed consolidated financial statements.

NGM BIOPHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands)
(Unaudited)

	Common Stock		Additional Paid-In Capital	Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2021	77,962	$ 78	$ 754,664	$ (129)	$ (418,966)	$ 335,647
Issuance of common stock upon exercise of stock options	125	—	668	—	—	668
Stock-based compensation expense	—	—	7,820	—	—	7,820
Comprehensive loss	—	—	—	(548)	—	(548)
Net loss	—	—	—	—	(32,450)	(32,450)
Balance at March 31, 2022	78,087	$ 78	$ 763,152	$ (677)	$ (451,416)	$ 311,137
Issuance of common stock under Open Market Sale Agreement, net of issuance costs	1,144	1	17,402	—	—	17,403
Issuance of common stock under employee stock purchase plan	121	—	1,228	—	—	1,228
Issuance of common stock upon exercise of stock options	103	—	993	—	—	993
Issuance of common stock to participants in 401(k) plan	8	—	137	—	—	137
Stock-based compensation expense	—	—	8,102	—	—	8,102
Comprehensive loss	—	—	—	(400)	—	(400)
Net loss	—	—	—	—	(46,519)	(46,519)
Balance at June 30, 2022	79,463	$ 79	$ 791,014	$ (1,077)	$ (497,935)	$ 292,081

NGM BIOPHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands)
(Unaudited)

	Common Stock		Additional Paid-In Capital	Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2020	70,583	$ 71	$ 578,599	$ 4	$ (298,631)	$ 280,043
Issuance of common stock under offering, net of issuance costs	5,324	5	134,565			134,570
Issuance of common stock upon exercise of stock options	1,001	1	5,906	—	—	5,907
Vesting of common stock from early exercises	5	—	41	—	—	41
Stock-based compensation expense	—	—	6,582	—	—	6,582
Comprehensive loss	—	—	—	(22)	—	(22)
Net loss	—	—	—	—	(27,544)	(27,544)
Balance at March 31, 2021	76,913	$ 77	$ 725,693	$ (18)	$ (326,175)	$ 399,577
Issuance of common stock upon exercise of stock options	280	—	1,905	—	—	1,905
Issuance of common stock under employee stock purchase plan	110	—	1,409	—	—	1,409
Issuance of common stock to participants in 401(k) plan	4	—	125	—	—	125
Vesting of common stock from early exercises	—	—	2	—	—	2
Stock-based compensation expense	—	—	6,716	—	—	6,716
Issuance costs under offering	—	—	10	—	—	10
Comprehensive income	—	—	—	23	—	23
Net loss	—	—	—	—	(36,692)	(36,692)
Balance at June 30, 2021	77,307	$ 77	$ 735,860	$ 5	$ (362,867)	$ 373,075

See accompanying notes to these unaudited condensed consolidated financial statements.

NGM BIOPHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Six Months Ended June 30,	
	2022	**2021**
Operating activities		
Net loss	$ (78,969)	$ (64,236)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	15,922	13,298
Reduction in related party contract asset due to Amended Collaboration Agreement with Merck	—	4,600
Depreciation	2,823	3,118
Amortization of premium on marketable securities	793	1,518
Non-cash lease expense	957	890
Other non-cash expenses	434	49
Changes in operating assets and liabilities:		
Related party receivable from collaboration	(1,729)	(3,253)
Related party contract asset	—	1,500
Prepaid expenses and other assets	(4,249)	(3,157)
Accounts payable	1,627	(4,522)
Accrued and other liabilities	(9,740)	2,038
Operating lease liability	(2,481)	(2,341)
Contract liabilities	(11,277)	4,963
Net cash used in operating activities	(85,889)	(45,535)
Investing activities		
Purchase of marketable securities	(144,048)	(194,525)
Proceeds from maturities of marketable securities	122,336	50,000
Purchases of property and equipment	(1,107)	(1,355)
Net cash used in investing activities	(22,819)	(145,880)
Financing activities		
Proceeds from follow on offering, net	—	134,580
Proceeds from Open Market Sale Agreement	17,403	—
Proceeds from exercise of stock options	1,661	7,812
Proceeds from employee stock purchase plan	1,228	1,409
Net cash provided by financing activities	20,292	143,801
Net decrease in cash and cash equivalents	(88,416)	(47,614)
Cash, cash equivalents and restricted cash, at beginning of period	153,294	148,516
Cash, cash equivalents and restricted cash, at end of period	$ 64,878	$ 100,902
Supplemental disclosures of non-cash investing and financing activities:		
Property and equipment purchases accrued and not yet paid	$ 54	$ 77
Right of use asset acquired under operating lease on the adoption of ASC 842	$ —	$ 5,855
Vesting of common stock from early exercises	$ —	$ 43

See accompanying notes to these unaudited condensed consolidated financial statements.

NGM BIOPHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Organization and Description of Business

NGM Biopharmaceuticals, Inc. and its wholly-owned subsidiary, NGM Biopharmaceuticals Australia Pty Ltd. ("NGM Australia"), collectively referred to as the Company, is focused on discovering and developing novel, potentially life-changing medicines based on scientific understanding of key biological pathways underlying cancer, retinal diseases and liver and metabolic diseases. The Company's robust portfolio of product candidates range from early discovery to Phase 2b development and include NGM707, NGM831, NGM438, NGM120, NGM621, aldafermin and MK-3655 in clinical development. The Company has additional programs that are in various stages of development ranging from functional validation to preclinical development.

The Company was incorporated in Delaware in December 2007 and commenced operations in 2008. The Company's headquarters are located at 333 Oyster Point Blvd., South San Francisco, California 94080.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP, and Regulation S-X for interim consolidated financial information. These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes for the year ended December 31, 2021 included in the Company's Annual Report on Form 10-K for the year ended December 31, 2021 filed with the United States Securities and Exchange Commission, or SEC, on March 1, 2022. These unaudited condensed consolidated financial statements reflect all adjustments that management believes are necessary for a fair presentation of the periods presented. All such adjustments are of a normal recurring nature and are not necessarily indicative of results expected for the full fiscal year ending December 31, 2022, or for any subsequent interim period.

These unaudited condensed consolidated financial statements include the consolidated accounts of NGM Biopharmaceuticals, Inc. and its wholly-owned foreign subsidiary, NGM Australia. All intercompany balances and transactions have been eliminated upon consolidation.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires management to make judgments, assumptions and estimates that affect the reported amounts of assets, liabilities, revenues and expenses. Specific accounts that require management estimates include, but are not limited to, the valuation of common stock and the associated stock-based compensation expense, contract manufacturing accruals, clinical trial accruals and revenue recognition in accordance with Accounting Standards Update, or ASU, 2014-09, Revenue from Contracts with Customers (Topic 606), or ASC 606. Management bases its estimates on historical experience and on various other assumptions that are believed to be 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 could differ materially from those estimates, and to the extent that there are differences between management's estimates and actual results, the Company's future financial statement presentation, financial condition, results of operations and cash flows may be affected.

Sources and Uses of Liquidity

Since inception, the Company has incurred net losses and generated negative cash flows from operations. During the three and six months ended June 30, 2022, the Company incurred net losses of $46.5 million and $79.0 million, respectively, and in the six months ended June 30, 2022, the Company generated negative cash flows from operations of $85.9 million. As of June 30, 2022, the Company had an accumulated deficit of $497.9 million. The Company expects its accumulated deficit will increase significantly over time and does not expect to experience positive cash flows from operations in the near future.

As of June 30, 2022, the Company had $297.8 million of cash, cash equivalents and short-term marketable securities.

In June 2020, the Company entered into an Open Market Sale Agreement℠, or the Sales Agreement, with Jefferies LLC. During the three months ended June 30, 2022, approximately 1.1 million shares were sold pursuant to the Sales Agreement for net proceeds to the Company of $17.4 million, after deducting issuance costs. As of June 30, 2022, $109.2 million of the Company's common stock remained available to be sold under the Sales Agreement, subject to conditions specified in the Sales Agreement.

The Company believes its existing cash, cash equivalents and short-term marketable securities will be sufficient to fund its operations for a period of at least one year from the date of filing of this Quarterly Report on Form 10-Q.

To fully implement the Company's business plan and fund its operations, the Company will need to raise significant additional capital through public or private equity or debt offerings (which may include potential net proceeds from future sales, if any, under the Sales Agreement), product collaborations, strategic alliances and licensing arrangements or a combination of the foregoing.

Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, the related party receivable from collaboration and other current assets and liabilities approximate their respective fair values due to their short-term nature.

Cash and Cash Equivalents

Cash and cash equivalents are stated at fair value. Cash equivalents are securities with an original maturity of three months or less at the time of purchase. The Company limits its credit risk associated with cash and cash equivalents by investing in highly rated money market funds and placing its cash with a bank it believes is highly creditworthy in amounts that may at times exceed federally insured limits. As of June 30, 2022 and December 31, 2021, cash and cash equivalents consisted of bank deposits and investments in money market funds.

Marketable Securities

The appropriate classification of the Company's marketable securities is determined at the time of purchase and such designations are re-evaluated at each balance sheet date. All of the Company's securities are considered as available-for-sale and carried at estimated fair values and reported in cash equivalents and short-term marketable securities. Unrealized gains and losses on available-for-sale securities are excluded from net loss and reported in accumulated other comprehensive loss as a separate component of stockholders' equity. Interest income, net, includes interest, amortization of purchase premiums and accretion of purchase discounts, realized gains and losses on sales of securities and other-than-temporary declines in the fair value of securities, if any. The cost of securities sold is based on the specific identification method.

The Company's investments are regularly reviewed for other-than-temporary declines in fair value. This review includes the consideration of the cause of the impairment, including the creditworthiness of the security issuers, the number of securities in an unrealized loss position, the severity and duration of the unrealized losses, whether the Company has the intent to sell the securities and whether it is more likely than not that the Company will be required to sell the securities before the recovery of their amortized cost basis. When the Company determines that the decline in fair value of an investment is below its carrying value and this decline is other-than-temporary, the Company reduces the carrying value of the security it holds and records a loss for the amount of such decline. As of June 30, 2022, the Company did not record any impairment related to other-than-temporary declines in the fair value of securities.

Restricted Cash

The Company's restricted cash balance represents collateral required under the Company's facility lease agreement and is classified as a non-current asset on the condensed consolidated balance sheets, as the collateral will not be returned to the Company within twelve months from the date of these condensed consolidated financial statements.

Concentration of Credit and Other Risks

Cash, cash equivalents and marketable securities from the Company's available-for-sale and marketable securities portfolio potentially subject the Company to concentrations of credit risk. The Company is invested in money market funds and marketable securities through custodial relationships with major United States, or U.S.,

banks. Under its investment policy, the Company limits amounts invested in such securities by credit rating, maturity, industry group, investment type and issuer, except for securities issued by the U.S. government.

Related party receivables from collaborations are typically unsecured. Accordingly, the Company may be exposed to credit risk generally associated with its current amended and restated research collaboration, product development and license agreement, or the Amended Collaboration Agreement, with Merck Sharp & Dohme LLC (formerly Merck Sharp & Dohme Corp.), or Merck, and any future collaboration agreements with other collaboration partners. To date, the Company has not experienced any losses related to these receivables.

Amounts recognized as revenue prior to the Company having an unconditional right (other than a right that is conditioned only on the passage of time) to receipt are recorded as contract assets in the Company's condensed consolidated balance sheets. Although the Company expects to have an unconditional right to receive such amounts, the Company may be exposed to the risk of not receiving the recorded amounts under its current collaboration agreement with Merck and any future collaboration agreements with other collaboration partners. To date, the Company has not experienced any losses related to contract assets.

Merck accounted for 100% of the Company’s revenue for the three and six months ended June 30, 2022 and 2021.

Property and Equipment, Net

Property and equipment are recorded at cost and consists of computer equipment, laboratory equipment and office furniture and leasehold improvements. Maintenance and repairs, and training on the use of equipment, are expensed as incurred. Costs that improve assets or extend their economic lives are capitalized. Depreciation is recognized using the straight-line method based on an estimated useful life of the asset, which is as follows:

Computer equipment	3 years
Laboratory equipment and office furniture	3 years
Leasehold improvement	Shorter of life of asset or lease term

Leases

Effective December 31, 2021, the Company was no longer an emerging growth company under the Jumpstart Our Business Startups Act of 2012, as amended, and as a result, the Company was required to adopt Accounting Standards Update, or ASU, 2016-02, Leases (Topic 842), referred to as ASC 842, for the fiscal year beginning January 1, 2021 using a modified-retrospective approach under which the Company recognized and measured leases existing at, or entered into after, January 1, 2021. Accordingly, the Company's condensed consolidated financial statements and information for the periods ended June 30, 2021 have been restated to conform to the new standard.

Under ASC 842, the Company determines if an arrangement is a lease at inception. Lease assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Lease liabilities are measured at the lease commencement date as the present value of future minimum lease payments over the term of the lease. Lease assets are measured as the lease liability plus initial direct costs and prepaid lease payments less lease incentives. In measuring the present value of the future minimum lease payments, the Company generally uses its incremental borrowing rate. The lease term is the noncancellable period of the lease and includes options to extend or terminate the lease when it is reasonably certain that an option will be exercised. Leases with terms of 12 months or less are not recorded on the Company's balance sheet. Lease expense is recognized on a straight-line basis over the lease terms, or in some cases, the useful life of the underlying asset. The Company accounts for the lease and non-lease components as a single lease component. The Company’s lease agreement for its laboratory and office facilities is classified as an operating lease.

The following table summarizes the effects of adopting ASC 842 on the Company's condensed consolidated statement of cash flows for the six months ended June 30, 2021 (in thousands):

	Six Months Ended June 30, 2021		
	Previously Reported	ASC 842 Adjustment	As Adjusted
Operating activities			
Noncash lease expense	$ —	$ 890	$ 890
Changes in operating assets and liabilities:			
Deferred rent	(1,451)	1,451	—
Operating lease liability	—	(2,341)	(2,341)
Net cash used in operating activities	$ (45,535)	$ —	$ (45,535)

Impairment of Long-Lived Assets

Long-lived assets, such as property and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized as the amount by which the carrying amount of the asset exceeds the estimated fair value of the asset. As of June 30, 2022 and December 31, 2021, no revision to the remaining useful lives or write-down of long-lived assets was required.

Income Taxes

Income taxes are accounted for under the liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and the operating loss and tax credit carryforwards. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. Deferred tax assets and liabilities are measured at the balance sheet date using the enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period such tax rate changes are enacted. The net deferred tax assets have been fully offset by a valuation allowance.

Revenue Recognition

Under ASC 606, the Company estimates each arrangement’s total transaction price, which includes unconstrained variable consideration, and the recognition of that transaction price based on a cost-based input method that requires estimates to determine, at each reporting period, the percentage of completion based on the estimated total effort required to complete the project and the total transaction price. The unconstrained variable consideration amount included in the transaction price represents an amount for which it is probable that a significant reversal of cumulative revenue recognized will not occur.

The Company applies the following five-step revenue recognition model outlined in ASC 606 to adhere to this core principle: (1) identify the contract(s) with a customer; (2) identify the performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to the performance obligations in the contract; and (5) recognize revenue when (or as) the Company satisfies a performance obligation.

All of the Company’s revenue to date has been generated from its collaboration agreements, primarily its collaboration agreement with Merck. The terms of these agreements generally require the Company to provide (i) license options for its compounds, (ii) research and development services and (iii) non-mandatory services in connection with participation in research or steering committees. Payments received under these arrangements may include non-refundable upfront license fees, partial or complete reimbursement of research and development costs, contingent consideration payments based on the achievement of defined collaboration objectives and royalties on sales of commercialized products. In some agreements, the collaboration partner is solely responsible for meeting defined objectives that trigger contingent or royalty payments. Often the partner only pursues such objectives subsequent to exercising an optional license on compounds identified as a result of the research and development services performed under the collaboration agreement.

The Company assesses whether the promises in its arrangements, including any options provided to the partner, are considered distinct performance obligations that should be accounted for separately. Judgment is required to determine whether the license to a compound is distinct from research and development services or participation in research or steering committees, as well as whether options create material rights in the contract. In situations when a contract includes distinct services that are substantially the same and have the same pattern of transfer to the customer over time, they are recognized as a series of distinct services.

The transaction price in each arrangement is generally comprised of a non-refundable upfront fee and unconstrained variable consideration related to the performance of research and development services. The unconstrained variable consideration amount included in the transaction price represents an amount for which it is probable that a significant reversal of cumulative revenue recognized will not occur. The Company typically submits a budget for the research and development services to the partner in advance of performing the services. The transaction price is allocated to the identified performance obligations based on the standalone selling price, or SSP, of each distinct performance obligation. Judgment is required to determine the SSP. In instances where the SSP is not directly observable, such as when a license or service is not sold separately, SSP is determined using information that may include market conditions and other observable inputs. The Company utilizes judgment to assess the nature of its performance obligations to determine whether they are satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress toward completion. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

The Company's collaboration agreements may include contingent payments related to specified development and regulatory milestones or contingent payments for royalties based on sales of a commercialized product. Milestones can be achieved for such activities in connection with progress in clinical trials, regulatory filings in various geographical markets and marketing approvals from health authorities. Sales-based royalties are generally related to the volume of annual sales of a commercialized product. At the inception of each agreement that includes such payments, the Company evaluates whether the milestones are considered probable of being achieved and estimates the amount to be included in the transaction price by using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within the Company's or its partner's control, such as those related to regulatory approvals, are not considered probable of being achieved until those approvals are received. The transaction price is then allocated to each performance obligation based on a relative SSP basis. At the end of each subsequent reporting period, the Company re-evaluates the probability of achievement of each such milestone and any related constraint and, if necessary, adjusts its estimate of the overall transaction price. Pursuant to the guidance in ASC 606, sales-based royalties are not included in the transaction price. Instead, royalties are recognized at the later of when the performance obligation is satisfied or partially satisfied, or when the sale that gives rise to the royalty occurs.

Contract modifications, defined as changes in the scope or price (or both) of a contract that are approved by the parties to the contract, such as a contract amendment, exist when the parties to a contract approve a modification that either creates new, or changes existing, enforceable rights and obligations of the parties to the contract. Depending on facts and circumstances, the Company accounts for a contract modification as one of the following: (i) a separate contract; (ii) a termination of the existing contract and a creation of a new contract; or (iii) a combination of the preceding treatments. A contract modification is accounted for as a separate contract if the scope of the contract increases because of the addition of promised services that are distinct and if the price of the contract increases by an amount of consideration that reflects the Company's standalone selling prices of the additional promised services. When a contract modification is not considered a separate contract and the remaining services are distinct from the services transferred on or before the date of the contract modification, the Company accounts for the contract modification as a termination of the existing contract and a creation of a new contract. When a contract modification is not considered a separate contract and the remaining services are not distinct, the Company accounts for the contract modification as an add-on to the existing contract and as an adjustment to revenue on a cumulative catch-up basis.

Research and Development

Research and development costs are expensed as incurred. Research and development expenses primarily include salaries and benefits for medical, clinical, quality, preclinical, manufacturing and research personnel, costs related to research activities, preclinical studies, clinical trials, drug manufacturing expenses and allocated overhead and facility occupancy costs. The Company accounts for non-refundable advance payments for goods or services that will be used in future research and development activities as expenses when the goods have been received or when the service has been performed rather than when the payment is made.

Clinical trial costs are a component of research and development expenses. The Company accrues estimated costs for its clinical trial activities performed by third parties, including clinical research organizations, or CROs, and other service providers based upon estimates of the proportion of work completed over the life of the individual clinical trial and patient enrollment rates in accordance with associated agreements. The Company's estimates are determined through detailed discussions with internal personnel and its service providers as to the progress of each clinical trial and by reviewing contracts, vendor agreements and purchase orders for previously agreed-upon rates and fees to be paid for such services.

Stock-Based Compensation

The Company's stock-based compensation programs include stock option grants, as well as shares issued under its 2019 Employee Stock Purchase Plan, or ESPP. Grants are awarded to employees, directors and nonemployees. The Company measures employee and director stock-based compensation expense for all stock-based awards at the grant date based on the fair value measurement of the award. Subsequent to the adoption of ASU No. 2018-07, Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting on January 1, 2019, stock-based compensation expense for nonemployee awards is measured based on the fair value on the date of adoption. The expense is recorded on a straight-line basis over the requisite service period, which is generally the vesting period, for the entire award. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures materially differ from estimates. The Company calculates the fair value measurement of stock options using the Black-Scholes option-pricing model.

Foreign Currency Transactions

The functional currency of NGM Biopharmaceuticals Australia Pty Ltd., the Company's wholly-owned subsidiary, is the U.S. dollar. Accordingly, all monetary assets and liabilities of the subsidiary are remeasured into U.S. dollars at the current period-end exchange rates and non-monetary assets are remeasured using historical exchange rates. Income and expense elements are remeasured to U.S. dollars using the average exchange rates in effect during the period. Remeasurement gains and losses are recorded as other income (expense), net on the condensed consolidated statements of operations.

The Company is subject to foreign currency risk with respect to its clinical and manufacturing contracts denominated in currencies other than the U.S. dollar, primarily British Pounds, Swiss Francs, Australian dollars and the Euro. Payments on contracts denominated in foreign currencies are made at the spot rate on the day of payment. Changes in the exchange rate between billing dates and payment dates are recorded within other income (expense), net on the condensed consolidated statements of operations.

Comprehensive Loss

Comprehensive loss is composed of net loss and certain changes in stockholders' equity that are excluded from net loss, primarily unrealized gains or losses, net of taxes, on the Company's marketable securities.

Net Loss per Share

Basic net loss per share is calculated by dividing net loss by the weighted average number of shares outstanding during the period, less shares subject to repurchase and excludes any dilutive effects of stock-based options and awards. Diluted net income per share is computed by giving effect to all potentially dilutive shares, including common stock issuable upon exercise of stock options. However, where there is a diluted net loss per share, no adjustment is made for potentially issuable shares since their effect would be anti-dilutive. In this case, diluted net loss per share is equal to basic net loss per share.

Net loss per share was computed as follows (in thousands, except per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Numerator:				
Net loss	$ (46,519)	$ (36,692)	$ (78,969)	$ (64,236)
Denominator:				
Weighted average number of shares used in calculating net loss per share—basic and diluted	79,270	77,096	78,650	76,568
Net loss per share—basic and diluted	$ (0.59)	$ (0.48)	$ (1.00)	$ (0.84)

Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows (in thousands):

	Three and Six Months Ended June 30,	
	2022	2021
Options to purchase common stock	13,125	11,124
Shares committed under ESPP	485	215
Total	13,610	11,339

Segment and Geographical Information

The Company operates in one business segment. Substantially all of the Company's long-lived assets, primarily comprised of property and equipment, are based in the United States. For the three and six months ended June 30, 2022 and 2021, the Company's revenues were entirely within the United States based upon the location of the Company and Merck.

Recent Accounting Pronouncements

New accounting pronouncements are issued by the Financial Accounting Standards Board, or FASB, or other standard setting bodies and adopted by the Company as of the specified effective date. Unless otherwise discussed, the impact of recently issued standards that are not yet effective will not have a material impact on the Company's results of operations and financial position upon adoption.

3. Fair Value Measurements

Cash equivalents and marketable securities are classified as available-for-sale securities and consisted of the following (in thousands):

	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
As of June 30, 2022				
U.S. treasury securities	$ 140,314	$ —	$ (870)	$ 139,444
Money market funds	59,296	—	—	59,296
Commercial paper	49,350	—	—	49,350
Corporate and agency bonds	45,842	—	(207)	45,635
Totals	$ 294,802	$ —	$ (1,077)	$ 293,725
Classified as:				
Cash and cash equivalents				$ 59,296
Short-term marketable securities (amortized cost of $235,506)				234,429
Total				$ 293,725

	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
As of December 31, 2021				
U.S. treasury securities	$ 141,093	$ —	$ (116)	$ 140,977
Money market funds	129,763	—	—	129,763
Corporate and agency bonds	64,997	7	(20)	64,984
Commercial paper	8,497	—	—	$ 8,497
Totals	$ 344,350	$ 7	$ (136)	$ 344,221
Classified as:				
Cash and cash equivalents				$ 129,763
Short-term marketable securities (amortized cost of $214,587)				214,458
Total				$ 344,221

Cash and cash equivalents in the table above excludes cash on deposit with banks of $4.1 million and $22.0 million as of June 30, 2022 and December 31, 2021, respectively.

To date, the Company has not recorded any impairment charges against the market value of its marketable securities. In determining whether a decline is other than temporary, the Company considers various factors including the length of time and extent to which the market value has been less than cost, the financial condition and near-term prospects of the issuer and the Company's intent and ability to retain its investment in the issuer for a period of time sufficient to allow for any anticipated recovery in market value.

As of June 30, 2022 and December 31, 2021, all of the Company's marketable securities had remaining contractual maturities of less than one year. At June 30, 2022 and December 31, 2021, the Company had 21 marketable securities in an unrealized loss position for less than twelve months. The Company does not intend to sell marketable securities that are in an unrealized loss position and it is highly unlikely that the Company will be required to sell the investments before recovery of their amortized cost basis, which may be maturity.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following table summarizes, by major security type, our available-for-sale securities that were measured at fair value on a recurring basis and were categorized using the fair value hierarchy (in thousands):

	Fair Value Measurements			
As of June 30, 2022	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets:				
U.S. treasury securities	$ 139,444	$ —	$ —	$ 139,444
Money market funds	59,296	—	—	59,296
Commercial paper	—	49,350	—	49,350
Corporate and agency bonds	—	45,635	—	45,635
Totals	$ 198,740	$ 94,985	$ —	$ 293,725

	Fair Value Measurements			
As of December 31, 2021	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets:				
U.S. treasury securities	$ 140,977	$ —	$ —	$ 140,977
Money market funds	129,763	—	—	129,763
Corporate and agency bonds	—	64,984	—	64,984
Commercial paper	—	8,497	—	8,497
Totals	$ 270,740	$ 73,481	$ —	$ 344,221

The carrying amounts of cash and cash equivalents, the related party receivable and other current assets and liabilities approximate their respective fair values due to their short-term nature.

The Company estimates the fair values of investments in commercial paper and corporate and agency bond securities using Level 2 inputs by taking into consideration valuations obtained from third-party pricing services.

There were no transfers of assets or liabilities between the fair value measurement levels during the six months ended June 30, 2022 and year ended December 31, 2021.

4. Balance Sheet Components

Cash, Cash Equivalents and Restricted Cash

A reconciliation of cash, cash equivalents and restricted cash reported within the condensed consolidated balance sheets to the amount reported within the condensed consolidated statements of cash flows is as follows (in thousands):

	June 30, 2022	June 30, 2021
Cash and cash equivalents	$ 63,379	$ 99,403
Restricted cash	1,499	1,499
Total cash, cash equivalents and restricted cash	$ 64,878	$ 100,902

Property and Equipment

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

	June 30, 2022	December 31, 2021
Leasehold improvements	$ 25,880	$ 25,880
Laboratory equipment and office furniture	22,807	21,916
Computer equipment	1,351	1,225
Construction-in-progress	162	18
Total property and equipment, gross	50,200	49,039
Less: accumulated depreciation and amortization	(41,720)	(38,968)
Total property and equipment, net	$ 8,480	$ 10,071

Depreciation expense was $1.4 million and $2.8 million for the three and six months ended June 30, 2022, respectively, compared to $1.6 million and $3.1 million for the same periods in 2021.

Accrued Liabilities

Accrued liabilities consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Clinical trials and research and development costs	$ 9,655	$ 12,070
Personnel-related costs	6,763	10,298
Manufacturing costs	3,482	7,773
Accrued expenses	4,040	3,117
Total accrued liabilities	$ 23,940	$ 33,258

5. Research Collaboration and License Agreements

Merck

In 2015, the Company entered into a research collaboration, product development and license agreement with Merck, which, together with amendments made prior to June 30, 2021, is referred to as the Original

Collaboration Agreement, covering the discovery, development and commercialization of novel therapies across a range of therapeutic areas, including a broad, multi-year drug discovery and early development program that was financially supported by Merck, and scientifically directed by the Company with input from Merck. The original research phase of the collaboration was for five years and was extended for an additional two years by Merck through March 2022. As part of that extension, Merck agreed to continue to fund up to $75.0 million of our R&D efforts each year consistent with the initial five-year research term and, in lieu of a $20.0 million extension fee payable to the Company, Merck agreed to make additional payments totaling up to $20.0 million in support of our R&D activities during 2021 through the first quarter of 2022.

On June 30, 2021, the Company entered into an amended and restated research collaboration, product development and license agreement with Merck, or the Amended Collaboration Agreement, replacing the Original Collaboration Agreement and extending the research phase of the collaboration generally through March 31, 2024, with possible extensions for each of the various programs to allow the Company or Merck to complete ongoing development, but with a narrower scope than in the Original Collaboration Agreement, as described in more detail below.

Merck owned approximately 16.3% of the Company's outstanding shares as of June 30, 2022.

The Amended Collaboration Agreement

Pursuant to the Amended Collaboration Agreement, the prior two-year extension of the research phase under the Original Agreement was deemed to end on March 31, 2021, while a new three-year research phase commenced on April 1, 2021. Under the Original Collaboration Agreement, all of the Company’s research and development programs, both those existing at the time the Company entered into the Original Collaboration Agreement and those the Company worked on during the research phase of the collaboration, other than aldafermin, were included within the scope of the collaboration. Under the terms of the Original Collaboration Agreement, upon completion of a human proof-of-concept trial for a particular collaboration compound, regardless of the results of such trial, Merck had the one-time option to obtain an exclusive, worldwide license, on specified terms, to that collaboration compound, as well as to all other compounds that were directed against the same target and that result in the same effect on such target, or the related compounds, referred to as the Merck license option. Under the Amended Collaboration Agreement, the scope of the collaboration and the resulting programs for which Merck has the Merck license option was narrowed. The collaboration as conducted under the Amended Collaboration Agreement, or the continuing collaboration, is focused primarily on the identification and research and development of collaboration compounds directed to targets of interest to Merck in the fields of ophthalmology and cardiovascular or metabolic, or CVM, disease, including heart failure, as well as certain laboratory testing and other activities on compounds that are directed to one of up to two undisclosed targets outside of the fields of ophthalmology and CVM disease, referred to as the Lab Programs. The ophthalmology compounds in the continuing collaboration include NGM621, which is being tested in a Phase 2 clinical trial, and its related compounds, and compounds directed against two other undisclosed ophthalmology targets and their related compounds. Collaboration compounds that remain within the scope of the continuing collaboration under the Amended Collaboration Agreement are referred to as continuing collaboration compounds. Given the narrowed research scope under the Amended Collaboration Agreement, the Company has the right, in its sole discretion, to independently research, develop and commercialize the collaboration compounds known as NGM120, NGM707, NGM831 and NGM438, their related compounds and all other preclinical and research assets that the Company researched or developed under the Original Collaboration Agreement but that are not included within the research and development scope of the continuing collaboration, which are referred to as the released NGM compounds. Merck retained the right to receive royalties at low single-digit rates on the sales of any released NGM compounds that receive regulatory approval and, if the Company decides during a certain time period to engage in a formal partnering process for a released NGM compound or negotiations regarding a license or asset sale of a released NGM compound, the Company is obligated to notify Merck, provide Merck with certain information and engage in good faith, non-exclusive negotiations with respect to such released NGM compound with Merck at Merck’s request.

Under the Amended Collaboration Agreement, Merck continues to have a Merck license option, as it did under the Original Agreement, to each continuing collaboration compound that is identified, researched and developed under the Amended Collaboration Agreement and reaches the specified option exercise point for such continuing collaboration compound as described below, and to its related compounds (each such continuing collaboration compound and its related compounds are referred to generally as a continuing program). In addition, under the terms of the Amended Collaboration Agreement, new CVM-related programs may be added to the continuing collaboration if recommended by the Company and selected by Merck, and Merck would have a Merck license option to such CVM-related continuing program. Merck has a one-time right to exercise its Merck license option, during the research phase or a tail period following such research phase, as applicable, for any continuing

collaboration compound on a continuing program-by-continuing program basis when the Company or Merck achieves the specified Merck license option exercise point. The Merck license option exercise point for collaboration compounds under the Original Collaboration Agreement was the completion of a human proof-of-concept trial, exercisable within 60 days of Merck's receipt of an agreed-upon data package for the relevant program. This generally continues to be the Merck license option exercise point under the Amended Collaboration Agreement for continuing collaboration compounds that are directed to ophthalmology targets, including NGM621 and its related compounds and all of the continuing collaboration compounds from two other ophthalmology programs directed against undisclosed ophthalmology targets and their related compounds (including NGM621 and its related compounds, collectively referred to as the continuing ophthalmology collaboration compounds). Upon the completion of the ongoing Phase 2 NGM621 CATALINA clinical trial, Merck will have an additional one-time option to obtain an exclusive, worldwide license to all of the continuing ophthalmology collaboration compounds together, referred to as the ophthalmology bundle option. If Merck does not exercise this one-time ophthalmology bundle option for all continuing ophthalmology collaboration compounds, it may nevertheless exercise its regular Merck license option with respect to NGM621 and its related compounds at such time, and it may also exercise its regular Merck license option for the continuing ophthalmology collaboration compounds from each of the other two programs if a continuing ophthalmology collaboration compound from such continuing program completes a human proof-of-concept trial. Unlike the Original Collaboration Agreement, the Merck license option exercise point for a continuing collaboration compound from the CVM-related continuing programs or the Lab Programs will be the designation by Merck of such continuing collaboration compound as a research program development candidate that Merck intends to progress into preclinical development.

As was the case under the Original Collaboration Agreement, under the Amended Collaboration Agreement, if Merck exercises a Merck license option and obtains the relevant exclusive, worldwide license for a continuing collaboration compound and its related compounds, Merck will pay an option exercise fee to the Company and will be responsible, at its own cost, for any further development and commercialization activities for continuing collaboration compounds within that licensed continuing program. In such case, the Company will have the option to receive milestones and royalty payments or, in certain cases, to co-fund development and participate in a global cost and profit share arrangement of up to 50%, with an additional option to co-detail any such licensed continuing collaboration compound in the United States under the same terms as set forth in the Original Collaboration Agreement. If the Company elects to exercise its cost and profit share option for a particular continuing collaboration compound and its related compounds Merck has agreed to advance to the Company and/or assume up to 25% of the Company’s share of the global development costs for such licensed compound, subject to an aggregate cap over the course of the collaboration. All such amounts advanced or assumed by Merck would accrue interest and be recouped by Merck in full out of the Company’s share of any profits resulting from sales of the licensed compound for which the Company elected to exercise its cost and profit share option before the Company was entitled to receive any of those profits.

Except for the ophthalmology bundle option, the amount of the option exercise fees for continuing ophthalmology collaboration compounds upon completion of a human proof-of-concept trial remains the same under the Amended Collaboration Agreement as under the Original Collaboration Agreement. If Merck exercises the ophthalmology bundle option, it will pay the Company either $40.0 million or $45.0 million as the Merck license option exercise fee, depending upon the stage of development of one of the two earlier stage ophthalmology programs that is included in the ophthalmology bundle option. Under the Amended Collaboration Agreement, if Merck exercises the Merck license option for a continuing collaboration compound from a CVM-related continuing program or the Lab Programs, Merck will pay the Company a $6.0 million option exercise fee at the time of selection to progress such licensed continuing collaboration compound or any of its related compounds into preclinical development and an additional $10.0 million milestone payment if such continuing collaboration compounds or one of its related compounds subsequently completes a human proof-of-concept trial.

Under the Amended Collaboration Agreement, the parties’ rights and obligations with respect to MK-3655 and related FGFR1c/KLB agonists for which Merck exercised its Merck license option in November 2018 did not change.

On March 30, 2022, the Company and Merck entered into a letter agreement, or the Letter Agreement, regarding NGM621 manufacturing activities that the Company is undertaking during the Phase 2 NGM621 CATALINA clinical trial to avoid a significant delay between the completion of that trial and the start of a Phase 3 clinical trial for NGM621. The Company will be responsible for all payments owed to the third-party manufacturer for such activities before Merck decides whether to exercise the ophthalmology bundle option or the NGM621 option following completion of the Phase 2 NGM621 CATALINA clinical trial. If Merck exercises either option, then in addition to paying the one-time option exercise fee to the Company, Merck will also reimburse the Company for

certain amounts it paid to the third-party manufacturer, according to the terms of the Letter Agreement and subject to certain limitations. Under the Amended Collaboration Agreement, Merck agreed to provide up to $86.0 million in research funding for the four calendar quarters ending March 31, 2022, which included the remaining $16.0 million of the up to $20.0 million in additional payments Merck agreed to pay as part of exercising its first option to extend the research phase of the collaboration under the Original Collaboration Agreement for two years through March 16, 2022. The Company was obligated to use commercially reasonable efforts to expend, and did spend, at least $35.0 million of such $86.0 million in funding during the same time frame on the ophthalmology and CVM-related programs and Lab Programs as required under the Amended Collaboration Agreement. The Company was permitted to use the remainder of the $86.0 million in research funding provided by Merck during such time frame to advance the released NGM compounds. During the remaining two years of the research phase after March 2022, Merck will provide up to a total of $20.0 million in research funding for the ophthalmology and CVM-related programs and the Lab Programs. Pursuant to the Letter Agreement, the Company may use part of this research funding to cover the costs of its personnel who provide support for the manufacturing activities conducted in preparation for a Phase 3 clinical trial for NGM621. Merck will also fund certain research and development costs related to NGM621, subject to certain limitations, until the earlier of the remaining two years of the research phase after March 2022 or until Merck exercises, or decides not to exercise, its license option with respect to NGM621 alone or bundled with the other continuing ophthalmology compounds. After March 2022, the Company, using its own funding, is required to use commercially reasonable efforts to research and develop a specific product candidate directed to a specific ophthalmology target to be ready for starting investigational new drug application-, or IND-, enabling studies by March 31, 2023. If Merck exercises its regular Merck license option with respect to NGM621 or the ophthalmology bundle option for all of the continuing ophthalmology collaboration compounds upon completion of the ongoing Phase 2 CATALINA clinical trial of NGM621 within 60 days of Merck's receipt of an agreed-upon data package and pays the applicable option exercise fee to the Company, then the Company will be obligated to reinvest $5.0 million or up to $15.0 million, respectively, of such option fee to fund research on the ophthalmology and CVM-related continuing programs.

Under the Amended Collaboration Agreement, the research phase for the ophthalmology continuing programs will end no later than March 31, 2024. The research phase for the CVM-related continuing programs will also continue until March 31, 2024, unless the parties mutually agree to extend the research phase to March 31, 2026, in which case Merck will provide up to a total of $20.0 million in research funding during those additional two years. The research phase for the Lab Programs will end no later than December 31, 2022.

As under the Original Collaboration Agreement, Merck has the right under the Amended Collaboration Agreement to review the then-ongoing continuing programs in the three-month period before the end of applicable research phase and to elect to designate one or more continuing programs for which research and development would continue to be conducted, until the applicable Merck license option exercise point is reached, for up to three years after the end of such research phase, with the possibility of extension if the Company is conducting ongoing ophthalmology clinical trials, if Merck is using commercially reasonable efforts to progress one or more ophthalmology continuing programs or if Merck determines to continue progressing a CVM-related continuing program or Lab Program toward the nomination of a research program development candidate, and any such extension is referred to as an Amended Collaboration Agreement tail period. Under the Amended Collaboration Agreement, the Amended Collaboration Agreement tail period, if any, for the ophthalmology continuing programs would be separate from the Amended Collaboration Agreement tail period, if any, for the CVM-related continuing programs or the Lab Program, and Merck would be primarily responsible for performing all research and development activities, itself or through third-party contractors, during the Amended Collaboration Agreement tail period, if any, for the CVM-related continuing programs or the Lab Program.

The Company concluded that the Amended Collaboration Agreement is a separate arrangement containing a three-year performance obligation to provide distinct research and development services in accordance with ASC 606. The total transaction price under the Amended Collaboration Agreement is $126.4 million and represents the sum of potential funding amounts, including $86.0 million in research funding for the four calendar quarters ending March 31, 2022, $20.0 million in research funding for the ophthalmology and CVM-related continuing programs during the remaining two years of the research phase after March 2022 and $20.4 million in estimated NGM621 reimbursable expenses during the remaining two years of the research phase after March 2022. The Company will continue to re-evaluate the transaction price as uncertain events are resolved or other changes in circumstances occur. The Company continues performing a series of research and development services in the area of both the continuing collaboration compounds and the released NGM compounds and has one performance obligation across all continuing programs. The Company will continue to use the cost-based input method to calculate the amount of revenue to recognize as services are being rendered from April 1, 2021 through March 31, 2024.

The Company considered whether the Merck license option and the ophthalmology bundle option created material rights in the contract and concluded that the fee attached to the exercise of such options approximated the SSP of the promised goods or services included in the options. Therefore, the Company concluded that such options did not give rise to material rights, were not performance obligations in the Amended Collaboration Agreement and, if and when exercised, would be accounted for as separate arrangements under ASC 606.

If Merck exercises its regular Merck license option for NGM621 or the ophthalmology bundle option for all of the continuing ophthalmology collaboration compounds upon completion of the Phase 2 CATALINA clinical trial within 60 days of Merck's receipt of an agreed-upon data package, pays the applicable Merck license option exercise fee to the Company and reimburses the Company for third-party manufacturing payments in accordance with the Letter Agreement this would not result in a modification of the contract as total contract consideration and the Company's performance obligation under the Amended Collaboration Agreement will not change.

A breakout of the milestone payments in connection with the potential achievement of certain clinical development events for each of the first three indications is as follows (in thousands):

	First Indication	Second Indication	Third Indication
Upon administration of an applicable product to the first patient in the first Phase 3 clinical trial for such product for the given indication	$ 35,000	$ 25,250	$ 17,500
Upon first completion of a proof-of-concept trial for a CVM-related research program development candidate	$ 10,000	$ —	$ —
Upon first completion of a proof-of-concept trial for a certain research development candidate for a lab program	$ 10,000	$ —	$ —

A breakout of the aggregate milestone payments in connection with the potential achievement of both acceptance of an application for and receipt of regulatory approval for each of the first three indications, for each of the three geographic areas, is as follows (in thousands):

	First Indication	Second Indication	Third Indication	Total
United States	$ 75,000	$ 56,250	$ 37,500	$ 168,750
European Union	60,000	45,000	30,000	135,000
Japan	30,000	22,500	15,000	67,500
	$ 165,000	$ 123,750	$ 82,500	$ 371,250

Summary of Related Party Revenue

The Company recognized revenue from its collaboration and license agreements as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Related party revenue	$ 8,293	$ 16,773	$ 29,241	$ 38,348

For the three months ended June 30, 2022, the Company recognized collaboration and license revenue of $8.3 million primarily related to reimbursable research and development activities associated with the performance obligation under the Amended Collaboration Agreement under which Merck is providing significantly less annual R&D funding than it had provided through March 31, 2022. Revenue recognized related to the reimbursable research and development activities was recognized using the cost-based input model related to research and development activities.

Related Party Contract Assets and Liabilities

Amounts recognized as revenue prior to the Company having an unconditional right (or a right that is conditioned only on the passage of time) to receipt are recorded as contract assets in the Company's condensed consolidated balance sheets. If the Company expects to have an unconditional right to receive the consideration in the next twelve months, the contract asset will be classified in current assets. As of June 30, 2022 and December 31, 2021, the Company did not have a related party contract asset.

Amounts received prior to satisfying the revenue recognition criteria are recorded as contract liabilities in the Company's condensed consolidated balance sheets. If the related performance obligation is expected to be satisfied within the next twelve months, the contract liability will be classified in current liabilities. As of June 30, 2022 and December 31, 2021, the Company recorded contract liabilities of $6.5 million and $17.8 million, respectively.

6. Commitments and Contingencies

Operating Lease and Lease Guarantee

In December 2015, the Company entered into an operating lease agreement, or the 333 Oyster Point lease agreement, for its corporate office space and laboratory facility at 333 Oyster Point Blvd., South San Francisco, California, or the 333 Oyster Point facility, for approximately 122,000 square feet that expires in December 2023. The 333 Oyster Point lease agreement provided a tenant improvement allowance of $15.2 million that the Company used in 2016 towards $22.3 million in total leasehold improvements that are amortized over the lease term of seven years. The 333 Oyster Point lease agreement required a letter of credit in the amount of $2.3 million as a security deposit to the lease, which the Company has recorded as non-current restricted cash on the condensed consolidated balance sheets. In accordance with the agreement, the Company reduced the letter of credit amount by $0.4 million on each of the third and fourth anniversaries of the rent commencement date and reclassified each $0.4 million amount from restricted cash to cash and cash equivalents on the condensed consolidated balance sheets.

As of June 30, 2022, the weighted-average remaining lease term for the 333 Oyster Point lease agreement was 1.5 years and the weighted-average discount rate used to determine the Company's operating lease liability was 2.85%. Cash paid for amounts included in the measurement of the lease liabilities were $2.6 million and $2.5 million in the six months ended June 30, 2022 and June 30, 2021, respectively.

During the three and six months ended June 30, 2022 and June 30, 2021, the components of lease costs, which were included in general and administrative expenses on the Company's consolidated statements of operations, were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Operating lease costs	$ 542	$ 542	$ 1,083	$ 1,083
Variable lease costs (1)	324	309	648	618
Total lease cost	$ 866	$ 851	$ 1,731	$ 1,701

(1) Variable lease costs include certain additional charges for operating costs, including insurance, maintenance, taxes and other costs incurred, which are billed based on both usage and as a percentage of the Company's share of total square footage.

As of June 30, 2022, the maturities of the Company's operating lease liabilities and future minimum lease payments were as follows (in thousands):

Year Ending December 31,	
2022 (remaining)	$ 2,687
2023	5,455
Total undiscounted lease payments	8,142
Less: present value adjustment	(162)
Present value of lease liabilities	$ 7,980

In July 2022, the Company entered into a new operating lease agreement for the 333 Oyster Point facility that will commence on January 1, 2024 and expire on December 31, 2033. See Note 9 for additional details.

Indemnification

In the normal course of business, the Company enters into contracts and agreements that contain a variety of representations and warranties and may provide for indemnification of the counterparty. The Company's exposure under these agreements is unknown because it involves claims that may be made against it in the future but have not yet been made.

In accordance with the Company's amended and restated certificate of incorporation and its amended and restated bylaws, the Company has indemnification obligations to its officers and directors, subject to some limits, with respect to their service in such capacities. The Company has also entered into indemnification agreements with its directors and certain of its officers. To date, the Company has not been subject to any claims, and it maintains director and officer insurance that may enable it to recover a portion of any amounts paid for future potential claims.

The Company's exposure under these agreements is unknown because it involves claims that may be made against it in the future but have not yet been made. The Company believes that the fair value of these indemnification obligations is minimal and, accordingly, it has not recognized any liabilities relating to these obligations for any period presented.

7. Stockholders' Equity

Preferred Stock

The Company has 10,000,000 shares of preferred stock authorized, which may be issued at the discretion of the Company's board of directors. The board of directors may issue shares of preferred stock in one or more series and may fix the number, rights, preferences, privileges and restrictions on such shares. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and sinking fund terms. As of June 30, 2022, the Company does not have any shares of preferred stock issued or outstanding.

Common Stock

As of June 30, 2022 and December 31, 2021, the Company had reserved shares of common stock for issuance as follows (in thousands):

	June 30, 2022	December 31, 2021
Reserve balance for Sales Agreement	13,038	14,183
Common stock options outstanding	13,125	10,485
Common stock options available for grant	6,949	6,698
ESPP shares available for purchase	386	507
401(k) Matching Plan (1)	192	18
Total	33,690	31,891

(1) The Company sponsors a 401(k) defined contribution plan for its employees. Employee contributions are voluntary. In December 2011, the Company adopted the 401(k) Matching Plan, under which the Company made matching contributions in the form of common stock at a rate of $1.00 for each $2.00 of employee contributions up to a maximum $750 of common stock per employee per year. Effective January 1, 2022, the Company increased its matching contributions to a rate of $1.00 for each $2.00 of employee contributions up to a maximum $3,500 of common stock per employee per year. Effective January 1, 2022, the Company increased shares of common stock reserved pursuant to the 401(k) Matching Plan to 200,000 shares from 17,813 shares of common stock as of December 31, 2021.

Open Market Sale Agreement

In June 2020, the Company entered into the Sales Agreement with Jefferies relating to the sale of shares of its common stock. In accordance with the terms of the Sales Agreement, the Company may offer and sell shares of its common stock having an aggregate offering price of up to $150.0 million from time to time through Jefferies, acting as its sales agent. During the three months ended June 30, 2022, approximately 1.1 million shares were sold pursuant to the Sales Agreement for net proceeds to the Company of $17.4 million, after deducting issuance costs. As of June 30, 2022, $109.2 million of the Company's common stock remained available to be sold under the Sales Agreement, subject to conditions specified in the Sales Agreement.

Equity Incentive Plan

In 2018, the Company adopted the 2018 Equity Incentive Plan, or the 2018 Plan, for eligible employees, officers, directors, advisors and consultants, which provides for the grant of incentive and non-statutory stock options, restricted stock awards and stock appreciation rights. The terms of the stock option agreements, including vesting requirements, are determined by the board of directors, subject to the provisions of the 2018 Plan. Options granted by the Company generally vest within four years and are exercisable from the grant date until ten years after the date of grant. Vesting of certain employee options may be accelerated in the event of a change in control of the Company.

Early Exercise of Stock Options

The 2018 Plan allows for the granting of options that may be exercised before the options have vested. Shares issued as a result of early exercise that have not vested are subject to repurchase by the Company upon termination of the purchaser's employment or services, at the price paid by the purchaser, and are not deemed to be issued for accounting purposes until those related shares vest. The amounts received in exchange for these shares have been recorded as a liability on the condensed consolidated balance sheets and are reclassified into Company common stock and additional paid-in-capital as the shares vest. The Company's right to repurchase these shares generally lapses in equal installments over four years beginning from the original vesting commencement date. Since the beginning of March 2021, the Company has not granted any options under the 2018 Plan that can be early exercised prior to vesting.

Stock Option Activity

A summary of the activity under the 2008 Plan and the 2018 Plan is as follows:

	Outstanding Options		Weighted Average Remaining Contractual Life (In Years)	Aggregate Intrinsic Value (In Thousands)
	Number of Options (In Thousands)	Weighted Average Exercise Price		
Balances at December 31, 2021	10,485	$ 15.79	6.68	$ 52,349
Options granted	3,423	15.19		
Options exercised	(228)	7.31		
Options cancelled	(555)	21.19		
Balances at June 30, 2022	13,125	$ 15.55	7.00	$ 22,421
Vested and expected to vest at June 30, 2022	12,661	$ 15.43	6.91	$ 22,420
Exercisable at June 30, 2022	8,680	$ 13.36	5.78	$ 22,421

The aggregate intrinsic values of options outstanding, vested and expected to vest, and exercisable were calculated as the difference between the exercise price of the options and the estimated fair value of the Company's common stock.

The weighted-average grant date fair value of stock options granted during the six months ended June 30, 2022 and 2021 was $10.15 per share and $19.23 per share, respectively. The intrinsic value of stock options exercised during the six months ended June 30, 2022 and 2021 was $1.8 million and $26.7 million, respectively. Due to the Company's net operating losses, the Company did not realize any tax benefits from stock-based payment arrangements for the three and six months ended June 30, 2022 and 2021.

Stock-Based Compensation Expense

Stock-based compensation expense for the three and six months ended June 30, 2022 and 2021 was calculated based on awards previously granted to employees, directors and nonemployees that are ultimately expected to vest and has been reduced for estimated forfeitures.

Stock-based compensation expense was allocated as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Research and development	$ 4,411	$ 3,738	$ 8,622	$ 7,309
General and administrative	3,691	2,978	7,300	5,989
Total stock-based compensation expense	$ 8,102	$ 6,716	$ 15,922	$ 13,298

Employee Stock Purchase Plan

Under the ESPP, eligible employees are granted the right to purchase shares of the Company's common stock through payroll deductions that cannot exceed 15% of each employee's salary. The ESPP provides for a 24-month offering period, which includes four six-month purchase periods. At the end of each purchase period, eligible employees are permitted to purchase shares of common stock at the lower of 85% of fair market value at the beginning of the offering period or fair market value at the end of the purchase period. As of June 30, 2022, 614,366 shares of common stock had been purchased under the ESPP.

8. Income Taxes

Since inception, the Company has incurred net losses and expects to record a net loss for the year ending December 31, 2022. Additionally, the Company's net deferred tax assets have been fully offset by a valuation allowance. Therefore, the Company did not record a tax provision for income taxes for the three and six months ended June 30, 2022 and 2021.

9. Subsequent Event

In July 2022, the Company entered into an operating lease agreement, or the 2024 Lease Agreement, for its corporate office space and laboratory facility at 333 Oyster Point Blvd., South San Francisco, California, which the Company currently occupies pursuant to a sublease agreement that is scheduled to expire on December 31, 2023. Pursuant to the 2024 Lease Agreement, the lease term with the new landlord begins on January 1, 2024 and expires on December 31, 2033, and the Company will pay an initial monthly base rent of approximately $0.9 million for the first year, which is subject to increase at an annual rate of 3.5% each year thereafter, plus certain operating and tax expenses. Base rent during the initial ten-year term of the 2024 Lease Agreement will total $124.1 million. The 2024 Lease Agreement provides a tenant improvement allowance of approximately $4.9 million. The Company has an option to extend the 2024 Lease Agreement for a period of either eight or ten years after the initial term. In July 2022, pursuant to the 2024 Lease Agreement, the Company provided the landlord with a letter of credit in the amount of $2.5 million, which the landlord may draw from upon the occurrence of certain events provided in the lease.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with (1) the condensed consolidated financial statements and notes to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q and (2) the audited consolidated financial statements and related notes and management's discussion and analysis of financial condition and results of operations for the fiscal year ended December 31, 2021 included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC, on March 1, 2022, or the 2021 Annual Report on Form 10-K. This discussion and analysis contains forward-looking statements based upon current beliefs, plans and expectations that involve risks, uncertainties and assumptions, such as statements regarding our plans, objectives, expectations, intentions and projections. Our actual results and the timing of events could differ materially from those anticipated in these forward-looking statements as a result of several factors that could impact our business, including those set forth in the section titled "Risk Factors" under Part II, Item 1A in this Quarterly Report on Form 10-Q. In some cases, you can identify forward-looking statements by terminology such as "anticipate," "aspire," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "should," "will" or the negative of these terms or other similar expressions.

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

Overview of Our Business

We are a biopharmaceutical company focused on discovering and developing novel, potentially life-changing medicines based on scientific understanding of key biological pathways underlying retinal diseases, cancer and liver and metabolic diseases. These diseases represent a significant burden for patients and healthcare systems and, in some cases, are leading causes of morbidity and mortality. Since the commencement of our operations in 2008, we have generated a robust portfolio of product candidates ranging from early discovery to Phase 2b development. Currently, we have seven programs in clinical development, including four in Phase 2 or 2b studies, across three therapeutic areas: cancer, retinal diseases and liver and metabolic diseases. Our biology-centric drug discovery approach aims to seamlessly integrate interrogation of complex disease-associated biology and protein engineering expertise to unlock proprietary insights that are leveraged to generate promising product candidates and enable their rapid advancement into proof-of-concept studies. As explorers on the frontier of life-changing science, we aspire to operate one of the most productive research and development engines in the biopharmaceutical industry. All therapeutic candidates in our pipeline have been generated by our in-house discovery engine led by biology and motivated by unmet patient need.

Pipeline Programs and Operational Updates

Pipeline Programs

We currently have seven product candidates in the clinic, five wholly-owned by us (NGM707, NGM831, NGM438, NGM120 and aldafermin), one being progressed by our collaborator, Merck Sharp & Dohme LLC, or Merck (MK-3655), and one optionable by Merck (NGM621).

- **Oncology**. Our oncology product candidates NGM707, NGM831, NGM438 and NGM120 and their related compounds are wholly-owned by us.
    - **NGM707**. NGM707, the lead asset in our myeloid reprogramming and checkpoint inhibition portfolio, is a dual antagonist monoclonal antibody that is designed to improve patient immune responses to tumors by inhibiting both Immunoglobulin-like transcript 2, or ILT2 (also known as LILRB1), and Immunoglobulin-like transcript 4, or ILT4 (also known as LILRB2) receptors. We believe NGM707 has the potential to reprogram ILT4- and ILT2-expressing myeloid cells to shift them from a suppressive state that restricts anti-tumor immunity to a stimulatory state that may promote anti-tumor immunity. Blocking ILT2 may also reverse inhibition of ILT2-expressing lymphoid cells to further stimulate anti-tumor immune responses.
        - We are conducting an open-label, Phase 1 portion of a Phase 1/2 clinical trial evaluating NGM707 as a monotherapy and in combination with KEYTRUDA® (pembrolizumab) for the

treatment of patients with advanced solid tumors. We expect to enroll approximately 180 patients in this trial. Both the Phase 1a dose-finding cohort of the trial evaluating NGM707 as a monotherapy and the Phase 1b cohort evaluating NGM707 in combination with pembrolizumab, which we initiated in the second quarter of 2022, are ongoing.

- ***Looking forward****:* We anticipate a readout of initial data from the Phase 1a cohort in the fourth quarter of 2022. The Phase 1a/1b portions of the trial are expected to be followed by Phase 2 expansion cohorts in specific tumor types.

- **NGM831**. NGM831 is an antagonist antibody that is designed to block the interaction of the Immunoglobulin-like transcript 3, or ILT3 (also known as LILRB4) receptor, with fibronectin, as well as other cognate ligands. For tumors in which both ILT3 and fibronectin are upregulated, the ILT3-fibronectin signaling pathway may act as a "stromal checkpoint" to repress myeloid cell function and inhibit anti-tumor immunity. By inhibiting ILT3's interaction with fibronectin and its other ligands, we believe NGM831 has the potential to mobilize a patient's own immune system to fight tumors by shifting myeloid cells from a suppressive state to a stimulatory state and promoting antitumor activity.

  - In March 2022, we initiated an open-label, Phase 1 portion of a Phase 1/1b clinical trial to evaluate NGM831 as a monotherapy and in combination with pembrolizumab for the treatment of patients with advanced solid tumors. We expect to enroll up to approximately 80 patients in this trial. The Phase 1a dose-finding cohort of the trial evaluating NGM831 as a monotherapy is ongoing. The Phase 1b cohort will evaluate NGM831 in combination with pembrolizumab in patients with advanced solid tumors.

- **NGM438**. NGM438 is an antagonist antibody that is designed to inhibit leukocyte-associated immunoglobulin-like receptor 1, or LAIR1, and thereby promote anti-tumor immune responses. NGM438 has the potential to potently block the binding of all collagens to LAIR1, including tumor-derived collagens. Collagens produced by the tumor stroma are believed to bind LAIR1 to create an immuno-suppressive tumor microenvironment. The interaction of collagens from the tumor stroma with LAIR1 on immune cells represents a “stromal checkpoint” that restrains anti-tumor immune responses. Reinvigoration of these collagen-suppressed immune cells by blocking the binding of collagens to LAIR1 may address a key resistance mechanism that limits tumor responses to current immunotherapies.

  - In May 2022, we initiated an open-label, Phase 1 portion of a Phase 1/1b clinical trial to evaluate NGM438 as a monotherapy and in combination with pembrolizumab for the treatment of patients with advanced solid tumors. We expect to enroll up to approximately 80 patients in this trial. The Phase 1a dose-finding cohort of the trial evaluating NGM438 as a monotherapy is ongoing. The Phase 1b cohort will be a dose-ranging study of NGM438 in combination with pembrolizumab in patients with advanced solid tumors.

- **NGM120**. NGM120 is an antagonist antibody that binds to glial cell-derived neurotrophic factor receptor alpha-like, or GFRAL, and is designed to block the effects of elevated serum levels of growth differentiation factor 15, or GDF15. We designed NGM120 as a potent, humanized monoclonal antibody inhibitor of GFRAL with the potential for once-monthly or less frequent dosing. Preclinical studies suggest that NGM120 may reduce tumor growth and improve survival in syngeneic orthotopic pancreatic tumor models in mice.

  - We are conducting a Phase 1/2 clinical trial to assess NGM120’s effect on cancer and cancer-related cachexia in patients with select advanced solid tumors, metastatic pancreatic cancer and metastatic castration-resistant prostate cancer, or mCRPC. The trial includes:

    - a Phase 1a cohort evaluating NGM120 as a monotherapy in patients with select advanced solid tumors,
    - a Phase 1b cohort evaluating NGM120 in combination with gemcitabine and Nab-paclitaxel in patients with metastatic pancreatic cancer,
    - an additional Phase 1b cohort testing NGM120 in combination with one or more lines of hormone therapies in patients with mCRPC and

- a Phase 2 cohort evaluating NGM120 in combination with gemcitabine and Nab-paclitaxel as first-line treatment in patients with metastatic pancreatic cancer (referred to as the PINNACLES trial).

We are currently enrolling patients into the Phase 2 cohort.

- ***Looking forward***: We plan to report additional data from the Phase 1a cohort and from the Phase 1b metastatic pancreatic cancer cohort of our Phase 1/2 NGM120 trial in the third quarter of 2022. We also expect to enroll our first patient in the additional Phase 1b cohort in the third quarter of 2022.

- **Retinal diseases**.
  - **NGM621**. NGM621 is a humanized Immunoglobulin 1, or IgG1, monoclonal antibody administered via intravitreal, or IVT, injection. NGM621 was engineered to potently bind to, and be a long-acting inhibitor of, complement C3 with the treatment goal of reducing disease progression in patients with geographic atrophy, or GA, secondary to age-related macular degeneration. We have completed a Phase 1 trial demonstrating that NGM621 was well tolerated with no patients experiencing serious adverse events or drug-related adverse events. Ocular adverse events observed were mild in severity and representative of those commonly associated with IVT injections. We also completed enrollment of the ongoing Phase 2 CATALINA clinical trial, which was designed to be a Phase 3-supportive or -enabling clinical trial. The CATALINA trial is evaluating the efficacy and safety of NGM621 when given to patients with GA every four weeks or every eight weeks via IVT injections compared to sham control. NGM621 received Fast Track designation from the United States Food and Drug Administration, or FDA, for GA secondary to age-related macular degeneration.
    - ***Looking forward***: We expect to report topline data from the Phase 2 CATALINA trial in the fourth quarter of 2022, to be followed by a planned presentation of results at a medical conference in the same quarter. If supported by the results of the CATALINA trial, we plan to use such trial results and input from the FDA to inform Phase 3 planning and design for NGM621. Merck has a one-time option to license NGM621 and its related compounds upon completion of the ongoing Phase 2 CATALINA clinical trial (either alone or bundled with all of the other ophthalmology compounds and their respective related compounds included within the scope of the current collaboration with Merck) within 60 days of Merck's receipt of an agreed-upon data package for each of the programs.

- **Liver and metabolic diseases.**
  - **Aldafermin.** Aldafermin is an engineered analog of human hormone fibroblast growth factor 19, or FGF19, that is administered through a once-daily subcutaneous injection. Aldafermin is wholly-owned by us. Aldafermin is in Phase 2b development in the fully enrolled ALPINE 4 trial for the treatment of patients with compensated cirrhosis due to non-alcoholic steatohepatitis, or NASH (liver fibrosis stage 4, or F4, by the NASH Clinical Research Network classification). The ALPINE 4 clinical trial is designed to evaluate the treatment effect of aldafermin over 48 weeks.
    - ***Looking forward:*** We expect to report topline data from the Phase 2b ALPINE 4 trial in the first half of 2023.
  - **MK-3655** (formerly NGM313). MK-3655 is an agonistic antibody discovered by us that selectively activates fibroblast growth factor receptor 1c-beta-klotho, or FGFR1c/KLB, which regulates insulin sensitivity, blood glucose and liver fat and is administered every four weeks through a subcutaneous injection. MK-3655, in Phase 2b development for the treatment of NASH, was licensed by Merck in November 2018.
    - Merck is continuing enrollment in the worldwide 52-week randomized, double-blind Phase 2b trial of MK-3655 in patients with NASH and liver fibrosis stage 2 or 3, or F2 or F3, by the NASH Clinical Research Network classification.

We have additional programs that are in various stages of development ranging from functional validation to preclinical development.

The success of each of our product candidates may be affected by numerous factors, including preclinical data, clinical data, competition, manufacturing capability, sales capability, collaboration partners, the sufficiency of our cash resources, regulatory matters, third-party payor matters and commercial viability. We do not have any

products approved for sale and do not anticipate generating revenue from product sales for the foreseeable future, if ever.

Operational Updates

Partnering has been and is expected to continue to be a key component of our strategy. For example, our collaboration with Merck, described in " — Our Merck Collaboration" below, historically provided us with robust financial support that enabled us to broaden and accelerate our research efforts and to develop more product candidates for major indications than we likely could have advanced on our own. Given the breadth of opportunities produced by our prolific discovery engine, and the current narrower scope of our Merck collaboration, we may decide to pursue additional strategic partners to progress, in whole or in part, some of our wholly-owned product candidates and/or commercialize any resulting approved product.

We do not own, and have no plans to establish, any manufacturing facilities. All of our manufacturing activities are outsourced to third-party contract development and manufacturing organizations or third-party contract manufacturing organizations, which we refer to collectively as CMOs, which are generally single-source suppliers of the drug product or drug substance they are manufacturing for us. We also utilize third-party contract research organizations, or CROs, to carry out many of our clinical development activities. We expect to be reliant on CMOs and CROs for these activities for the foreseeable future. Significant portions of our research and development, or R&D, resources are focused, and will continue to be focused, on the manufacture and testing of clinical trial materials. If our CROs and CMOs fail to satisfy their contractual duties to us or meet expected deadlines or if our CMOs experience difficulties in scaling production, higher than anticipated costs or lower than anticipated yields, product loss due to contamination, equipment failure, improper installation or operation of equipment, vendor or operator error, turnover of qualified staff or improper storage conditions, difficulties with quality control, product stability or quality assurance testing, or difficulties procuring raw materials or components as a result of the ongoing COVID-19 pandemic or otherwise, our ongoing and planned trials and possible acceleration or expansion of those trials may be delayed, perhaps substantially, or abandoned, which could materially and adversely affect our business. For example, while we initiated the Phase 1/1b clinical trial of NGM831 in March 2022 and the Phase 1/1b clinical trial of NGM438 in May 2022, our planned individual new drug application, or IND, submissions for NGM438 and NGM831 were delayed due to challenges at one of our CMOs with respect to the manufacture of those product candidates, primarily related to analytical method qualification and release testing. It is possible that we could experience further supply-related delays that would create supply challenges and possible timing delays for ongoing and planned clinical trials or delay the commencement of first-in-human testing of future product candidates. In addition, there is increased competition in the biotechnology industry for CMO manufacturing slots and other capabilities generally, which has had, and may continue to have, a negative impact on the availability of manufacturing capacity and therefore our ability to supply clinical trial materials for planned, ongoing, accelerated or expanded clinical trials. Our CMOs' facilities and operations have also been adversely affected by labor, raw material and component shortages, high turnover of staff and difficulties in hiring trained and qualified replacement staff. Changes in economic conditions, supply chain constraints, labor, raw material and component shortages and steps taken by governments and central banks, particularly in response to the COVID-19 pandemic as well as other stimulus and spending programs, could lead to higher inflation than previously experienced or expected, which could, in turn, lead to an increase in costs. These supply chain effects, increased competition and higher costs of acquired goods and services may negatively impact our business operations and our financial results.

In addition, all of our product candidates other than NGM621, aldafermin and MK-3655 are currently manufactured solely at a facility in Lithuania. Following Russia's invasion of Ukraine in February 2022, NATO deployed additional military forces to Eastern Europe, including to Lithuania. The ongoing invasion of Ukraine and the retaliatory measures taken or that may be taken by the United States, NATO and others, including significant sanctions against Russia, create global security concerns and regional instability, including due to the possibility of expanded regional or global conflict, and are likely to have short-term and likely longer-term negative impacts on regional and global economies, any or all of which could disrupt our supply chain and adversely affect our ability to conduct ongoing and future clinical trials of our product candidates and our ability to raise capital on favorable terms.

In July 2022, we entered into an operating lease agreement, or the 2024 Lease Agreement, for our existing corporate office space and laboratory facility at 333 Oyster Point Blvd., South San Francisco, California, which allows us to remain in our existing facilities through December 31, 2033, subject to our compliance with the 2024 Lease Agreement. We also have an option to extend the 2024 Lease Agreement for a period of either eight or ten years after the initial ten-year term of January 1, 2024 to December 31, 2033.

We seek to allocate our capital efficiently and strategically and fund our portfolio based on each program's scientific and other merits. Our discipline has been demonstrated by our decision not to proceed with development activities on multiple potentially viable product candidates for portfolio management reasons to concentrate our resources on what we consider our most promising product candidates. Given the substantial decrease in research funding we will now receive from Merck as compared to historical periods commensurate with the decreased collaboration scope described below, going forward we will need to devote a substantial amount of our own financial resources to fund our R&D programs, and we may need to delay or suspend development activities on product candidates that we consider promising unless and until we are able to raise sufficient additional capital and/or we will need to enter into additional collaborations in order to proceed with such development through to regulatory approval.

Our Merck Collaboration

In 2015, we entered into a research collaboration, product development and license agreement with Merck, which, together with amendments made prior to June 30, 2021, is referred to as the Original Collaboration Agreement, covering the discovery, development and commercialization of novel therapies across a range of therapeutic areas, including a broad, multi-year drug discovery and early development program financially supported by Merck, but scientifically directed by us with input from Merck. The original research phase of the collaboration was for five years and was extended for an additional two years by Merck through March 2022. As part of that extension, Merck agreed to continue to fund up to $75.0 million of our R&D efforts each year consistent with the initial five-year research term and, in lieu of a $20.0 million extension fee payable to us, Merck agreed to make additional payments totaling up to $20.0 million in support of our R&D activities during 2021 through the first quarter of 2022.

On June 30, 2021, we entered into an amended and restated research collaboration, product development and license agreement with Merck, or the Amended Collaboration Agreement, replacing the Original Collaboration Agreement and extending the research phase of the collaboration, but with a narrower scope than in the Original Collaboration Agreement. Under the Amended Collaboration Agreement, the collaboration is focused primarily on the identification, R&D of collaboration compounds directed to targets of interest to Merck in the fields of ophthalmology and cardiovascular or metabolic, or CVM, disease, including heart failure. The ophthalmology compounds in the collaboration include NGM621 (and its related compounds) and compounds directed against two other undisclosed ophthalmology targets (and their related compounds). The collaboration scope also includes certain laboratory testing and other activities on compounds that are directed to one of up to two undisclosed targets outside of the fields of ophthalmology and CVM disease, or the Lab Programs. The research phase will now continue generally through March 31, 2024, with possible extensions for each of the various programs to allow us or Merck to complete ongoing development.

Under the Amended Collaboration Agreement, Merck is providing significantly less annual R&D funding than it had provided through March 31, 2022. In this regard, for the period that started on April 1, 2022 and ends on March 31, 2024, Merck will provide up to $20.0 million of R&D funding for the ophthalmology programs (other than NGM621), the CVM-related programs and the Lab Programs. Pursuant to the letter agreement that we entered into with Merck on March 30, 2022, or the Letter Agreement, we may use part of this R&D funding to cover our personnel costs for supporting manufacture of NGM621 for use in a possible Phase 3 clinical trial. If the parties mutually agree to extend the research phase for the CVM-related programs from March 31, 2024 to March 31, 2026, then Merck will provide up to a total of $20.0 million in R&D funding during the additional two years of the CVM program research phase. Merck will also fund certain R&D costs related to NGM621, in an amount expected to be up to approximately $20.0 million, until the earlier of Merck's decision to exercise, or not to exercise, its License Option with respect to NGM621 alone or bundled with the other continuing ophthalmology compounds (as described below) or, March 31, 2024. During the period before Merck's decision, we are responsible under the Letter Agreement for paying all amounts owed to third parties for NGM621 manufacturing activities performed in anticipation of a Phase 3 clinical trial. If Merck decides to exercise its License Option, Merck will reimburse us for certain amounts we paid to such third parties, according to the terms of the Letter Agreement and subject to certain limitations, in addition to paying us the one-time option exercise fee described below.

In addition, we have certain obligations to conduct R&D related to collaboration compounds that will not be reimbursed by Merck. We are required to use commercially reasonable efforts to research and develop a specific product candidate directed to an ophthalmology target to be ready by March 31, 2023 for starting IND-enabling studies and we are responsible for the cost of such work after March 2022. We will have additional R&D funding obligations under the collaboration of up to $5.0 million or $15.0 million in the event that Merck, as described in greater detail below, exercises its License Option to NGM621 alone or bundled with the other continuing

ophthalmology compounds, respectively, and pays us the applicable option exercise fee. We also may spend more than the amounts we will be reimbursed by Merck for activities related to collaboration compounds.

Under the Original Collaboration Agreement, upon the completion of each proof-of-concept clinical trial under the program, Merck had a one-time option to obtain a worldwide, exclusive license to the product candidate tested in the trial and compounds related to it, referred to as a License Option, within 60 days of Merck's receipt of an agreed-upon data package for such program. Under the Amended Collaboration Agreement, Merck retains a License Option to each collaboration compound and its related compounds upon completion of a human proof-of-concept trial for a particular collaboration compound, regardless of the results of such trial, or at earlier points as specified in the Amended Collaboration Agreement, including the option to license NGM621 and its related compounds (either alone or bundled with all of the other ophthalmology collaboration compounds and their respective related compounds included within the scope of the Amended Collaboration Agreement) upon completion of the CATALINA clinical trial within 60 days of Merck's receipt of an agreed-upon data package. For each program for which Merck exercises its License Option and pays the applicable option exercise fee, Merck is responsible for any further development and commercialization activities for the licensed compounds and we have the option, when a licensed compound has advanced to Phase 3 clinical trials, to receive milestones and royalty payments or, in certain cases, to co-fund development and participate in a global cost and profit share arrangement of up to 50%, with an additional option to co-detail any such licensed compounds in the United States. If we elect to exercise our cost and profit share option for a particular licensed compound and its related compounds, Merck has agreed to advance to us and/or assume up to 25% of our share of the global development costs for such licensed compound, subject to an aggregate cap over the course of the collaboration. All such amounts advanced or assumed by Merck would accrue interest and be recouped by Merck in full out of our share of any profits resulting from sales of the licensed compound for which we elected to exercise our cost and profit share option before we would be entitled to receive any of those profits.

If Merck does not exercise a License Option within the specified time period, then we would be free to develop and commercialize the product candidate tested in the proof-of-concept trial and its related compounds independently or with third-party partners, subject to an obligation to make low single-digit royalty payments to Merck. Merck exercised its License Option for MK-3655 and its related FGFR1c/KLB agonists in November 2018 under the Original Collaboration Agreement.

As a result of entering into the Amended Collaboration Agreement, we have the right to independently research, develop and commercialize all of the clinical, preclinical and research assets that we researched or developed under the Original Collaboration Agreement that are now outside the narrower scope of the collaboration, including NGM707, NGM831, NGM438 and NGM120, subject to an obligation to make low single-digit royalty payments to Merck. The parties' rights and obligations remain the same with respect to MK-3655 and its related FGFR1c/KLB agonists. We also have full rights to all future programs we pursue that fall outside of the scope of the specific therapeutic areas and programs included in Amended Collaboration Agreement.

Similar to the Original Collaboration Agreement, during the applicable research phase (including any applicable tail period for each program) for the ophthalmology programs, CVM-related programs and Lab Programs, we may not directly or indirectly research, develop, manufacture or commercialize, outside of the collaboration, any product with specified activity against any target that is being researched or developed under the applicable programs and, if Merck exercises its License Option for a program, we may not directly or indirectly research, develop, manufacture or commercialize any product with specified activity against the target that is the subject of that program for so long as Merck's license to it remains in effect. In addition, under the Amended Collaboration Agreement, we are prohibited from directly or indirectly researching, developing or commercializing any product for the treatment of heart failure with preserved ejection fraction, or HFpEF, during the research phase for the CVM-related programs.

Because, under the Amended Collaboration Agreement, the level of R&D funding from Merck going forward will be substantially lower on an annual and overall basis than the R&D funding previously provided by Merck prior to April 2022, we need to devote a substantial amount of our own financial resources to our R&D programs, particularly with respect to our wholly-owned programs, and, to a lesser extent, with respect to programs that are within the scope of the collaboration under the Amended Collaboration Agreement that we are required to fund. In addition, our funding requirements would increase for any programs that are within the scope of the current collaboration in the event Merck does not elect to license these programs and we decide to continue them, in the event Merck elects to terminate its license to any program it licenses and we decide to continue it or in the event we opt to co-develop any Merck-licensed programs, which could include NGM621. Accordingly, we will need to raise significant additional capital and/or we will need to enter into additional collaborations in order to proceed with development through regulatory approval and commercialization of our current and potential future product

candidates. Neither may be possible and, as a result, if adequate funds are not available when we need them, we may need to significantly delay, scale back or discontinue development of some or all of such product candidates or scale back or discontinue discovery efforts, which could have a material adverse effect on our business, operating results and prospects, or we may be required to cease operations altogether. In particular, if Merck elects to license NGM621 and its related compounds after completion of the CATALINA trial, we would need to raise substantial additional capital if we opt to co-develop the program and are therefore required to contribute to the costs of Phase 3 development as described above. Similarly, if Merck does not elect to license NGM621 and its related compounds after completion of the CATALINA trial, we would need to raise substantial additional capital and/or partner the program in order to proceed to Phase 3 development of NGM621 if supported by the results from the CATALINA trial.

For more information on the terms of the Amended Collaboration Agreement, see Note 5, “Research Collaboration and License Agreements,” of the notes to audited consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Financial Highlights

Since inception, we have funded our operations primarily through:

- fees received from collaboration partners, which since inception through June 30, 2022 includes reimbursement of R&D expenses of $514.0 million and upfront cash licensing fees of $123.0 million, primarily from Merck, and a payment of $20.0 million from Merck to license MK-3655 and related compounds;
- proceeds from private placements of convertible preferred stock prior to our initial public offering, or IPO, including approximately $106.0 million of our Series E convertible preferred stock purchased by Merck;
- net proceeds from our IPO in 2019 of approximately $107.8 million, together with proceeds from the concurrent private placement of shares of common stock to Merck of $65.9 million;
- net proceeds of $134.6 million from the sale of 5,324,074 shares of our common stock in January 2021 upon completion of an underwritten public offering of our common stock, or the follow-on offering, which included the full exercise by the underwriters of their option to purchase additional shares; and
- net proceeds of $39.5 million through June 30, 2022 from sales of approximately 2.0 million shares of our common stock under an Open Market Sale Agreement℠, or the Sales Agreement, we entered into with Jefferies LLC, or Jefferies, in June 2020.

At June 30, 2022, we had $297.8 million in cash, cash equivalents and short-term marketable securities.

We have incurred net losses each year since our inception. As of June 30, 2022, we had an accumulated deficit of $497.9 million. Substantially all of our net losses have resulted from costs incurred in connection with our R&D programs and general and administrative, or G&A, costs associated with our operations. Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of our clinical trials and our expenses on other R&D activities, and the amount of R&D funding we receive from Merck or future collaboration partners, if any. For further discussion of our financial position and future sources of funding, see “Liquidity and Capital Resources” below.

COVID-19 Business Update

We are continuing to closely monitor the impact of the global COVID-19 pandemic on our business and have taken and continue to take proactive efforts designed to protect the health and safety of our patients, employees, clinical trial investigators and site staff, while maintaining business continuity. We are currently operating under a hybrid work model where some employees work on site, others work remotely and others work a combination of on site and remote. There have been relatively minor impacts on overall productivity in our prior primarily remote and our current hybrid work model. However, since the beginning of the COVID-19 pandemic, we have experienced employee attrition at rates higher than we experienced historically, resulting in an increased rate of hiring new employees. We cannot predict whether these trends will continue or be exacerbated, the impact of COVID-19 on future productivity or whether or when we may be required to return to a more restrictive work model as the pandemic continues to evolve.

During the COVID-19 pandemic, we have experienced, from time to time, a slower pace of clinical trial site initiation and clinical trial enrollment and/or a higher subject drop-out rate than originally anticipated in certain of our clinical trials. We believe this may have been due to factors such as the vulnerability of our studied patient

populations, clinical trial site suspensions, reallocation of medical resources, site staff shortages and the challenges of working remotely due to shelter-in-place and similar government orders and guidelines, among other factors. We have been proactively working to mitigate these and other effects of the COVID-19 pandemic by monitoring site initiations, patient enrollment and patient study adherence to provide support to patients and trial staff, often on a case-by-case and/or patient-by-patient basis. While the COVID-19 pandemic has not yet resulted in a significant impact to our disclosed clinical development timelines, as the COVID-19 pandemic continues to evolve, including the emergence of new variants, there may continue to be negative impacts on our ability to initiate new clinical trial sites, to enroll new patients and to retain existing patients participating in our clinical trials. These negative impacts may include increased clinical trial costs, longer timelines and delay in our ability to obtain regulatory approvals of our product candidates, if at all. Moreover, we rely on CROs and other third parties to assist us with clinical development activities, and we cannot guarantee that they will continue to perform their contractual duties in a timely and satisfactory manner as a result of the COVID-19 pandemic.

In addition, while we have not yet experienced significant disruption to drug or related component supply for our ongoing clinical trials due to the COVID-19 pandemic, our contract manufacturers' facilities and operations have been adversely affected by labor, raw material and component shortages, high turnover of staff and difficulties in hiring trained and qualified replacement staff. These difficulties have resulted in some delays in early development timelines and we could experience more significant disruptions to our supply chain and operations as a result of the evolving effects of the continuing COVID-19 pandemic. If our contract manufacturers are required to obtain an alternative source of certain raw materials and components, for example, additional testing, validation activities and regulatory approvals may be required, which can also have a negative impact on timelines. Any associated delays in the manufacturing and supply of drug substance and drug product for our clinical trials could adversely affect our ability to conduct ongoing and future clinical trials of our product candidates on our anticipated development timelines. If any of our contract manufacturers or raw materials or components suppliers become subject to acts or orders of U.S. or foreign government entities requiring them to allocate or prioritize manufacturing capacity, raw materials and components to the manufacture or distribution of COVID-19 vaccines or medical supplies needed to test or treat COVID-19 patients, this could delay our clinical trials, perhaps substantially, which could materially and adversely affect our business.

While the potential future economic impact caused by, and the duration of, the COVID-19 pandemic is difficult to assess or predict, the COVID-19 pandemic (as well as the ongoing invasion of Ukraine by Russia and the related sanctions imposed against Russia) could result in significant and prolonged disruption of global financial markets, and our ability to raise additional capital through public or private equity or debt offerings may be adversely impacted by disruptions to, and volatility in, the credit and financial markets in the United States and worldwide, and in the biotechnology industry specifically, which could negatively affect the financial resources available to us. In addition, economic recession or additional market corrections resulting from, among other things, the spread of COVID-19 could materially affect our business and the value of our common stock. Finally, we also cannot predict how the evolving effects of the COVID-19 pandemic may influence the future decisions of Merck to license any programs available to it under the Amended Collaboration Agreement, such as NGM621 and its related compounds. For additional information about risks and uncertainties related to the COVID-19 pandemic that may impact our business, financial condition and results of operations, see the section titled “Risk Factors” in Part II, Item 1A of this Quarterly Report on Form 10-Q.

Financial Operations Overview

Related Party Revenue

Our revenue to date has been generated primarily from recognition of license fees and R&D service funding pursuant to our collaboration with Merck. Merck is also a significant stockholder and, as such, collaboration revenue from Merck is referred to as related party revenue.

Since the Company's inception through June 30, 2022, Merck paid us $589.1 million pursuant to the terms of our collaboration. Due to the nature of our collaboration with Merck and the timing of related revenue recognition, our revenue has fluctuated from period to period in the past and we expect that it will continue to fluctuate in future periods given the substantial decrease in the level of funding we receive from Merck beginning in April 2022 under with the Amended Collaboration Agreement commensurate with the decreased collaboration scope. As a result, we believe that period-to-period comparisons of our revenue may not be meaningful and should not be relied upon as being indicative of future performance.

We use the cost-based input method in accordance with Accounting Standards Codification 606, or ASC 606, to calculate the corresponding amount of revenue to recognize at each reporting period. In applying the cost-based input measure of revenue recognition, we measure actual costs incurred relative to budgeted costs to fulfill our performance obligation. We apply considerable judgment when we re-evaluate the estimate of expected costs to satisfy the performance obligation each reporting period and make adjustments for any significant changes. A significant change in the estimate of expected costs under the Amended Collaboration Agreement could have a material impact on revenue recognized (including the possible reversal of previously recognized revenue) at each reporting period.

Our related party revenue was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Related party revenue	$ 8,293	$ 16,773	$ 29,241	$ 38,348

Research and Development Expenses

R&D efforts include drug discovery and other research activities and development activities relating to our product candidates, such as manufacturing drug substance, drug product and other clinical trial materials, conducting preclinical studies and clinical trials and providing support for these operations. Our R&D expenses consist of both internal and external costs. Our internal costs include employee, consultant, facility and other R&D operating expenses. Our external costs include fees paid to CROs and other service providers in connection with our clinical trials and preclinical studies, third-party license fees and CMO costs related to manufacturing drug substance, drug product and other clinical trial materials.

Our R&D efforts are extensive and costly. Our R&D expenses related to the development of our product candidates consist primarily of:

- fees paid to our CROs in connection with our clinical trials and other related clinical trial fees, when applicable;
- costs related to acquiring and manufacturing drug substance, drug product and clinical trial materials, and the costs of continued testing, such as process validation testing and stability testing, of drug substance and drug product;
- costs related to toxicology testing and other research- and preclinical-related studies;
- salaries and related overhead expenses, which include stock-based compensation and benefits, for personnel in R&D functions;
- fees paid to consultants for R&D activities;
- R&D operating expenses, including facility costs and depreciation expenses; and
- costs related to compliance with regulatory requirements.

As a result of the substantial decrease in the level of funding we receive from Merck beginning in April 2022 under the Amended Collaboration Agreement commensurate with the decreased collaboration scope as described above, we need to devote a substantial amount of our own financial resources to our development programs, particularly with respect to our wholly-owned programs and, to a lesser extent, with respect to programs that are

within the scope of the Amended Collaboration Agreement that we are required to fund, as described above. In addition, our funding requirements would increase for any programs that are within the scope of the collaboration in the event Merck does not elect to license these programs and we decide to continue them, in the event Merck elects to terminate its license to any program it licenses and we decide to continue it or in the event we opt to co-develop any Merck-licensed programs. In particular, if Merck elects to license NGM621 and its related compounds after completion of the CATALINA trial, we would need to raise substantial additional capital if we opt to co-develop the program and are therefore required to contribute to the costs of Phase 3 development as described above. Similarly, if Merck does not elect to license NGM621 and its related compounds after completion of the CATALINA trial, we would need to raise substantial additional capital and/or partner the program in order to proceed to Phase 3 development of NGM621 if supported by the results from the CATALINA trial. For the foreseeable future, we anticipate a significant portion of our financial resources, other than those received from Merck which are dedicated to activities under the Amended Collaboration Agreement, will be directed to activities required to initiate and advance clinical trials of our oncology programs, to prepare for the manufacture of NGM621 in anticipation of a potential Phase 3 trial and to complete the Phase 2b ALPINE 4 clinical trial of aldafermin.

The successful development of our product candidates is highly uncertain. At this time, we cannot reasonably estimate the nature, timing or costs of the efforts that will be necessary to complete the remainder of the development of our product candidates. This is due to the numerous risks and uncertainties associated with developing medicines, including the uncertainty of:

- our ability to hire and retain key R&D personnel;
- manufacturing scale-up challenges, production shortages or other supply disruptions for clinical trial materials, including raw materials and components;
- the evolving effects of the COVID-19 pandemic on our employees, patients, clinical trial sites and our CROs, CMOs and other service providers;
- the timely and quality performance of our CROs, CMOs and other service providers;
- whether Merck will elect to license, or to terminate its license, to any of our programs within the scope of the collaboration and the timing of such election or termination, particularly with respect to NGM621;
- the amount of our financial resources that we need to devote to our development programs and our obligations under the Amended Collaboration Agreement, and our ability to raise adequate additional capital or enter into collaborations to meet our funding requirements;
- the effect of products that may compete with our product candidates or other market developments;
- our ability to expand and enforce our intellectual property portfolio;
- the scope, rate of progress, results and expense of our ongoing, as well as any future, clinical trials and other R&D-related activities; and
- the impact and timing of any interactions with regulatory authorities, including timing and receipt of regulatory approvals.

A change in the outcome of any of the risks and uncertainties associated with the development of a product candidate could mean a significant change in the costs, as well as the timing, associated with the development of that product candidate. For example, if the FDA or a comparable foreign health authority were to require us to conduct clinical trials beyond those that we currently anticipate will be required for the completion of clinical development of a product candidate, or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development. For additional discussion of the risks and uncertainties associated with our R&D efforts, see “Risk Factors—Risks Related to Our Business and Industry,” “—Risks Related to Our Dependence on Third Parties,” “—Risks Related to Regulatory Approvals” and "—Risks Related to Our Intellectual Property” in Part II, Item 1A of this Quarterly Report on Form 10-Q.

General and Administrative Expenses

G&A expenses consist primarily of salaries and other related costs, including stock-based compensation and benefits. Other significant costs include legal fees relating to patent and corporate matters, facility costs not otherwise included in R&D expenses and fees for accounting and other consulting services.

We anticipate that our G&A expenses will increase in the future to support our continued and increasing R&D activities. These increases will likely include increased costs related to the hiring of additional personnel, as well as fees paid to outside consultants, lawyers and accountants, among other expenses, and an increase in operating lease expenses under the 2024 Lease Agreement beginning in 2024. Additionally, we anticipate continued

increased costs associated with being a public company, including expenses related to services associated with maintaining compliance with Nasdaq listing rules and related Securities and Exchange Commission, or SEC, requirements and costs related to insurance, investor relations and compliance with Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act. In addition, we may incur expenses associated with negotiating and entering into agreements with collaboration partners and with building a sales organization in connection with, and prior to, potential future regulatory approval and commercialization of our product candidates.

Results of Operations

Our results of operations were as follows (in thousands):

	Three Months Ended June 30,			Six Months Ended June 30,		
	2022	2021	Change	2022	2021	Change
Related party revenue	$ 8,293	$ 16,773	$ (8,480)	$ 29,241	$ 38,348	$ (9,107)
Operating expenses:						
Research and development	45,433	43,570	1,863	88,239	84,269	3,970
General and administrative	9,927	9,823	104	20,650	18,544	2,106
Total operating expenses	55,360	53,393	1,967	108,889	102,813	6,076
Loss from operations	(47,067)	(36,620)	(10,447)	(79,648)	(64,465)	(15,183)
Interest income, net	543	115	428	719	229	490
Other income (expense), net	5	(187)	192	(40)	—	(40)
Net loss	$ (46,519)	$ (36,692)	$ (9,827)	$ (78,969)	$ (64,236)	$ (14,733)

Related Party Revenue from Merck

Revenue decreased $8.5 million and $9.1 million in the three and six months ended June 30, 2022, respectively, compared to the same periods in 2021 primarily due to a decrease in R&D revenue under the Amended Collaboration Agreement with Merck.

Under the Amended Collaboration Agreement, from April 1, 2022 until March 31, 2024, Merck will provide up to $20.0 million of R&D funding for the ophthalmology programs (other than NGM621), the CVM-related programs and the Lab Programs. If the parties mutually agree to extend the research phase for the CVM-related programs from March 31, 2024 to March 31, 2026, then Merck will provide up to a total of $20.0 million in R&D funding during the additional two years of the CVM program research phase. Merck will also fund certain R&D costs related to NGM621 in an amount expected to be up to approximately $20.0 million, until the earlier of Merck's decision to exercise, or not to exercise, its License Option with respect to NGM621 alone or bundled with the other continuing ophthalmology compounds or, March 31, 2024. In this regard, our related party revenue from Merck has decreased substantially in 2022 compared to 2021 and is expected to continue to remain at a significantly lower level through March 31, 2024.

Due to the nature of our collaboration with Merck and the timing of related revenue recognition, our revenue has fluctuated from period to period in the past and we expect that it will continue to fluctuate during the remainder of the collaboration.

Research and Development Expenses

Our R&D expenses by program were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
External R&D expenses:				
NGM707 (Anti-ILT2/ILT4 dual antagonist)	$ 7,880	$ 1,056	$ 11,558	$ 2,221
NGM621 (C3 inhibitor)	4,783	5,491	10,269	9,177
Aldafermin (FGF19 analog)	2,881	9,474	7,243	19,072
NGM120 (GFRAL antagonist)	2,536	2,235	4,015	3,596
NGM438 (LAIR1 antagonist)	1,291	956	3,313	2,471
NGM831 (ILT3 antagonist)	1,520	650	3,259	1,318
Other external R&D expenses	705	914	825	1,224
Total external R&D expenses	21,596	20,776	40,482	39,079
Personnel-related expenses	15,435	14,192	31,330	28,461
Internal and unallocated R&D expenses (1)	8,402	8,602	16,427	16,729
Total R&D expenses	$ 45,433	$ 43,570	$ 88,239	$ 84,269

(1) Internal and unallocated R&D expenses consist primarily of research supplies and consulting fees, which we deploy across multiple R&D programs.

R&D expenses increased $1.9 million and $4.0 million in the three and six months ended June 30, 2022, respectively, compared to the same periods in 2021 primarily due to increases in external expenses, driven by our ongoing clinical trials of NGM707, NGM621, NGM831, NGM120 and NGM438 and personnel-related expenses, partially offset by a decrease in expenses for our manufacturing activities and our clinical trials of aldafermin.

We expect our R&D expenses will increase in 2022 compared to 2021 primarily due to the continued advancement of our wholly-owned oncology programs. In 2022, we have substantial activities ongoing in all of our programs, and are targeting achievement of multiple milestones, including:

- NGM621: continuing treatment of patients in the fully enrolled Phase 2 CATALINA clinical trial, preparing to report topline data from that trial in the fourth quarter of 2022 and preparing for a potential Phase 3 trial;
- NGM707: continuing enrollment in the Phase 1a/1b portion of the ongoing Phase 1/2 clinical trial and preparing for a readout of initial data from the Phase 1a cohort in the fourth quarter of 2022;
- NGM120: continuing enrollment in the Phase 2 PINNACLES portion of the ongoing Phase 1/2 clinical trial, enrolling in the Phase 1b cohort of the trial in patients with mCRPC and preparing to report additional data from the Phase 1a cohort and data from the Phase 1b metastatic pancreatic cancer cohort of the trial in the third quarter of 2022;
- NGM831: continuing enrollment in the Phase 1 portion of the Phase 1/1b clinical trial;
- NGM438: continuing enrollment in the Phase 1 portion of the Phase 1/1b clinical trial which was initiated in May 2022; and
- Aldafermin: continuing treatment of patients in the fully enrolled Phase 2b ALPINE 4 clinical trial and preparing to report topline data from that trial in the first half of 2023.

General and Administrative Expenses

G&A expenses increased $0.1 million and $2.1 million in the three and six months ended June 30, 2022, respectively, compared to the same periods in 2021. The increase in the six months ended June 30, 2022 was primarily due to an increase in headcount and an increase in stock-based compensation expense of $1.3 million.

We anticipate that our G&A expenses in 2022 will increase compared to 2021 due to an increase in compensation-related expenses driven by higher headcount and other expenses related to the expansion and support of our business, in particular as needed to support our continued and increasing R&D activities, and to a lesser extent due to expenses associated with being a public company and with negotiating and entering into agreements with collaboration partners.

Liquidity and Capital Resources

Funding Requirements

We have no products approved for commercial sale, have not generated any revenue from product sales to date and we are not and may never be profitable. We have incurred losses in each year since commencing operations, and we expect to incur significant and increasing operating losses in 2022 and over the next several years. As of June 30, 2022, we had an accumulated deficit of $497.9 million, and we expect our accumulated deficit will increase significantly over time.

We have an active discovery research group and multiple pipeline programs in development. We have spent, and expect to continue to spend, significant resources to fund R&D of, and seek regulatory approvals for, our product candidates for the foreseeable future as our research, development, manufacturing, preclinical studies, clinical trial and related activities increase.

Prior to 2022, we received substantial R&D funding from our collaboration with Merck. However, under the narrower scope of the Amended Collaboration Agreement, R&D funding from Merck beginning April 2022 is substantially lower on an annual and overall basis than the R&D funding previously provided by Merck and we can no longer use R&D funding from Merck to support the development of any of our wholly-owned oncology programs, including NGM707, NGM831, NGM438 and NGM120. As a result, we need to fund not only our currently wholly-owned programs going forward, but also certain activities that remain within the scope of the ongoing collaboration with Merck that we are required to fund ourselves (and our failure to allocate funding to meet such requirements may be deemed a breach of the Amended Collaboration Agreement). In addition, we need to fund any programs that are within the scope of the current collaboration with Merck in the event Merck does not elect to license these programs and we decide to continue to develop them, in the event Merck elects to terminate its license to any program it licenses and we decide to continue to develop it or in the event we opt to co-develop any program Merck elects to license. In particular, if Merck elects to license NGM621 and its related compounds after completion of the CATALINA trial, we would need to raise substantial additional capital if we opt to co-develop the program and are therefore required to contribute to the costs of Phase 3 development as described above. Similarly, if Merck does not elect to license NGM621 and its related compounds after completion of the CATALINA trial, we would need to raise substantial additional capital and/or partner the program in order to proceed to Phase 3 development of NGM621 if supported by the results from the CATALINA trial.

Our cash requirements for fiscal year 2022 will continue to be driven by our R&D and G&A expenses. In 2021 and 2020, our R&D expenses were $161.7 million and $164.0 million, respectively. In 2022 and over the next several years, we expect our R&D expenses to increase substantially unless we partner one or more of our wholly-owned programs, particularly as we advance our oncology product candidates into and through clinical development and, if supported by the results from the CATALINA trial, fund later-stage clinical development of NGM621.

In 2021 and 2020, our G&A expenses were $36.9 million and $27.2 million, respectively. Beginning in 2022 and over the next several years, we expect our G&A expenses to increase moderately as we continue to hire additional personnel to support our growing R&D activities and as we continue to incur the increased costs associated with being a public company. Beginning in 2024, our operating lease costs will increase pursuant to the 2024 Lease Agreement we entered into in July 2022 for our current corporate office space and laboratory facilities in South San Francisco, California. Our current sublease will expire on December 31, 2023. The 2024 Lease Agreement will commence on January 1, 2024 and expire on December 31, 2033. We will pay an initial monthly base rent of approximately $0.9 million for the first year, which is subject to increase at an annual rate of 3.5% each year thereafter, plus certain operating and tax expenses.

We believe that our existing cash, cash equivalents and short-term marketable securities will be sufficient to fund our operations for at least twelve months from the date this Quarterly Report on Form 10-Q is filed. We have based this estimate on assumptions that may prove to be inaccurate and we could utilize our available capital resources sooner than we currently expect. In addition, 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 as a result of a number of factors, including the factors discussed under “Risk Factors” in Part II, Item 1A of this Quarterly Report on Form 10-Q. Nonetheless, in order to advance our current and potential future product candidates through development and to regulatory approval and commercialization, we will need to raise significant additional capital or we will need to partner one or more of our wholly-owned programs and obtain funding or other resources through such arrangements. Neither may be possible and, as a result, we may be required to delay, scale back or discontinue development of such product candidates, which could have a material adverse effect on our business, operating results and prospects.

Sources of Liquidity

Cash and Investments

As of June 30, 2022, we had cash and cash equivalents of $63.4 million and short-term marketable securities of $234.4 million.

Merck Collaboration

The revenue we receive under the Amended Collaboration Agreement with Merck is currently our only source of revenue. For the period that started on April 1, 2022 and ends on March 31, 2024, Merck is committed to fund up to $20.0 million of R&D funding for the ophthalmology programs (other than NGM621), the CVM-related programs and the Lab Programs. Merck is also obligated to fund certain R&D costs related to NGM621 in an amount expected to be up to approximately $20.0 million, until the earlier of Merck's decision to exercise, or not to exercise, its license option with respect to NGM621 alone or bundled with the other continuing ophthalmology compounds or, March 31, 2024. See “Overview of Our Business – Our Merck Collaboration” above.

Other Sources of Capital

In June 2020, we entered into the Sales Agreement with Jefferies. In accordance with the terms of the Sales Agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to $150.0 million from time to time through Jefferies, acting as our sales agent. In the second quarter of 2022, approximately 1.1 million shares of our common stock were sold under the Sales Agreement for net proceeds to the Company of $17.4 million. As of June 30, 2022, $109.2 million of our common stock remained available to be sold under the Sales Agreement, subject to conditions specified in the Sales Agreement.

We plan to finance our future cash needs through public or private equity or debt offerings, including under the Sales Agreement, product collaborations, strategic alliances, licensing arrangements or a combination of these potential financing sources. Additional capital may not be available in sufficient amounts, on reasonable terms or when we need it, if at all.

Our ability to raise additional capital through public or private equity or debt offerings may be adversely impacted by worsening global economic conditions and the disruptions to, and volatility in, the credit and financial markets in the United States and worldwide, and in the biotechnology industry specifically, resulting from, among other things, the continuing effects of the COVID-19 pandemic, including the emergence of new variants, macroeconomic factors including inflation and geopolitical instability, including instability resulting from the ongoing invasion of Ukraine by Russia and the related sanctions imposed against Russia. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve restrictive covenants. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders. Furthermore, any securities that we may issue may have rights senior to those of our common stock and could contain covenants or protective rights that would lead to restrictions on our operations and potentially impair our competitiveness, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business.

We may seek other third-party collaborators for the development and commercialization of any product candidates that are not within the scope of the collaboration with Merck. If we decide to enter into any such arrangements with any third parties, and are successful in doing so, we will likely have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of our product candidates. Our ability to generate revenue from any such arrangement will depend on the specific terms we reach with any collaborator, as well as each of our collaborators’ abilities to successfully perform the functions assigned to them in such arrangement towards developing, seeking regulatory approval for and commercializing our product candidates.

If we are unable to raise adequate additional capital through public or private equity or debt offerings, collaborations or otherwise, on acceptable terms or at all, we may be delayed in or prevented from pursuing our planned and any future development and commercialization efforts, which will have a material adverse effect on our business, operating results and prospects.

Cash Flow Activity

The following table summarizes our cash flow activity for the periods indicated (in thousands):

	Six Months Ended June 30,	
	2022	2021
Net cash provided by (used in):		
Operating activities	$ (85,889)	$ (45,535)
Investing activities	(22,819)	(145,880)
Financing activities	20,292	143,801
Net decrease in cash, cash equivalents and restricted cash	$ (88,416)	$ (47,614)

Operating Activities

In the six months ended June 30, 2022, net cash used in operating activities was $85.9 million, which consisted of a net loss of $79.0 million, adjusted for non-cash charges of $20.9 million and a change in operating assets and liabilities of $27.8 million. The non-cash charges consisted primarily of stock-based compensation expense of $15.9 million and depreciation expense of $2.8 million. The change in operating assets and liabilities was mainly driven by decreases in contract liabilities of $11.3 million, accrued liabilities of $9.7 million and the operating lease liability of $2.5 million, and increases in prepaid expenses and other current assets of $4.2 million and the related party receivable of $1.7 million.

In the six months ended June 30, 2021, net cash used in operating activities was $45.5 million, which consisted of a net loss of $64.2 million, adjusted for non-cash charges of $23.5 million and a change in operating assets and liabilities of $4.8 million. The non-cash charges consisted primarily of stock-based compensation expense of $13.3 million, a decrease in related party contract assets due to the Amended Collaboration Agreement with Merck of $4.6 million and depreciation expense of $3.1 million. The change in operating assets and liabilities was mainly driven by increases in contract liabilities of $5.0 million, increases in prepaid expenses and other current assets of $3.2 million and the related party receivable of $3.3 million, partially offset by decreases in related party contract assets of $1.5 million and accounts payable of $4.5 million.

Investing Activities

In the six months ended June 30, 2022, net cash used in investing activities was $22.8 million, which consisted primarily of purchases of marketable securities of $144.0 million offset by $122.3 million in net proceeds on maturity of marketable securities.

In the six months ended June 30, 2021, cash used in investing activities was $145.9 million, which consisted of purchases of marketable securities of $194.5 million primarily from the net proceeds of the follow-on offering, partially offset by $50.0 million in net proceeds on maturity of marketable securities.

Financing Activities

In the six months ended June 30, 2022, net cash provided by financing activities consisted of net proceeds of $17.4 million from the sale of shares of our common stock under the Sales Agreement and proceeds of $2.9 million from our employee equity incentive and purchase plans.

In the six months ended June 30, 2021, cash provided by financing activities consisted of net proceeds from the follow-on offering of $134.6 million and proceeds from our employee equity incentive and purchase plans of $9.2 million.

Contractual Obligations

Our contractual obligations are related to our operating lease liability as set forth in Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K for the year ended December 31, 2021. In July 2022, we entered into the 2024 Lease Agreement for the corporate office space and laboratory facility in South San Francisco, California which we currently occupy pursuant to a sublease agreement scheduled to expire on December 31, 2023. The initial term of the 2024 Lease Agreement will commence on January 1, 2024 and expire on December 31, 2033. Base rent during the initial ten-year term of the 2024 Lease Agreement will total $124.1 million. See Note 9 to our condensed consolidated financial statements included in Part I, Item 1, “Financial Statements” of this Quarterly Report on Form 10-Q for additional information.

We enter into agreements in the normal course of business with CROs for clinical trials, CMOs and other vendors for preclinical studies, supplies, manufacturing and other services and products for operating purposes. These agreements are generally cancellable at any time by us, upon prior written notice, and may or may not include cancellation fees. Given that the amount and timing related to such payments are uncertain, they are not considered to be contractual obligations. As of June 30, 2022, we had not accrued for any termination or cancellation charges as these were not considered probable. Significant portions of our R&D resources are focused, and will continue to be focused, on the manufacture and testing of clinical trial materials. We expect our R&D expenses to increase substantially beginning in 2022 and over the next several years unless we partner one or more of our wholly-owned programs, particularly as we advance our oncology product candidates into and through clinical development and, if warranted by the results from the CATALINA trial, support later-stage clinical development of NGM621. See "Funding Requirements" above for additional information regarding our expected R&D spend.

We are obligated to make future payments to third parties under in-license agreements, including sublicense fees, low single-digit royalties and payments that become due and payable on the achievement of certain development and commercialization milestones. As the amount and timing of sublicense fees and the achievement and timing of these milestones are not probable and estimable, such commitments have not been included on our consolidated balance sheets and are not considered to be contractual obligations. See "Business - Licensing Arrangements" in Part I, Item 1 of the 2021 Annual Report on Form 10-K for additional information regarding our current in-license agreements.

Critical Accounting Policies and Estimates

Our management’s discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which we have prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The preparation of our condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of our condensed consolidated financial statements, as well as revenue and expenses during the reported periods. We evaluate these estimates and judgments on an ongoing basis. In accordance with U.S. GAAP, 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 materially from these estimates under different assumptions or conditions. We believe that there have been no significant changes in our critical accounting policies and estimates disclosed in our 2021 Annual Report on Form 10-K.

Newly Issued Accounting Pronouncements

There have been no new accounting pronouncements or changes to accounting pronouncements during the six months ended June 30, 2022 that are of significance or potential significance to us.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

During the six months ended June 30, 2022, there were no material changes to our market risk disclosures as set forth in Part II, Item 7A “Quantitative and Qualitative Disclosures About Market Risk” in our 2021 Annual Report on Form 10-K.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

As of June 30, 2022, management, with the participation of our Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act 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 the Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosures.

Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of June 30, 2022, the design and operation of our disclosure controls and procedures were effective at a reasonable assurance level.

Changes in Internal Control over Financial Reporting

During the quarter ended June 30, 2022, there have been no changes to our internal control over financial reporting 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 a party to any material litigation or other material legal proceedings.

Item 1A. Risk Factors.

An investment in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below before deciding whether to make an investment decision with respect to our common stock. You should also refer to the other information contained in this Quarterly Report on Form 10-Q, including in Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in our condensed consolidated financial statements and related notes, as well as our other filings with the U.S. Securities and Exchange Commission, or SEC. Our business, financial condition, results of operations, stock price and prospects could be materially and adversely affected by any of these risks or uncertainties. In any such case, the trading price of our common stock could decline, and you could lose all or part of your investment. We caution you that the risks, uncertainties and other factors referred to below and elsewhere in this Quarterly Report on Form 10-Q may not contain all of the risks, uncertainties and other factors that may affect our future results and operations. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations and the market price of our common stock. Moreover, new risks will emerge from time to time. It is not possible for our management to predict all risks.

Summary Risk Factors

Below is a summary of material factors that make an investment in our common stock speculative or risky. Importantly, this summary does not address all of the risks and uncertainties that we face. Additional discussion of the risks and uncertainties summarized in this risk factor summary, as well as other risks and uncertainties that we face, can be found immediately following this risk factor summary. The below summary is qualified in its entirety by that more complete discussion of such risks and uncertainties. You should carefully consider the risks and uncertainties described immediately following this risk factor summary as part of your evaluation of an investment in our common stock.

- We have incurred net losses every year since our inception, we have no source of product revenue, we expect to continue to incur significant and increasing operating losses and we may never become profitable.
- All of our revenue for recent periods has been received from a single collaboration partner, Merck Sharp & Dohme LLC (formerly Merck Sharp & Dohme Corp.), or Merck, and that revenue will be substantially lower going forward as compared to historical periods.
- In order to complete the development and commercialization of our current and potential future product candidates and to finance our other operations, we will require substantial additional capital that may not be available to us on acceptable terms, or at all, and as a result, we may be required to delay, scale back or discontinue development of our product candidates.
    - In particular, if Merck elects to license NGM621 and its related compounds after completion of the Phase 2 CATALINA trial, we would need to raise substantial additional capital if we opt to co-develop the program and are therefore required to contribute to the costs of Phase 3 development.
    - Similarly, if Merck does not elect to license NGM621 and its related compounds after completion of the CATALINA trial, we would need to raise substantial additional capital and/or partner the program in order to proceed to Phase 3 development of NGM621 if supported by the results from the CATALINA trial.
- We need to successfully complete rigorous preclinical and clinical testing of our product candidates before we can seek regulatory approval, and the regulatory approval processes of the U.S. Food and Drug Administration, or FDA, and comparable foreign health authorities are lengthy and inherently unpredictable, and if we are not successful at each step of the process, commercialization of our product candidates will be delayed or prevented.
    - Our most advanced product candidates, NGM621, NGM120, aldafermin and MK-3655, are only in Phase 2 development, may fail to demonstrate safety and efficacy in ongoing and future clinical trials, may never achieve regulatory approval and may not be able to be successfully commercialized due to competition or other factors.

- Similarly, clinical trials of our other product candidates, including the ongoing trials of NGM707, NGM831 and NGM438, may fail to produce positive results or to demonstrate safety and efficacy to the satisfaction of health authorities.

- Aldafermin and MK-3655 are being developed for the treatment of nonalcoholic steatohepatitis, or NASH, an indication for which there are no approved products, which makes it difficult to predict the timing, cost and potential success of their clinical development and regulatory approval for the treatment of NASH, as evidenced by the fact that our previously completed Phase 2b ALPINE 2/3 trial of aldafermin in patients with NASH and liver fibrosis stage 2 or 3, or F2 or F3, by the NASH Clinical Research Network classification did not meet its primary endpoint and, as a result, we decided to suspend further development of aldafermin in patients with F2/F3 NASH.
- We may not be able to obtain and maintain the relationships with our current collaborator, Merck, potential future collaborators and other third parties that are necessary to develop, manufacture and commercialize some or all of our product candidates.
    - We depend on our collaboration with Merck for revenue and for the development and commercialization of our product candidates that remain within the scope of the collaboration.
    - In the future we may depend on collaborations with other third parties for revenue and for the development and commercialization of our product candidates and such collaborations involve numerous risks, any of which could materially and adversely affect our business and financial condition.
    - We rely completely on contract manufacturers for the manufacture of our product candidates and the process of manufacturing, and conducting release testing for, our biologic product candidates is complex, highly regulated and subject to many risks, including our current reliance on single source manufacturers and suppliers, difficulties in supply chain, including procuring raw materials and components and the availability of manufacturing slots, and difficulties in production, including scaling up and validating initial production, contamination, equipment failure, improper installation or operation of equipment, vendor or operator error, turnover of qualified staff or improper storage conditions, or difficulties with quality control, product stability or quality assurance testing, any of which could substantially increase our costs and limit supply of our product candidates and any future products needed for clinical trials and commercialization.
- The COVID-19 pandemic continues to adversely impact our business and operations, as well as the businesses or operations of our contract manufacturers, clinical research organizations, clinical trial sites and other third parties with whom we conduct business.
- Our future success depends in part on our ability to attract and retain highly skilled employees, including members of our current senior management team, especially our Chief Scientific Officer, Dr. Jin-Long Chen, and during the ongoing COVID-19 pandemic we have experienced employee attrition at rates higher than we have experienced historically, which may continue or be exacerbated and could have a negative impact on our productivity.
- Our product candidates other than NGM621, aldafermin and MK-3655 are currently solely manufactured at a facility in Lithuania. The ongoing invasion of Ukraine by Russia and the retaliatory measures taken or that may be taken by the United States, NATO and others, including significant sanctions against Russia, create global security concerns and regional instability, including due to the possibility of expanded regional or global conflict, and are likely to have short-term and likely longer-term negative impacts on regional and global economies, any or all of which could disrupt our supply chain and adversely affect our ability to conduct ongoing and future clinical trials of our product candidates and our ability to raise capital on favorable terms.
- We face substantial competition, which may result in others discovering, developing or commercializing products before, or more successfully than, us.
- Our success depends in significant part upon our ability to obtain and maintain intellectual property protection for our products and technologies.
- We may not successfully identify new product candidates to expand our development pipeline.
- Our principal stockholders, including entities affiliated with The Column Group, Merck and our management, own a substantial percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.
- We or third parties we rely on or partner with could experience a cybersecurity incident that could harm our business.

- The market price of our common stock has been and may continue to be volatile, and you could lose all or part of your investment.
- We continue to incur increased costs as a result of operating as a public company and our management devotes substantial time to public company compliance initiatives. We are obligated to develop and maintain proper and effective internal control over financial reporting. If we are not able to comply with the requirements of operating as a public company in a timely manner, or if we or our independent registered public accounting firm identify deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, investors may lose confidence in our operating results and the price of our common stock could decline.

Risks Related to Our Financial Condition and Capital Needs

We have incurred net losses every year since our inception and have no source of product revenue. We expect to continue to incur significant and increasing operating losses and may never become profitable.

We have no products approved for commercial sale and have not generated any revenue from product sales to date. As a result, we are not profitable and have incurred losses in each year since commencing operations. Our net losses were $120.3 million, $102.5 million and $42.8 million for the years ended December 31, 2021, 2020 and 2019, respectively. As of June 30, 2022, we had an accumulated deficit of $497.9 million.

We expect to continue to incur significant and increasing research and development, or R&D, and other expenses related to our ongoing operations for the foreseeable future, particularly to fund R&D of, and seek regulatory approvals for, our product candidates. We further expect to incur substantial and increasing operating losses in 2022 and over the next several years as our research, development, manufacturing, preclinical studies, clinical trial and related activities and related expenses increase and we expect our accumulated deficit will also increase significantly in future periods. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue outside of our collaboration with Merck. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital.

In addition, we will not be able to generate product revenue unless and until one of our product candidates successfully completes clinical trials, receives regulatory approval and is successfully commercialized. As our product candidates are in Phase 2 trials or in earlier stages of development, we do not expect to receive product revenue from our product candidates for a number of years, if ever.

Our ability to generate any product revenue from our current or future product candidates also depends on a number of additional factors, including our or our current collaborator's and potential future collaborators' ability to:

- successfully complete research and clinical development of current and future product candidates and obtain regulatory approval for those product candidates;
- establish and maintain supply and manufacturing relationships with third parties, and ensure adequate, scaled up and legally compliant manufacturing of bulk drug substances and drug products to maintain sufficient supply;
- launch and commercialize any product candidates for which we obtain marketing approval, if any, and, if launched independently by us without a collaborator, successfully establish a sales force and marketing and distribution infrastructure;
- demonstrate the necessary safety data (and, if accelerated approval is obtained, verify the clinical benefit) post-approval to ensure continued regulatory approval;
- obtain coverage and adequate product reimbursement from third-party payors, including government payors, for any approved products;
- achieve market acceptance for any approved products;
- establish, maintain, protect and enforce our intellectual property rights; and
- attract, hire and retain qualified personnel.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, including that our product candidates may not advance through development or be approved for commercial sale, we are unable to predict if or when we will generate product revenue or achieve or maintain profitability. For example, in May 2021, we announced that our Phase 2b ALPINE 2/3 trial evaluating aldafermin in patients with F2/

F3 NASH did not meet its primary endpoint, and, as a result, we decided to suspend further development of aldafermin in patients with F2/F3 NASH. Even if we successfully complete development and regulatory processes for other product candidates or of aldafermin in other indications, we anticipate incurring significant costs associated with launching and commercializing any products. If we fail to become profitable or do not sustain profitability on a continuing basis, we may be unable to continue our operations at planned levels and be forced to reduce or cease our operations.

All of our revenue for recent periods has been received from a single collaboration partner, and that revenue will be substantially lower going forward as compared to historical periods.

We do not have any committed external source of funds, other than pursuant to our ongoing collaboration with Merck, which has provided us with substantial financial support since 2015. However, as described under “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Overview of Our Business - Our Merck Collaboration” in Part I, Item 2 of this Quarterly Report on Form 10-Q, the R&D funding we receive from Merck under the collaboration going forward will be substantially lower on an annual and overall basis than the research funding previously provided by Merck due to the narrower scope of the amended and restated research collaboration, product development and license agreement we entered into with Merck on June 30, 2021, or the Amended Collaboration Agreement, which amended and restated our then-existing collaboration agreement with Merck, originally entered into in 2015, which, together with amendments made prior to June 30, 2021, we refer to as the Original Collaboration Agreement.

In this regard, for the period that started on April 1, 2022 and ends on March 31, 2024, Merck is committed to fund up to $20.0 million in R&D funding for the ongoing ophthalmology programs (other than NGM621), the cardiovascular or metabolic-, or CVM-, related programs and other smaller laboratory programs subject to the collaboration. Merck is also obligated to fund certain R&D costs related to NGM621, in an amount expected to be up to approximately $20.0 million, until the earlier of Merck's decision to exercise, or not to exercise, its license option with respect to NGM621 and its related compounds (either alone or bundled with all of the other continuing ophthalmology compounds and their respective related compounds) or, March 31, 2024. As a result, we need to devote a substantial amount of our own financial resources to our R&D programs, particularly with respect to our wholly-owned programs and, to a lesser extent, with respect to programs that are within the scope of the current collaboration under the Amended Collaboration Agreement that we are required to fund (and our failure to allocate funding to meet such requirements may be deemed a breach of the Amended Collaboration Agreement). In addition, our funding requirements would increase for any programs that are within the scope of the current collaboration in the event Merck does not elect to license these programs and we decide to continue them, in the event Merck elects to terminate its license to any program it licenses and we decide to continue it or in the event we opt to co-develop any Merck-licensed programs. In particular, if Merck elects to license NGM621 and its related compounds after completion of the CATALINA trial, we would need to raise substantial additional capital if we opt to co-develop the program and are therefore required to contribute to the costs of Phase 3 development. Similarly, if Merck does not elect to license NGM621 and its related compounds after completion of the CATALINA trial, we would need to raise substantial additional capital and/or partner the program in order to proceed to Phase 3 development of NGM621 if supported by the results from the CATALINA trial.

Other than our Amended Collaboration Agreement with Merck, which is limited in scope and duration, and may be unilaterally terminated by Merck under certain circumstances, we are not party to any agreements that could provide us with future revenue. Accordingly, we will need to raise significant additional capital and/or we will need to enter into additional collaborations in order to proceed with development through regulatory approval and commercialization of our current and potential future product candidates. Neither may be possible and, as a result, if adequate funds are not available when we need them, we may need to significantly delay, scale back or discontinue development of some or all of our product candidates or scale back or discontinue discovery efforts, which could have a material adverse effect on our business, operating results and prospects, or we may be required to cease operations altogether.

We will need significant additional capital to proceed with development and commercialization of our current and potential future product candidates and our other operations. We may not be able to access sufficient capital on acceptable terms, if at all, and, as a result, we may be required to delay, scale back or discontinue development of such product candidates.

As an R&D company, our operations have consumed substantial amounts of cash since inception, and we will require substantial additional capital to finance our operations and pursue our strategy, both in the short and the long term, and the amount of funding we will need depends on many factors, including:

- the initiation, progress, timing, delays, costs and results of preclinical studies and clinical trials for our current and future product candidates;
- whether Merck exercises its option to license product candidates within the scope of the ongoing collaboration upon completion of human proof-of-concept studies, such as its license option for NGM621 upon completion of the Phase 2 CATALINA trial, or at the earlier license option point as specified in the Amended Collaboration Agreement for each such candidate;
- whether Merck terminates the research phase of the collaboration under pre-specified circumstances set forth in the Amended Collaboration Agreement or terminates a program that it has licensed;
- the amount of our financial resources that we will need to devote to our obligations under the Amended Collaboration Agreement;
- the outcome, timing and cost of seeking and obtaining regulatory approvals from the FDA and comparable foreign health authorities, including the potential for such authorities to require that we perform more studies than those that we currently expect or to change their requirements on studies that had previously been agreed to;
- the cost to establish, maintain, expand, enforce and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with licensing, preparing, filing, prosecuting, defending and enforcing any patents or other intellectual property rights;
- the cost and timing of selecting, auditing and potentially validating a manufacturing site for later-stage clinical and commercial-scale manufacturing;
- the effect of products that may compete with our product candidates or other market developments;
- market acceptance of any approved product candidates, including product pricing and product reimbursement by third-party payors;
- the cost of potentially acquiring, licensing or investing in additional businesses, products, product candidates and technologies; and
- the cost of establishing sales, marketing and distribution capabilities for any of our product candidates for which we may receive regulatory approval and that we determine to commercialize ourselves or in collaboration with partners.

We believe that our existing cash, cash equivalents and short-term marketable securities will be sufficient to fund our operations for at least the twelve months from the date of filing of this Quarterly Report on Form 10-Q. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. In addition, 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 as a result of a number of factors, including the factors discussed elsewhere in this “Risk Factors” section.

We plan to finance our future cash needs through public or private equity or debt offerings, including under the Open Market Sale Agreement℠, or the Sales Agreement, we entered into with Jefferies LLC in June 2020, product collaborations, strategic alliances, licensing arrangements or a combination of these potential financing sources. Additional capital may not be available in sufficient amounts, on reasonable terms or when we need it, if at all. Our ability to raise additional capital through public or private equity or debt offerings may be adversely impacted by worsening global economic conditions and the disruptions to, and volatility in, the credit and financial markets in the United States and worldwide, and the biotechnology industry specifically, resulting from, among other things, the continuing effects of the COVID-19 pandemic, including the emergence of new variants, macroeconomic factors including inflation and geopolitical instability, including instability resulting from the ongoing invasion of Ukraine by Russia and the related sanctions imposed against Russia.

If adequate funds are not available from public or private equity or debt offerings on acceptable terms when needed, in order to continue the development of product candidates outside of the scope of the collaboration with Merck we may need to:

- seek strategic alliances for R&D programs when we otherwise would not, at an earlier stage than we would otherwise desire or on terms less favorable than might otherwise be available; or

- enter into product collaborations that could require us to relinquish, or license, on potentially unfavorable terms, our rights to intellectual property, product candidates or products that we otherwise would develop or seek to commercialize ourselves.

Even if we decide we want to collaborate with other pharmaceutical and biotechnology companies for the development and potential commercialization of such product candidates, we may not be able to enter into agreements on acceptable terms, if at all. We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon the potential collaborator's evaluation of the subject product candidate and its market opportunity, our assessment of the collaborator's resources and expertise and the terms and conditions of the potential collaboration.

We are also restricted under our existing Amended Collaboration Agreement with Merck, and may be restricted under future collaboration agreements, from entering into additional agreements on certain terms with potential collaborators. For example, under the current terms of the Amended Collaboration Agreement, we may not directly or indirectly research, develop, manufacture or commercialize, except pursuant to the Amended Collaboration Agreement, any medicine or product candidate that modulates a target then subject to the collaboration with specified activity, including, if Merck exercises its option to license a program, we may not directly or indirectly research, develop, manufacture or commercialize any product with specified activity against the target that is the subject of that program for so long as Merck's license to that program remains in effect. The human hormone fibroblast growth factor 19, or FGF19 program, including aldafermin, is excluded from this provision, notwithstanding that both aldafermin and MK-3655 signal, in part, through the fibroblast growth factor receptor 1c, or FGFR1c, pathway. In addition, under the Amended Collaboration Agreement, we are prohibited from, directly or indirectly, researching, developing or commercializing any product for the treatment of heart failure with preserved ejection fraction, or HFpEF, during the research phase for the CVM-related programs.

We may not be able to raise adequate additional capital or negotiate potential future collaborations on a timely basis, on acceptable terms or at all. If we are unable to do so, we may have to delay, scale back or discontinue our research, the development of any product candidate for which we are seeking a collaboration or one or more of our other development programs, delay a product candidate's potential commercialization or reduce the scope of any sales or marketing activities or increase our expenditures and undertake development or commercialization activities at our own expense, or we may be prevented from pursuing research, development and commercialization efforts, which will have a material adverse effect on our business, operating results and prospects.

Raising additional capital may cause dilution to our existing stockholders, lead to restrictions on our operations or require us to relinquish rights to our product candidates or intellectual property.

If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve restrictive covenants. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders. Furthermore, any securities that we may issue may have rights senior to those of our common stock and could contain covenants or protective rights that would lead to restrictions on our operations and potentially impair our competitiveness, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business.

Risks Related to Our Dependence on Third Parties

We depend on our collaboration with Merck for the development and commercialization of our product candidates within the scope of the collaboration. Our collaboration with Merck involves numerous risks, any of which could materially and adversely affect our business and financial condition.

As described in more detail under "Management's Discussion and Analysis of Financial Condition and Results of Operations - Overview of Our Business - Our Merck Collaboration" in Part I, Item 2 of this Quarterly Report on Form 10-Q, our continuing Merck collaboration involves a complex allocation of rights, provides for certain R&D funding and, for products for which Merck exercises its license option, if any, provides us with either milestone payments based on the achievement of specified clinical development, regulatory and commercial milestones and royalty-based revenue if certain product candidates are successfully commercialized or a cost and profit share arrangement with the possibility that we would provide sales representatives to co-detail the product candidates that Merck elects to advance in the United States. Under the Amended Collaboration Agreement, the research phase of the collaboration continues generally through March 2024, with possible extensions for each of the various programs to allow us or Merck to complete ongoing development during designated tail periods. The

level of R&D funding we expect to receive from Merck going forward will be substantially lower on an annual and overall basis than the R&D funding previously provided by Merck. In addition, we do not know whether Merck will exercise its option to license additional product candidates, such as its license option for NGM621 upon completion of the Phase 2 CATALINA trial within 60 days of Merck's receipt of an agreed-upon data package, or whether Merck will terminate its license to a licensed program under the terms of the Amended Collaboration Agreement or otherwise.

Under the Amended Collaboration Agreement, Merck has the unilateral right to terminate all or part of the agreement at certain times and under certain circumstances. Merck also may unilaterally terminate its R&D funding for programs within the scope of the collaboration if we are acquired by a third party or in the event of an uncured material breach by us. Subject to certain limitations, Merck may partially terminate the Amended Collaboration Agreement for convenience as it relates to MK-3655 or any future licensed program, as it did in 2019 when it terminated its license to our growth differentiation factor 15, or GDF15, agonist program, which included currently suspended product candidates NGM395 and NGM386. Merck may also unilaterally terminate the Amended Collaboration Agreement as it relates to its rights to research and develop small molecule compounds. It may also unilaterally terminate the Amended Collaboration Agreement with respect to a specific licensed program in the event of an uncured material breach by us. If Merck terminates a program as a result of our uncured material breach, then we would lose our option to participate in a global cost and profit share arrangement if not yet exercised as of the time of termination and lose our co-detailing option (whether or not exercised as of that time) for the relevant licensed program.

If Merck terminates funding or terminates the Amended Collaboration Agreement, it could delay or preclude our ability to complete certain of our research and development programs, which would materially and adversely affect our business and our stock price would likely decline. In addition, in the event that Merck decides to take over any product candidates included in the scope of the collaboration for development during any tail period, or exercises its license option for any such product candidate, we could be subject to disputes with Merck with respect to their obligation to use commercially reasonable efforts with respect to the development and commercialization of the affected product candidate, and we could otherwise be subject to disputes with Merck over the scope of the parties' respective rights under the Amended Collaboration Agreement, any of which could delay or preclude the development or commercialization of the affected product candidate and involve us in costly and time-consuming arbitration and litigation, which could divert management attention and resources and otherwise negatively affect our business and operations.

We may depend in the future on collaborations with third parties other than Merck for the development and commercialization of our product candidates and for revenue. If those collaborations are not successful, we may not be able to capitalize on the market potential of our product candidates.

We may seek other third-party collaborators for the development and commercialization of any product candidates that are not within the scope of the collaboration with Merck or if Merck elects not to proceed with development of any product candidates that are within the scope of the current collaboration. For example, if Merck does not elect to license NGM621 and its related compounds after completion of the CATALINA trial, we would need to raise substantial additional capital and/or partner the program in order to proceed to Phase 3 development of NGM621 if supported by the results from the CATALINA trial. If we decide to enter into any such arrangements with any third parties, and are successful in doing so, we will likely have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of our product candidates. Our ability to generate revenue from any such arrangement will depend on the specific financial terms we reach with any collaborator, as well as each of our collaborators' abilities to successfully perform the functions assigned to them in such arrangement towards developing, seeking regulatory approval for and commercializing our product candidates.

Collaborations involving our product candidates, including our collaboration with Merck, pose risks to us, including the following:

- Collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations. For example, under the terms of the collaboration with Merck, if Merck exercises its option to acquire an exclusive license for a product candidate that is within the scope of the collaboration, our ability to influence the resources Merck devotes to such product candidate are substantially reduced until such time, if any, that we exercise our right to participate in a cost and profit share arrangement. Even after we exercise that right to participate in a cost and profit share arrangement, our ability to influence Merck will be limited.

- Collaborators might opt not to pursue development and commercialization of our product candidates or not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding or external factors, such as an acquisition that diverts resources or creates competing priorities. For example, in June 2021, we and Merck entered into the Amended Collaboration Agreement that covers a narrower scope, focused primarily on ophthalmology- and CVM-related therapeutic areas, than had been covered under the Original Collaboration Agreement. In addition, under the terms of the Amended Collaboration Agreement, it is possible for Merck to unilaterally terminate the MK-3655 program and any other program (whether or not we have exercised our cost and profit share option) upon prior written notice, such as it did for NGM386 and NGM395, without triggering a termination of the remainder of the Amended Collaboration Agreement. Moreover, Merck might also opt not to designate any collaboration product candidates for further development during the tail period following the end of the research phase or exercise any of its options to acquire a license to a product candidate.
- Collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, request the suspension or termination of a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing.
- Collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours.
- A collaborator with marketing and distribution rights might not commit sufficient resources to the marketing and distribution of our product candidates.
- Collaborators might not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our proprietary information or expose us to potential litigation.
- Disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of our product candidates or that result in costly litigation or arbitration that diverts management attention and resources.
- We may lose certain valuable rights under circumstances identified in our collaborations, including, in the case of our collaboration with Merck, if we undergo a change in control.
- Collaborations might be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates.

Collaboration agreements might not lead to development or commercialization of product candidates in the most efficient manner, or at all. If a present or future collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program under such collaboration could be delayed, diminished or terminated.

We may not be able to obtain and maintain the relationships with third parties that are necessary to develop, commercialize and manufacture some or all of our product candidates.

In addition to our dependence on our collaboration with Merck and any potential future collaborators, we expect to depend on other third parties, including contract research organizations, or CROs, clinical data management organizations, clinical investigators, contract manufacturing organizations/contract development and manufacturing organizations, or CMOs, and other third-party partners and service providers to support our discovery efforts, to formulate product candidates, to conduct our clinical trials and certain aspects of our research and preclinical studies, to manufacture clinical and commercial-scale quantities of our drug substances and drug products and to market, sell and distribute any products we successfully develop and for which we obtain regulatory approval. Any problems we experience with any of these third parties could delay our research efforts or the development, manufacturing or commercialization of our product candidates or any future products, which could harm our results of operations. For more information, see the risk factors titled *"We rely completely on CMOs for the manufacture of our product candidates, and we are subject to many manufacturing risks, any of which could substantially increase our costs and limit supply of our product candidates and any future products"* and *"We have no experience in sales, marketing and distribution and may have to enter into agreements with third parties to perform these functions, which could prevent us from successfully commercializing our product candidates."*

We cannot guarantee that we or, as applicable, any of our collaborators will be able to successfully negotiate agreements for, and maintain relationships with, third-party partners and service providers on favorable

terms, if at all. If we or any of our collaborators are unable to obtain and maintain these agreements, we may not be able to clinically develop, formulate, manufacture, obtain regulatory approvals for or commercialize our product candidates, which will, in turn, adversely affect our business. If we or any of our collaborators need to enter into alternative arrangements, it would delay our product development and, if applicable, commercialization activities and such alternative arrangements may not be available on terms acceptable to us.

We expect to continue to expend substantial management time and effort to enter into relationships with third parties and, if we successfully enter into such relationships, to manage these relationships. In addition, our reliance on these third parties for R&D activities reduces our control over these activities but does not relieve us of our responsibilities. For example, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. However, we cannot control the amount or timing of resources our collaborators will devote to our R&D programs, product candidates or potential product candidates, and we cannot guarantee that these parties will fulfill their obligations to us under these arrangements in a timely fashion, if at all. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials or other R&D activities in accordance with regulatory requirements, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize any approved products. In addition, we base our expense accruals related to clinical trials on our estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and CROs that conduct and manage clinical trials on our behalf and, if their estimates are not accurate, it could negatively affect the accuracy of our financial statements.

Any agreements we have or may enter into with third-party partners and service providers may give rise to disputes regarding the rights and obligations of the parties. Disagreements could develop over contract interpretation, rights to ownership or use of intellectual property, the scope and direction of R&D, the approach for regulatory approvals or commercialization strategy. We are conducting research programs in a range of therapeutic areas, and our pursuit of these opportunities could result in conflicts with the other parties to these agreements that may be developing or selling pharmaceuticals or conducting other activities in these same therapeutic areas. Any disputes or commercial conflicts could lead to the termination of our agreements, delay progress of our product development programs, compromise our ability to renew agreements or obtain future agreements, lead to the loss of intellectual property rights, result in increased financial obligations for us or result in costly and time-consuming arbitration or litigation.

In addition, we are less knowledgeable about the reputation and quality of third-party contractors in countries outside of the United States where we conduct discovery research or preclinical and clinical development and manufacturing of our product candidates and, therefore, we may not choose the best parties for these relationships.

We rely completely on CMOs for the manufacture of our product candidates, and we are subject to many manufacturing risks, any of which could substantially increase our costs and limit supply of our product candidates and any future products.

We have limited process development capabilities and require the services of third-party CMOs to provide additional process development and manufacturing capabilities. We do not have, and we do not currently plan to acquire or develop, the facilities or capabilities to manufacture bulk drug substance or filled drug product for use in clinical trials or commercialization. As a result, we rely completely on CMOs, which entails risks to which we would not be subject if we manufactured product candidates or products ourselves, including risks related to reliance on third parties for availability of drug product to use in our clinical trials and for regulatory compliance and quality assurance with respect to such drug product, the possibility of breach of the manufacturing agreement by third parties because of factors beyond our control (including a failure to manufacture our product candidates or any products we may eventually commercialize in accordance with our specifications) and the possibility of termination or nonrenewal of agreements by third parties, based on their own business priorities, at a time that is costly or damaging to us.

Our product candidates are biologics, and the manufacture of biologic products is complex, highly regulated and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. As a result, the manufacture of our product candidates is subject to many risks, including the following, some of which we have experienced:

- product loss or other negative consequences due to contamination, equipment failure, improper installation or operation of equipment, vendor or operator error, shortages of qualified personnel or improper delivery or storage conditions;

- difficulties with production costs and yields, quality control, product stability and quality assurance testing, including challenges related to bioanalytical method development and the qualification and implementation of those methods for release testing, which can delay availability of clinical trial materials;
- the negative consequences of failure to comply with strictly enforced federal, state and foreign regulations;
- minor deviations from normal manufacturing processes, which have in the past and may in the future result in reduced production yields, product defects and other supply disruptions;
- the presence of microbial, viral or other contaminants discovered in our product candidates or in the manufacturing facilities in which they are made, which can necessitate closure of facilities for an extended period of time to investigate and eliminate the contamination;
- the negative consequences of our CMOs' failure to qualify upon an audit by regulatory authorities, by us or by our collaborators;
- our CMOs' changing strategies and business priorities, which can affect the availability of facilities where we intend to manufacture our product candidates; and
- our CMOs' manufacturing facilities being adversely affected by labor, raw material and component shortages, turnover of qualified staff or financial difficulties of their owners or operators, including as a result of the evolving effects of the COVID-19 pandemic, or by natural disasters, power failures, local political unrest or other factors.

We cannot ensure that issues relating to the manufacture or testing of our product candidates, such as those described above, will not occur or continue to occur in the future and if we or our CMOs experience any such issues there could be a shortage of drug substance or drug product for use in our clinical trials, which could delay clinical and regulatory timelines significantly and have an adverse effect on our business.

In addition, to date our product candidates have been manufactured by CMOs solely for preclinical studies and relatively small clinical trials. We intend to continue to use CMOs for these purposes, and also for the supply of larger quantities that may be required to conduct accelerated or expanded early clinical trials or larger, later clinical trials and for commercialization if we advance any of our product candidates through regulatory approval and to commercialization. For MK-3655 and any other product candidates licensed by Merck, we will rely on Merck's internal manufacturing capacity or a third-party manufacturer engaged by Merck. These manufacturers may not have sufficient manufacturing capacity and may not be able to scale up the production of drug substance or drug product in the quantities we need and at the level of quality required in a timely or effective manner, or at all. In particular, there is increased competition in the biotechnology industry for CMO manufacturing slots and other capabilities generally, which has had, and may continue to have, a negative impact on the availability of manufacturing capacity and therefore our ability to supply clinical trial materials for planned, ongoing or expanded clinical trials.

The transfer of our small-scale manufacturing processes to CMOs for scale up and validation, such as our ongoing activities with a CMO to transfer the process for the manufacture of NGM621 in anticipation of a potential Phase 3 trial, and any later scale up and validation of the manufacturing process in the CMOs' facilities to manufacture larger quantities, involve difficult and complex processes. We may not be successful in transferring our production system to a CMO, either because it is unable to implement the process successfully in its facilities or for other reasons. Later scale-up activities are also difficult and costly and entail risks such as process reproducibility, stability, consistency and other technical challenges. If we are unable to adequately validate or scale up the manufacturing processes for our product candidates, we would need to undertake a transfer to another third party and repeat the manufacturing validation process, which can be expensive and time-consuming and could delay the initiation or completion of our clinical trials.

Similarly, we or our CMOs may make changes to our product candidates' manufacturing processes at various points in product development for many reasons, including scaling up, facility fit, raw material or component availability, decreasing costs or timing of production, improving processing robustness and reliability, decreasing processing times or others. Such changes require further validation and may have unintended consequences, which could include causing our product candidates to perform differently when administered in clinical trials and affecting clinical trial results. In some circumstances, we may be required to perform comparability or other studies to demonstrate that the product used in earlier clinical trials or at earlier stages of a trial are comparable to the product we intend to use in later trials or later stages of an ongoing trial. These efforts are expensive and there is no assurance that they will be successful, which could impact our ability to continue or initiate clinical trials in a timely manner, or at all.

Any future adverse developments affecting manufacturing operations or the scale up or validation of manufacturing processes for our product candidates may result in shipment delays, lot failures, clinical trial delays or discontinuations, or, if we are commercializing products, inventory shortages, product withdrawals or recalls or other interruptions in supply. We may also have to record inventory write-offs and incur other charges and expenses for drug substance or drug product that fails to meet specifications or cannot be used before its expiration date. In addition, for out of specification materials, we may need to undertake costly remediation efforts or manufacture new batches at considerable cost and time delays or, in the longer run, seek more expensive manufacturing alternatives.

We also have a single source of supply for most of our product candidates, including the drug substances used in manufacturing them. Single sourcing minimizes our leverage with our CMOs, who may take advantage of our reliance on them to increase the pricing of their manufacturing services or require us to change our intended manufacturing plans based on their strategies and priorities. Single sourcing also imposes a risk of interruption or delays in supply in the event of manufacturing, quality or compliance difficulties and/or other difficulties in timely supplying us with materials. For example, our planned individual new drug application submissions for NGM438 and NGM831 were delayed due to challenges at one of our CMOs, primarily related to analytical method qualification and release testing for those product candidates. It is possible that we could experience further supply-related delays that would adversely affect our ability to commence first-in-human testing of product candidates on our anticipated timing. Moreover, we do not currently have arrangements in place for redundant supply for drug substance or drug product. If one of our suppliers fails or refuses to supply us for any reason or we otherwise choose to engage a new supplier for one or more of our product candidates, including a second source supplier to mitigate the risks of single-source supply, it would take a significant amount of time and cost to implement and execute the necessary technology transfer to, and qualification of, a new supplier. The FDA or comparable foreign health authority must approve manufacturers of drug substance and drug product. If there are any delays in qualifying new suppliers or facilities or a new supplier is unable to meet the requirements of the FDA or comparable foreign health authority for approval, there could be a shortage of drug substance or drug product for use in clinical trials with respect to the affected product candidates.

Our product candidates use certain raw materials for their production, such as reagents that support cell growth, purification materials and testing and manufacturing supplies. Some of these materials only have a single supplier and are purchased as necessary without a long-term supply agreement in place. In addition, our drug products may require the use of syringe or other components, some of which have been the subject of shortages amplified by the COVID-19 pandemic due to their use in, among other things, COVID-19 vaccine production. If our CMOs are required to obtain an alternative source of certain raw materials and components, additional testing, validation activities and regulatory approvals may be required, which may negatively impact manufacturing and other development timelines. For example, one of our CMOs recently experienced shortages of the specific cell culture media used to manufacture one of our products due to global supply chain challenges and, while we have been successful in obtaining a replacement product, these types of substitutions may require additional and unplanned testing, qualification or validation activities. Any significant delay in the acquisition or decrease in the availability of these materials, components or other items, or failure to successfully qualify or validate alternative materials or components, could considerably delay the manufacture of our product candidates, which could adversely impact the timing or completion of any ongoing and planned trials or the timing of regulatory approvals, if any, of our product candidates.

In addition, our CMOs' facilities and operations have been adversely affected by labor, raw material and component shortages, high turnover of staff and difficulties in hiring trained and qualified replacement staff and the operations of our CMOs may be requisitioned, diverted or allocated by U.S. or foreign government orders such as under emergency, disaster and civil defense declarations in connection with the COVID-19 pandemic or otherwise. For a discussion of how the COVID-19 pandemic has affected or may affect drug or related component supplies for our clinical trials, refer to the risk factor titled *"The COVID-19 pandemic continues to adversely impact our business and operations, as well as the businesses or operations of our manufacturers, CROs and other third parties with whom we conduct business. Our business could be materially and adversely affected in the future by the effects of other disease outbreaks, epidemics and pandemics, including by the evolving effects of the COVID-19 pandemic."* Changes in economic conditions, supply chain constraints, labor, raw material and component shortages and steps taken by governments and central banks, particularly in response to the COVID-19 pandemic as well as other stimulus and spending programs, could also lead to higher inflation than previously experienced or expected, which could, in turn, lead to an increase in costs.

Our product candidates other than aldafermin and MK-3655 are currently manufactured at a facility in Lithuania. Following Russia's invasion of Ukraine in February 2022, the response from the United States and its allies has included both significant sanctions and NATO's deployment of additional military forces to Eastern Europe, including to Lithuania. The ongoing invasion of Ukraine and the retaliatory measures taken or that may be

taken by the United States, NATO and others, including significant sanctions against Russia, create global security concerns and regional instability, including due to the possibility of expanded regional or global conflict, and are likely to have short-term and likely longer-term negative impacts on regional and global economies, any or all of which could disrupt our supply chain and adversely affect our ability to conduct ongoing and future clinical trials of our product candidates and our ability to raise capital on favorable terms.

Any further delays or interruptions in the supply of clinical trial material could delay the completion or initiation of our clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense, terminate ongoing clinical trials or abandon planned clinical trials or expansions or accelerations of clinical trials completely.

We have no experience in sales, marketing and distribution and may have to enter into agreements with third parties to perform these functions, which could prevent us from successfully commercializing our product candidates.

We currently have no sales, marketing or distribution capabilities. To commercialize our product candidates outside of the Merck collaboration, or to commercialize products subject to the Merck collaboration for which we may in the future exercise our co-detailing rights in the United States or for which Merck decides not to exercise its license option, we must either develop our own sales, marketing and distribution capabilities or make arrangements with third parties to perform these services for us. If we exercise our co-detailing rights in the United States with respect to the Merck collaboration, we will be responsible for the costs of fielding such a sales force, subject to partial offset pursuant to the formula by which profits are allocated, and the risks of attracting, retaining, motivating and ensuring the compliance of such a sales force with the various requirements of the Merck collaboration and applicable law. If we decide to market any of our products on our own, we will have to commit significant resources to developing a marketing and sales force and supporting distribution capabilities. If we decide to enter into arrangements with third parties for performance of these services, we may find that they are not available on terms acceptable to us, or at all. If we are not able to establish and maintain successful arrangements with third parties or build our own sales and marketing infrastructure, we may not be able to commercialize our product candidates, which would adversely affect our business, operating results and prospects.

Risks Related to Our Business and Industry

The COVID-19 pandemic continues to adversely impact our business and operations, as well as the businesses or operations of our manufacturers, CROs and other third parties with whom we conduct business. Our business could be materially and adversely affected in the future by the effects of other disease outbreaks, epidemics and pandemics, including by the evolving effects of the COVID-19 pandemic.

Disease outbreaks and epidemics in regions where we have concentrations of clinical trial sites or other business operations or pandemics, such as the COVID-19 pandemic, could adversely affect our business, including by causing significant disruptions in our operations and/or in the operations of third-party manufacturers and CROs upon whom we rely. For example, the COVID-19 pandemic has presented a substantial public health and economic challenge around the world and is affecting employees, patients, communities and business operations, as well as the United States and international economy and financial markets. In this regard, the COVID-19 pandemic and government measures taken in response have had a significant impact, both direct and indirect, on businesses and commerce, as significant reductions in business-related activities have occurred, supply chains have been disrupted and manufacturing and clinical development activities have been curtailed or suspended.

Remote and hybrid work policies, quarantines, shelter-in-place and similar government orders, shutdowns or other restrictions on the conduct of business operations related to the COVID-19 pandemic could materially and adversely affect our operations. Although we are operating under a hybrid work model, we may be forced to, or determine that we should, resume a more restrictive remote work model. In connection with these measures, we may be subject to claims based upon, arising out of or related to COVID-19 and our actions and responses thereto, including any determinations that we have made and may make in the future with respect to our onsite operations.

Further, the effects of future governmental shelter-in-place orders and our remote and hybrid work policies may materially and adversely impact productivity, disrupt our business and delay our clinical programs and timelines, the magnitude of which will depend, in part, on the length and severity of the restrictions and other limitations on our ability to conduct our business in the ordinary course. For example, since the beginning of the COVID-19 pandemic, we have experienced employee attrition at rates higher than we experienced historically, resulting in an increased rate of hiring new employees. We cannot predict whether these trends will continue or be exacerbated, the impact of COVID-19 on future productivity or whether or when we may be required to return to a more restrictive work model as the COVID-19 pandemic continues to evolve. Future similar, and perhaps more

severe, disruptions in our operations could materially and adversely impact our business, financial condition, results of operations and growth prospects.

As the COVID-19 pandemic continues to evolve, including the emergence of new variants, there may be additional negative impacts in the future on our ability to initiate new clinical trial sites, to enroll new patients and to maintain existing patients who are participating in our clinical trials, which may include increased clinical trial costs, longer timelines and delay in our ability to obtain regulatory approvals of our product candidates, if at all. Our ability to attract additional clinical trial sites and principal investigators to conduct our clinical trials and to conduct the necessary clinical trial site initiation procedures has been and may continue to be impacted by quarantines, shelter-in-place and similar restrictions imposed by federal, state and local governments. These restrictions may also continue to prohibit or discourage patients from enrolling in, or continuing to participate in, our clinical trials. Principal investigators and clinical trial site staff, as healthcare providers, may have heightened exposure to COVID-19 and if their health is impacted by COVID-19, it could adversely impact the conduct of our clinical trials at their sites. Similarly, potential participants in our clinical trials, many of whom are particularly vulnerable, may be unwilling to enroll in, and enrolled patients may be unwilling to continue to participate in, our clinical trials due to concerns about traveling to sites for required screening and clinical trial visits and procedures. In this regard, during the COVID-19 pandemic, we have experienced, from time to time, a slower pace of clinical site initiation and clinical trial enrollment and a higher subject drop out rate than originally anticipated in certain of our clinical trials. We believe this may have been due to factors such as the vulnerability of our studied patient populations, site staff shortages, clinical trial site suspensions, reallocation of medical resources and the challenges of working remotely due to shelter-in-place and similar government orders and guidelines, among other factors.

Enrolled patients may also be unable to comply with clinical trial protocols if quarantines, shelter-in-place and similar restrictions continue to impede patient movement or interrupt healthcare services. Accordingly, we have developed and implemented additional clinical study policies and procedures designed to help protect trial participants from exposure to COVID-19 as a result of their trial participation, which include the use of telemedicine visits with trial participants, remote monitoring of clinical trial sites and other measures, as appropriate, designed to ensure that data from our clinical trials that may be temporarily disrupted as a result of safety measures during the COVID-19 pandemic are collected pursuant to the study protocol and consistent with current Good Clinical Practices, or cGCPs, with any material protocol deviation reviewed and approved by the clinical trial sites' institutional review boards, or IRBs, or ethics committees. We may be required to develop and implement additional clinical study policies and procedures to mitigate the evolving effects of the COVID-19 pandemic, which could significantly increase our R&D expenses. General supply chain issues exacerbated during the COVID-19 pandemic may also impact the ability of our clinical trial sites to obtain basic medical supplies used in our trials in a timely fashion, if at all. For example, earlier this year we were made aware of a shortage of tubes required for taking blood samples, requiring the use of tubes of a different size from those specified in one of our protocols. If any of the foregoing or any future efforts to mitigate the impact of the COVID-19 pandemic on our clinical trials are not successful, or if the effects of the COVID-19 pandemic persist or become more severe, it could materially and adversely affect our clinical development timelines and our ability to obtain regulatory approvals of our product candidates and could significantly increase our costs.

We also could see an adverse impact on our ability to report clinical trial results, or interact with regulators, IRBs and ethics committees or other important agencies due to limitations in health authority employee resources or otherwise. Moreover, we rely on CROs and other third parties to assist us with clinical development activities, and we cannot guarantee that they will continue to perform their contractual duties in a timely and satisfactory manner as a result of the COVID-19 pandemic.

Quarantines, shelter-in-place and similar government orders and guidelines could impact personnel at third-party manufacturing facilities in the United States and other countries, or the availability or cost of materials, which would disrupt our supply chain and delay our clinical development efforts. Our CMOs' facilities and operations have been adversely affected by labor, raw material and component shortages, high turnover of staff and difficulties in hiring trained and qualified replacement staff. These difficulties have resulted in some delays in early development timelines and we could experience more significant disruptions to our supply chain and operations as a result of the evolving effects of the continuing COVID-19 pandemic. If our CMOs are required to obtain an alternative source of certain raw materials and components, for example, additional testing, validation activities and regulatory approvals may be required which can also have a negative impact on timelines. Any associated delays in the manufacturing and supply of drug substance and drug product for our clinical trials could adversely affect our ability to conduct ongoing and future clinical trials of our product candidates on our anticipated development timelines. Likewise, the operations of our third-party manufacturers may be requisitioned, diverted or allocated by U.S. or foreign government orders such as under emergency, disaster and civil defense declarations in connection with the COVID-19 pandemic or otherwise. As an example, in 2020, the Defense Production Act was invoked pursuant to

which the U.S. government may, among other things, require domestic industries to provide essential goods and services needed for the national defense, such as drug material or other supplies needed to treat COVID-19 patients or to produce or distribute vaccines, which could require our third-party manufacturers to allocate manufacturing capacity or raw materials or components in a way that delays or interrupts our supply of clinical trial material. For example, early in the pandemic, our aldafermin drug product CMO advised us that it could be required under orders of the U.S. government to allocate manufacturing capacity to the manufacture or distribution of COVID-19 vaccines. If any of our CMOs or raw materials or components suppliers become subject to acts or orders of U.S. or foreign government entities to allocate or prioritize manufacturing capacity, raw materials or components to the manufacture or distribution of COVID-19 vaccines or medical supplies needed to test or treat COVID-19 patients, this could delay our clinical trials, perhaps substantially, which could materially and adversely affect our business.

In any event, if the effects of the COVID-19 pandemic persist or become more severe or more acutely impact geographies with particular relevance to our business, we could experience significant disruptions to our current and potential future clinical development timelines, impacts on our ability to obtain regulatory approvals of our product candidates and increases in our costs, all or any of which would adversely affect our business, financial condition, results of operations and growth prospects.

While the potential future economic impact caused by, and the duration of, the COVID-19 pandemic is difficult to assess or predict, the COVID-19 pandemic (as well as the ongoing invasion of Ukraine by Russia and the related sanctions imposed against Russia) could result in significant and prolonged disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect the financial resources available to us. In addition, economic recession or additional market corrections resulting from, among other things, the spread of COVID-19 could materially affect our business and the value of our common stock. We also cannot predict how the evolving effects of the COVID-19 pandemic may influence the future decisions of Merck to license any programs available to it under the Amended Collaboration Agreement, such as NGM621 and its related compounds.

While we expect the COVID-19 pandemic to continue to affect our business operations, the extent of the impact on our clinical development and regulatory efforts, our ability to raise sufficient additional capital on acceptable terms, if at all, the decisions of Merck and the value of and market for our common stock will depend on future developments that are highly uncertain and cannot be predicted with confidence at this time. Such developments include the emergence and spread of SARS-CoV-2 variants in the United States and other countries, including the potential emergence of variants that may prove especially contagious or virulent, the ultimate duration and severity of the COVID-19 pandemic, government actions, such as travel restrictions, quarantines and social distancing requirements in the United States and in other countries, business closures or business disruptions, and the effectiveness of vaccination programs and other actions taken globally to contain and treat COVID-19. To the extent the evolving effects of the COVID-19 pandemic adversely affects our business and results of operations, it also may have the effect of heightening many of the other risks and uncertainties described elsewhere in this ‘‘Risk Factors’’ section.

Our product candidates must undergo rigorous clinical trials before seeking regulatory approvals, and clinical trials may be delayed, suspended or terminated at any time for many reasons, any of which could delay or prevent regulatory approval and, if approval is granted, commercialization of our product candidates.

All of our product candidates are subject to rigorous and extensive clinical trials before we can seek regulatory approval from the FDA and comparable foreign health authorities such as the European Commission. Clinical trials may be delayed, suspended or terminated at any time for reasons including but not limited to:

- ongoing discussions with the FDA or comparable foreign health authorities regarding the scope or design of our clinical trials;
- delays in obtaining, or the inability to obtain, required approvals from IRBs and ethics committees or other governing entities at clinical trial sites selected for participation in our clinical trials;
- delays in patient enrollment and other key trial activities, including as a result of the evolving effects of the COVID-19 pandemic and of the significant competition for recruiting patients with cancer in clinical trials;
- delays in reaching agreement on acceptable terms with prospective CROs and the failure of CROs, testing laboratories and other third parties to satisfy their contractual duties to us or meet expected deadlines;

- deviations from the trial protocol by clinical trial sites and investigators, or failures to conduct the trial in accordance with regulatory requirements;
- lower than anticipated retention rates of participants in clinical trials, including patients dropping out due to side effects, disease progression or concerns about the COVID-19 pandemic;
- failure of enrolled patients to complete treatment or to return for post-treatment follow-up;
- for clinical trials in selected patient populations, delays in identification and auditing of central or other laboratories and the transfer and validation of assays or tests to be used to identify selected patients and test any patient samples;
- implementation of new, or changes to, guidance or interpretations from the FDA or comparable foreign health authorities with respect to approval pathways for product candidates we are pursuing;
- the need to repeat clinical trials as a result of inconclusive or negative results, poorly executed testing or changes in required endpoints;
- insufficient supply or deficient quality of drug substance, drug product or other clinical trial material necessary to conduct our clinical trials, as well as delays in the testing, validation, manufacturing and delivery to clinical trial sites of such material;
- withdrawal of clinical trial sites or investigators from our clinical trials for any reason, including as a result of changing standards of care or the ineligibility of a site to participate in our clinical trials;
- unfavorable FDA or comparable foreign health authority inspection or review of a clinical trial site or records of any clinical or preclinical investigation;
- drug-related adverse effects or tolerability issues experienced by participants in our clinical trials;
- changes in government regulations or administrative actions;
- lack of adequate funding to continue the clinical trials;
- our ability to hire and retain key research and development personnel; or
- the placement of a clinical hold on a trial by the FDA or comparable foreign health authorities.

For example, in the third quarter of 2021, the manufacturer of Abraxane® (paclitaxel protein bound), or Abraxane, reported a shortage of Abraxane to the FDA due to manufacturing delays. Abraxane, also referred to as Nab-paclitaxel, is required for treatment of some of the patients in our ongoing Phase 1/2 NGM120 clinical trial. The Phase 2 portion of the trial (referred to as the PINNACLES trial) is studying NGM120 in combination with gemcitabine and Nab-paclitaxel as first-line treatment in patients with metastatic pancreatic cancer to assess NGM120's effect on both cancer and cancer-related cachexia. It is possible that if our clinical trial sites are unable to obtain Nab-paclitaxel in a timely fashion, or at all, that the portion of the ongoing Phase 1/2 NGM120 trial using Nab-paclitaxel could be negatively impacted.

We cannot guarantee that we will be able to successfully accomplish required regulatory and/or manufacturing activities or all of the other activities necessary to initiate and complete clinical trials in a timely fashion, if at all. As a result, our preclinical studies and clinical trials may be extended, delayed or terminated, and we may be unable to obtain regulatory approvals or successfully commercialize our products. In addition, we have only limited experience in conducting late-stage clinical trials required to obtain regulatory approval. In any event, we do not know whether any of our clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all.

Our product development costs will increase if we continue to experience delays in clinical testing. Significant clinical trial delays could also shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, which would impair our ability to successfully commercialize our product candidates and may harm our business, results of operations and prospects. Our or our collaborators' inability to timely complete clinical development could result in additional costs to us or impair our ability to generate product revenue or development, regulatory, commercialization and sales milestone payments and royalties on product sales.

If clinical trials of our product candidates fail to produce positive results or to demonstrate safety and efficacy to the satisfaction of the FDA or comparable health authorities, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

Our product candidates are in early stages of development, with our most advanced product candidates only in Phase 2 development. Before obtaining marketing approval from health authorities for the sale of our product candidates, we or our collaborators must conduct extensive preclinical studies and clinical trials to demonstrate the safety and efficacy of the product candidates in humans. Preclinical studies and clinical trials are expensive, take several years to complete and may not yield results that support further clinical development or product approvals. The design of a clinical trial can determine whether its results will support approval of a product, and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. Because we have limited experience designing clinical trials, we may be unable to design and execute a clinical trial to support regulatory approval.

In addition, there is a high failure rate for drugs and biologic products proceeding through clinical trials and failure can occur at any stage of testing. For example, our Phase 2b ALPINE 2/3 trial evaluating aldafermin in patients with F2/F3 NASH did not meet its primary endpoint and, as a result, we decided to suspend further development of aldafermin in patients with F2/F3 NASH, allowing for the reallocation of resources to advancing our other programs. While we continued, and have completed, enrollment in our Phase 2b ALPINE 4 clinical trial of aldafermin in patients with compensated cirrhosis due to NASH (liver fibrosis stage 4, or F4, by the NASH Clinical Research Network classification), we updated the design of the ALPINE 4 trial, elevating the Enhanced Liver Fibrosis, or ELF, test, a reproducible, quantitative non-invasive liver prognostic test that evaluates liver fibrosis and correlates to liver-related outcomes, to be the primary endpoint for the trial. The ELF test is a composite blood test measuring the presence of three biomarkers associated with liver matrix metabolism. Liver biopsy data will also be measured and reported as a secondary endpoint upon completion of the trial. For more information, refer to the risk factor titled "*Aldafermin, which is wholly-owned by us, as well as MK-3655, which is being developed by our collaborator, Merck, are being developed for the treatment of NASH, an indication for which there are no approved products. This makes it difficult to predict the timing, cost and potential success of their clinical development and regulatory approval for the treatment of NASH.*" We may determine to discontinue any further development of aldafermin in the future, in which case, we will not receive any return on our investment in aldafermin.

Further, we expect that certain of our current product candidates will, and future product candidates may, require chronic administration. The need for chronic administration increases the risk that participants in our clinical trials will fail to comply with our dosing regimens. If participants fail to comply, we may not be able to generate clinical data in our trials acceptable to the FDA or comparable foreign health authorities. The need for chronic administration also increases the risk that our clinical drug development programs may not uncover all possible adverse events that patients who take our products may eventually experience. The number of patients exposed to treatment with, and the average exposure time to, our product candidates in clinical development programs may be inadequate to detect rare adverse events or chance findings that may only be detected once our products are administered to more patients and for longer periods of time.

In addition, data obtained from preclinical and clinical activities are subject to varying interpretations, which may delay, limit or prevent regulatory approval. In any event, it is impossible to predict when or if any of our product candidates will prove safe and effective in humans or will receive regulatory approval. If we are unable to successfully discover, develop or enable our collaborators to develop drugs that regulatory authorities deem effective and safe in humans, we will not have a viable business.

Success in preclinical studies or earlier-stage clinical trials may not be indicative of results in future clinical trials.

To date, the data supporting our drug discovery and development programs are derived from laboratory and preclinical studies and earlier-stage clinical trials. Owing in part to the complexity of biological pathways, when used to treat human patients, our product candidates might not demonstrate the biochemical and pharmacological properties we anticipate based on laboratory studies or earlier-stage clinical trials, and they may interact with human biological systems or other drugs in unforeseen, ineffective or harmful ways. Success in preclinical studies and earlier-stage clinical trials does not ensure that later clinical trials will generate the same results or otherwise provide adequate data to demonstrate the effectiveness and safety of our product candidates. In this regard, despite the results reported in our Phase 1 and 2 clinical trials for aldafermin, in Phase 1 clinical trials for MK-3655, NGM621 and NGM120 and in preclinical studies for our other product candidates, including three of our oncology product candidates, NGM707, NGM831 and NGM438, future clinical trials in humans may show that one or more of our product candidates are not safe and effective, in which event we may need to abandon development of such product candidates. In fact, many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials even after achieving promising results in preclinical studies and earlier-stage clinical trials. Similarly, preliminary data and interim results from clinical trials may not be predictive of final results. For example, in spite of the results we had obtained in our Phase 1 trials of aldafermin and in our first

Phase 2 trial, in May 2021, we announced that our Phase 2b ALPINE 2/3 trial evaluating aldafermin in patients with F2/F3 NASH did not meet its primary endpoint.

In addition, some of our earlier-stage clinical trials involve small patient populations, sometimes at single sites, and the results of these clinical trials may be subject to substantial variability and may not be indicative of either future interim results or final results.

Our product candidates may cause undesirable side effects or adverse events or have other properties or safety risks, which could delay or prevent continued clinical development or their regulatory approval or limit the commercial profile of any approved label.

Adverse events, undesirable side effects or similar safety issues caused by our product candidates could cause us or health authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign health authorities. Additional clinical trials may be required to further evaluate the safety profile of our product candidates. Patients in certain of our ongoing or planned clinical trials, particularly patients with cancer or with NASH with more advanced fibrosis, often enter our trials with significant comorbidities or advanced life-threatening illness and/or are treated in the trial with our product candidate in combination with other medications, including, in cancer patients, chemotherapy or other approved cancer treatments. As a result, patients in our clinical trials can be expected to experience some adverse events, including death, or side effects that are not or may not be related to treatment with our product candidates. Nonetheless, the occurrence of adverse events or side effects, whether or not related to our product candidates, could impact the success of our clinical trials.

Patients have experienced, and we have reported, serious adverse events, or SAEs, in the treatment arms of our completed trials of MK-3655, NGM621 and aldafermin. Ocular SAEs reported in our ongoing Phase 2 CATALINA trial of NGM621, which remains masked to treatment assignment, include retinal detachment and vitreous hemorrhage in the non-study eye, development of choroidal neovascularization in the study eye, visual worsening due to retinal artery occlusion in the study eye and decreases of vision, or visual acuity loss, due to worsening geographic atrophy, or GA, in the study and non-study eye. We expect that patients in our clinical trials, including those that are sham- or placebo-controlled with some patients not receiving study drug, will continue to experience adverse events and SAEs and we will continue to monitor those SAEs for any signals of concern regarding the safety and tolerability of our product candidates. For example, cancer patients enrolled in our ongoing clinical trials of NGM120, NGM707, NGM831 and NGM438, many of whom are suffering from advanced life-threatening illness, have experienced, and we expect will continue to experience, SAEs and other adverse events, which may or may not be drug related. If patients in any of our clinical trials experience a high or unacceptable severity and prevalence of side effects, including particularly SAEs, it could affect patient recruitment or the ability of enrolled patients to complete their treatment in a clinical trial or result in failure to obtain regulatory approval for our product candidates or product liability claims.

In addition, significant increases in serum levels of low-density lipoprotein cholesterol, or LDL-C, were observed in clinical trials of aldafermin in patients with NASH and type 2 diabetes. Serum levels of LDL-C were brought back to baseline levels with concomitant statin use in patients with NASH; however, the impact of these drug-induced changes in LDL-C are unknown. Generally, sustained and prolonged LDL-C elevations in untreated patients are associated with cardiovascular disease through atherosclerotic plaque development. While data from our completed Phase 2b ALPINE 2/3 clinical trial and earlier trials of aldafermin demonstrated the ability of concomitant statin use to mitigate the serum LDL-C elevations driven by aldafermin activity, aldafermin's impact on LDL-C may negatively impact market acceptance of an approved aldafermin product.

Our product candidates are protein or antibody therapeutics. Protein and antibody therapeutics can sometimes induce host immune responses that can cause the production of anti-drug antibodies, or ADAs. In some cases, ADAs have no effect. In other cases, ADAs may neutralize the effectiveness of the product candidate, can require that higher doses be used to obtain a therapeutic effect or can cross react with substances naturally occurring in a subject's body, which can cause unintended effects, including potential impacts on efficacy and adverse events. Some patients treated with aldafermin in our completed clinical trials have developed ADAs against aldafermin and, in some cases, those antibodies were neutralizing or appeared to cross react with the patient's naturally occurring FGF19. We developed an assay to measure the presence of ADAs against aldafermin for our ongoing NASH program, which we are using to test patient samples and which will need to be evaluated by regulatory agencies. The presence of ADAs was also observed in our Phase 1 MK-3655 trial. If we or Merck, as appropriate, are required to undertake substantial additional testing as a result of the detection of ADAs in subjects using aldafermin, MK-3655 or any other product candidate, the costs of our clinical trials may increase. If we or Merck determine that ADAs are causing safety or efficacy concerns when using any of our product candidates, we

or Merck may need to delay or halt clinical trials of our product candidates and the affected product candidates may never obtain regulatory approval. We cannot provide assurance that the detection of ADAs will not be higher than we have observed historically or that observed rates will not later be found to limit drug exposure or cause adverse safety events, or that the detection of ADAs will not otherwise result in the non-approvability of any of our product candidates.

In clinical trials to date, NGM621 has been delivered to clinical sites in vials and then administered to patients using commercially available single-use syringes. The manufacturer of a commercially available single-use syringe widely used by ophthalmologists for intravitreal, or IVT, injections, including investigators in the Phase 2 CATALINA trial, issued a notice that such single-use syringes should not be used for ocular medications due to an increased potential for adverse eye conditions. We have not experienced any safety concerns in our ongoing or completed NGM621 clinical trials relating to syringe use; however, we communicated with the FDA and our study investigators regarding this issue and are evaluating alternative syringes that may be suitable for intraocular use. However, if any patient in our clinical trials experiences a safety event due to the use of these commercially available single-use syringes, we could be required to delay or halt our clinical trials or may be subject to product liability claims.

Future results of our trials could reveal a high and unacceptable severity and prevalence of side effects, SAEs, ADAs, safety issues or other negative or otherwise unexpected characteristics. The occurrence of those issues could affect patient recruitment or the ability of enrolled patients to complete their treatment in a clinical trial, result in failure to obtain regulatory approval for our product candidates or product liability claims or impact market acceptance of our products. Any of these occurrences could materially and adversely affect our business, financial condition and prospects.

Aldafermin, which is wholly-owned by us, as well as MK-3655, which is being developed by our collaborator, Merck, are being developed for the treatment of NASH, an indication for which there are no approved products. This makes it difficult to predict the timing, cost and potential success of their clinical development and regulatory approval for the treatment of NASH.

We are developing aldafermin, and Merck is developing MK-3655, for the treatment of NASH, an indication for which there are no approved products. Implementation of new, or changes to, guidance or interpretations from the FDA or comparable foreign health authorities with respect to approval pathways, such as draft guidance documents from the FDA for the development of products for the treatment of NASH that issued in 2018 and 2019 and from the European Medicines Agency, or EMA, that issued in 2018, may impact the path for regulatory approval for NASH therapies. Further, as we and other companies advance clinical trials for potential NASH therapies, we expect that the path for regulatory approval for NASH therapies may continue to evolve as companies refine their regulatory approval strategies and interact with health authorities. Such evolution may impact our future clinical trial designs, including trial size and endpoints, in ways that we cannot currently predict. We updated the design of the ALPINE 4 trial of aldafermin, elevating the ELF test to be the primary endpoint for the trial. Neither the ELF test, nor any other surrogate biomarker endpoints, are currently endorsed by the FDA or EMA as sufficient for granting regulatory approval of products being developed for the treatment of compensated cirrhosis due to NASH (stage F4) and therefore may not be able to be used as a primary endpoint in potential future Phase 3 trials to support regulatory approval for aldafermin.

In addition, certain of our competitors have recently experienced regulatory setbacks for NASH therapies following communications from the FDA. We currently do not know the impact, if any, that these setbacks could have on the path for regulatory approval for NASH therapies generally or for aldafermin and MK-3655 in particular. If the clinical trials for aldafermin and MK-3655 are not designed in a manner that, even if successful, support regulatory approval due to shifting approval pathways or for other reasons, those product candidates may be delayed in obtaining approval or may never be approved, which could have a material adverse effect on our business, operating results and prospects.

Aldafermin is a modified version of a human hormone that has been associated with liver cancer in rodent testing.

The IND application we filed for aldafermin in February 2014 for type 2 diabetes was placed on clinical hold by the FDA Division of Metabolism and Endocrinology Products pending receipt of additional information relating to the potential risk of proliferative effects of aldafermin in the livers of non-human primates and mice based on concerns relating to the observation that human FGF19 can induce hepatocellular proliferation in rodents. We withdrew this IND in January 2015, as we determined that we would not further study aldafermin in type 2 diabetes after we analyzed the results of the Phase 2 clinical trial of aldafermin in type 2 diabetes and made the

determination to pursue NASH and other liver indications. To date, the FDA Division of Hepatology and Nutrition, which is responsible for the NASH indication, has not requested any additional information regarding the potential for aldafermin to induce hepatocellular proliferation. We have received feedback from the FDA Carcinogenicity Assessment Committee that our preclinical data through six-month chronic toxicology studies in mice and monkeys support a single species, two-year carcinogenicity assessment in rats. The human hormone and the rodent ortholog for FGF19 share a sequence identity of approximately 50%, which means that the results of these studies of aldafermin in rats are not necessarily predictive of the potential risk of carcinogenicity in humans. To our knowledge, neither FGF19 nor any variant thereof other than aldafermin has ever been tested in humans. Concerns about the association between FGF19 and liver cancer could have an adverse effect on our ability to develop and commercialize aldafermin.

We may not successfully identify new product candidates to expand our development pipeline.

The success of our business over the longer term depends upon our ability to identify and validate new potential protein and antibody therapeutics. Research programs to identify new product candidates require substantial technical, financial and human resources, and our research methodology may not successfully identify medically relevant protein or antibody therapeutics to be developed as product candidates. In addition, our drug discovery efforts often identify and select novel, untested proteins in the particular disease indication we are pursuing, which we may fail to validate after further research work. Moreover, our research efforts may initially show promise in discovering potential new protein and antibody therapeutics yet fail to yield product candidates for clinical development for multiple reasons. For example, potential product candidates may, on further study, be shown to have inadequate efficacy, harmful side effects, suboptimal drug profiles or other characteristics suggesting that they are unlikely to be commercially viable products. Our inability to successfully identify additional new product candidates to advance into clinical trials could have a material adverse effect on our business, operating results and prospects.

We may fail to select or capitalize on the most scientifically, clinically and commercially promising or profitable product candidates.

We have limited technical, managerial and financial resources to determine which of our product candidates should proceed to initial clinical trials, later-stage clinical development and potential commercialization. We may make incorrect determinations in allocating resources among these product candidates. Our decisions to allocate our R&D, management and financial resources toward particular product candidates or therapeutic areas may not lead to the development of viable commercial products and may divert resources from better opportunities. Similarly, our decisions to delay or terminate drug development programs, such as our decision to suspend development activities related to multiple metabolic disease product candidates and for aldafermin in patients with F2/ F3 NASH to concentrate our resources elsewhere, also may be incorrect and could cause us to miss valuable opportunities.

Under the terms of our Amended Collaboration Agreement with Merck, we have the right, exercisable during a specified period prior to the commencement of Phase 3 clinical testing of the applicable product candidate, to convert our economic participation from a milestones and net sales royalty arrangement into a cost and profit share arrangement. If we exercise the cost and profit share right, we have the ability to participate in a co-detailing relationship in the United States. Due to the limited exercise period, we may have to choose whether a product candidate will be subject to a cost and profit share arrangement before we have as much information as we would like, including whether and when such program may receive FDA approval of the applicable biologics license application, or BLA. As a result of such incomplete information or due to incorrect analysis by us, we may select a cost and profit share program that later proves to have less commercial potential than an alternative, or none at all, or may pass on a cost and profit share program that proves commercially successful.

We must attract and retain highly skilled employees in order to succeed. If we are not able to retain our current senior management team, especially our Chief Scientific Officer, Dr. Jin-Long Chen, or to continue to attract and retain qualified scientific, technical and business personnel, our business will suffer.

To succeed, we must recruit, retain, manage and motivate qualified clinical, scientific, technical and management personnel and we face significant competition for experienced personnel. If we do not succeed in attracting and retaining qualified personnel, particularly at the management level, it could adversely affect our ability to execute our business plan and harm our operating results. An important element of our strategy is to take advantage of the R&D and other expertise of our current management. The loss of any one of our executive officers, including, in particular, Dr. Jin-Long Chen, our Chief Scientific Officer, could result in a significant loss in the

knowledge and experience that we, as an organization, possess and could cause significant delays, or outright failure, in the development and further commercialization of our product candidates.

There is intense competition for qualified personnel, including management, in the technical fields in which we operate, particularly in the oncology field, and we may not be able to attract and retain qualified personnel necessary for the successful research, development and future commercialization, if any, of our product candidates. In particular, the hiring environment in the San Francisco Bay Area, where we are headquartered, is extremely competitive. Many of the other pharmaceutical companies that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do. They also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high-quality candidates than what we have to offer. The labor market tightened significantly after the beginning of the ongoing COVID-19 pandemic, and we have experienced employee attrition at rates higher than we experienced historically, which may continue and could have a negative impact on our productivity. If we are unable to continue to attract and retain high-quality personnel, the rate and success with which we can discover and develop product candidates and our business will be limited.

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than us.

The biopharmaceutical industry is intensely competitive and subject to rapid and significant technological change. Our competitors include multinational pharmaceutical companies, specialized biotechnology companies and universities and other research institutions. A number of pharmaceutical and biotechnology companies are pursuing the development or marketing of pharmaceuticals that seek to treat the same diseases that we are pursuing with our most advanced product candidates, particularly in the oncology field. Some of these pharmaceuticals in development are active, or seek to be active, against the same targets that our product candidates are engineered to effect, including the targets that are the focus of our immuno-oncology candidates, ILT2, ILT3, ILT4 and LAIR1. It is probable that the number of companies seeking to develop products and therapies for the treatment of cancer, retinal diseases and liver and metabolic diseases will increase. Many of our competitors have substantially greater financial, technical, human and other resources than we do and may be better equipped to develop, manufacture and market technologically superior products. In addition, many of these competitors have significantly greater experience than we have in undertaking preclinical studies and human clinical trials of new pharmaceutical products and in obtaining regulatory approvals of human therapeutic products. Accordingly, our competitors may succeed in obtaining FDA approval and approval or marketing authorization from comparable health authorities such as the European Commission for superior products or for other products that would compete with our product candidates. Many of our competitors have established distribution channels and commercial infrastructure to support the commercialization of their products, whereas we have no such channel or capabilities. In addition, many competitors have greater name recognition and more extensive collaborative relationships. Smaller and earlier-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies.

Our competitors may obtain regulatory approval of their products more rapidly than us or may obtain patent protection or other intellectual property rights that limit our ability to develop or commercialize our product candidates. Our competitors may also develop drugs that are more effective, more convenient, more widely used and less costly or have a better safety profile than our products and these competitors may also be more successful than us in manufacturing and marketing their products. If we are unable to compete effectively against these companies, then we may not be able to commercialize our product candidates or achieve a competitive position in the market. These companies also compete with us in recruiting and retaining qualified scientific, management and commercial personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Although we believe there are no FDA- or EMA-approved therapies that specifically target the signaling pathways that our current product candidates are designed to modulate or inhibit, there are numerous currently approved therapies for treating the same diseases or indications (other than NASH or GA) for which our product candidates may be useful and many of these currently approved therapies act through mechanisms similar to our product candidates. Many of these approved drugs are well-established therapies or products and are widely accepted by physicians, patients and third-party payors. Some of these drugs are branded and subject to patent protection, and others are available on a generic basis. Insurers and other third-party payors may also encourage the use of generic products or specific branded products. We expect that if our product candidates are approved, they will be priced at a significant premium over competitive generic products, including branded generic products. This may make it difficult for us to differentiate our products from currently approved therapies, which may adversely impact our business strategy. In addition, many companies are developing new therapeutics, and we cannot predict

what the standard of care will be as our product candidates progress through clinical development. For more information regarding the competition that our most advanced product candidates face, or may face, see the discussion of specific competition for each product candidate in “Business-Key Therapeutic Areas and Pipeline Programs” in our 2021 Annual Report on Form 10-K.

In the third quarter of 2021, Apellis Pharmaceuticals, Inc., or Apellis, presented top-line results from two Phase 3 clinical trials of its product candidate, pegcetacoplan (an anti-complement C3), in patients with GA secondary to age-related macular degeneration. One trial met the primary endpoint of significantly reducing GA progression at a one-year time point in the pegcetacoplan arm versus the sham arm, while the other trial did not meet its primary endpoint. In the first quarter of 2022, Apellis also reported additional data on the safety and efficacy of pegcetacoplan from an un-prespecified 18-month analysis of the two Phase 2 trials and submitted a new drug application, or NDA, for pegcetacoplan for GA to the FDA in June of 2022. The FDA accepted and granted Priority Review designation for the NDA with a Prescription Drug User Fee Act (PDUFA) target action date of November 26, 2022. A Priority Review designation indicates the FDA will review an application within six months (compared to 10 months under a standard review). If Apellis obtains regulatory approval of pegcetacoplan, it may affect our future late-stage clinical trial designs and require added clinical development expense. In addition, Iveric bio, Inc.’s, or Iveric's, Zimura® (avacincaptad pegol), a PEGylated aptamer inhibitor of complement C5, completed a Phase 2/3 clinical trial that demonstrated statistically significant reductions in the rate of GA lesion area growth in the Zimura arm versus the sham arm. Iveric is conducting a second confirmatory Phase 3 trial of Zimura and expects to announce Phase 3 trial results in the third quarter of 2022. Even if we or Merck obtain regulatory approval of NGM621 in the future, we may not be able to compete effectively against pegcetacoplan and Zimura, which may adversely affect our future revenues and business prospects.

We may encounter difficulties in managing our growth, which could adversely affect our operations.

Over the past few years, we have significantly increased our headcount and advanced our pipeline and the complexity of our operations, which has placed a strain on our administrative and operational infrastructure. We expect this strain to continue as we seek to maintain our growth and seek to obtain and manage relationships with third parties. Our ability to manage our operations and growth effectively depends upon the continual improvement of our procedures, hybrid and remote work policies, reporting systems and operational, financial and management controls, particularly in light of the evolving effects of the COVID-19 pandemic. We also may not be able to expand or identify and access sufficient facilities to accommodate our growth, particularly given our location in South San Francisco, California and the current high demand for, and restricted supply of, R&D facilities in this market. We also may not be able to implement administrative and operational improvements in an efficient or timely manner and may discover deficiencies in existing systems and controls. If we do not meet these challenges, we may be unable to take advantage of market opportunities, execute our business strategies or respond to competitive pressures, which in turn may slow our growth or give rise to inefficiencies that would increase our losses.

Our product candidates may not achieve adequate market acceptance among physicians, patients, healthcare payors and others in the medical community necessary for commercial success.

Demonstrating the safety and efficacy of our product candidates and obtaining regulatory approvals will not guarantee future revenue. Even if our product candidates receive regulatory approval, they may not gain adequate market acceptance among physicians, patients, healthcare payors and others in the medical community. The degree of market acceptance of any of our approved product candidates will depend on a number of factors, including:

- the efficacy and safety profile of the product candidate as demonstrated in clinical trials;
- the timing of market introduction of the product candidate, as well as competitive products;
- the clinical indications for which the product candidate is approved;
- acceptance of the product candidate as a safe and effective treatment by physicians and patients;
- the actual and perceived advantages of the product candidate over alternative treatments, including any similar generic treatments;
- the viewpoints of influential physicians with respect to the product candidate;
- the inclusion or exclusion of the product candidate from treatment guidelines established by various physician groups;
- the cost of treatment relative to alternative treatments;

- our pricing and the availability of coverage and adequate reimbursement by third parties and government authorities as described in the risk factor titled "*Even if we obtain approval to market our products, these products may become subject to unfavorable pricing regulations, reimbursement practices from third-party payors or healthcare reform initiatives in the United States and abroad, which could harm our business*";
- the relative convenience and ease of administration;
- the frequency and severity of adverse events;
- the effectiveness of sales and marketing efforts; and
- any unfavorable publicity relating to the product candidate.

For example, aldafermin is currently administered via a once-daily subcutaneous injection. While we are undertaking efforts to develop formulations and presentations of aldafermin that allow for more convenient or less frequent dosing, there is no assurance that these efforts will be successful, which may negatively impact market acceptance of an approved aldafermin product, if any. In addition, refer to the risk factor titled "*Our product candidates may cause undesirable side effects or adverse events or have other properties or safety risks, which could delay or prevent continued clinical development or their regulatory approval or limit the commercial profile of any approved label."* If any product candidate is approved but does not achieve an adequate level of acceptance by such parties, we may not generate or derive sufficient revenue from that product candidate and may not become or remain profitable.

Even if we obtain approval to market our products, these products may become subject to unfavorable pricing regulations, reimbursement practices from third-party payors or healthcare reform initiatives in the United States and abroad, which could harm our business.

The regulations that govern marketing approvals, pricing and reimbursement for new drug products vary widely from country to country. Current and future legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. In many regions, including the EU, Japan and Canada, the pricing of prescription drugs is controlled by the government and some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after regulatory approval for the product is granted. Regulatory agencies in those countries could determine that the pricing for our products should be based on prices of other commercially available drugs for the same disease, rather than allowing us to market our products at a premium as new drugs. As a result, we might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay or limit our commercial launch of the product, possibly for lengthy time periods, which could negatively impact the revenue we generate from the sale of the product in that particular country. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if our product candidates obtain marketing approval.

Our commercial success also depends on coverage and adequate reimbursement of our product candidates by third-party payors, including government payors, private health insurers, health maintenance organizations and other organizations, which may be difficult or time-consuming to obtain, may be limited in scope and may not be obtained in all jurisdictions in which we may seek to market our products. Governments and private insurers closely examine medical products to determine whether they should be covered by reimbursement and, if so, the level of reimbursement that will apply. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular drugs. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for drug products. We cannot be sure that coverage and reimbursement will be available for any product that we or our partners commercialize and, if reimbursement is available, what the level of reimbursement will be. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we or our collaborators obtain regulatory approval. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we and our collaborators may not be able to successfully commercialize any product candidate for which marketing approval is obtained.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign health authorities. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including costs of research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may only be temporary. Reimbursement rates may vary according to the use of the drug and the clinical setting

in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Our inability to promptly obtain coverage and profitable reimbursement rates from both government-funded and private payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

The advancement of healthcare reform may negatively impact our ability to profitably sell our product candidates, if approved.

Third-party payors, whether domestic or foreign, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product for which we obtain marketing approval.

For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively referred to as the ACA, was enacted, which includes measures that have significantly changed the way health care is financed by both governmental and private insurers. There have been executive, judicial and congressional challenges to certain aspects of the ACA. While Congress has not passed comprehensive legislation repealing the ACA, such legislation may be reintroduced. Members of Congress have introduced legislation to modify or replace certain provisions of the ACA. It is unclear how these efforts to repeal and/or replace the ACA will impact the ACA and our business. For example, the Tax Cuts and JOBS Act, or the 2017 Tax Act, repealed the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage that is commonly referred to as the “individual mandate.” In December 2019, a U.S. District Court upheld a ruling that the ACA is unconstitutional in its entirety because the “individual mandate” was repealed by Congress. On June 17, 2021, the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the “individual mandate” was repealed by Congress. Thus, the ACA remains in effect in its current form, although it may be subject to judicial or Congressional challenges in the future. Any such challenges to the ACA and the healthcare reform measures of the administration of President Biden may increase the pressure on drug pricing or limit the availability of coverage and adequate reimbursement for our product candidates, which would adversely affect our business.

There has also been increasing executive, legislative and enforcement interest in the United States with respect to drug pricing practices. There have been U.S. congressional inquiries, presidential executive orders and proposed and enacted legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs and reform government program reimbursement methodologies for drugs. For example, in an executive order, the administration of President Biden expressed its intent to pursue certain policy initiatives to reduce drug prices and, in response, the United States Department of Health and Human Services, or HHS, released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform and sets out a variety of potential legislative policies that Congress could pursue to lower drug prices. We expect that the healthcare reform measures that have been adopted and may be adopted in the future may result in more rigorous coverage criteria and additional downward pressure on the price that we receive for any approved product and could seriously harm our future revenues. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our products.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. Such reforms could have an adverse effect on anticipated revenue from product candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop product candidates.

In many countries outside the United States, government-sponsored healthcare systems are the primary payors for drugs. With increasing budgetary constraints and/or difficulty in understanding the value of medicines, governments and payors in many countries are applying a variety of measures to exert downward price pressure. These measures include: mandatory price controls; price referencing; therapeutic-reference pricing; increases in mandates; incentives for generic substitution and biosimilar usage and government-mandated price cuts. Many

countries have health technology assessment agencies that use formal economic metrics such as cost-effectiveness to determine prices, coverage and reimbursement of new therapies. These agencies are expanding in both established and emerging markets and are expected to become law in EU member states in the near future with the adoption of the Health Technology Assessment Regulation. Many countries also limit coverage to populations narrower than those specified on product labels or impose volume caps to limit utilization. We expect that countries will continue taking aggressive actions to seek to reduce expenditures on drugs. Similarly, fiscal constraints may also affect the extent to which countries are willing to approve new and innovative therapies and/or allow access to new technologies.

We cannot predict the likelihood, nature or extent of healthcare reform initiatives that may arise from future legislation or administrative action. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

Our international operations may expose us to business, regulatory, political, operational, financial, pricing and reimbursement risks associated with doing business outside of the United States.

Our business is subject to risks associated with conducting business internationally. Some of our suppliers and clinical trial sites are located outside of the United States. Furthermore, if we, Merck or any future collaborator succeeds in developing any of our product candidates, we intend to market them in the European Union, or the EU, and other jurisdictions in addition to the United States. If approved, we, Merck or any future collaborator may hire sales representatives and conduct physician and patient association outreach activities outside of the United States. Doing business internationally involves a number of challenges and risks, including but not limited to:

- multiple, conflicting and changing laws and regulations, such as privacy and data protection regulations, tax laws, export and import restrictions, employment laws, regulatory requirements and other governmental approvals, permits and licenses;
- failure by us to obtain and maintain regulatory approvals for the use of our products in various countries;
- rejection or qualification of foreign clinical trial data by the competent authorities of other countries;
- delays or interruptions in the supply of clinical trial material resulting from any events affecting raw material or component supply or manufacturing capabilities abroad, including those that may result from the ongoing COVID-19 pandemic;
- additional potentially relevant third-party patent rights;
- complexities and difficulties in obtaining, maintaining, protecting and enforcing our intellectual property;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple payor reimbursement regimes, government payors or patient self-pay systems;
- limits on our ability to penetrate international markets;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our products and exposure to foreign currency exchange rate fluctuations;
- natural disasters, political and economic instability, including wars such as the current ongoing invasion of Ukraine by Russia, terrorism and political unrest, outbreak of disease, including COVID-19 and related shelter-in-place orders, travel, social distancing and quarantine policies, boycotts, curtailment of trade and other business restrictions; and
- regulatory and compliance risks that relate to anti-corruption compliance and record-keeping that may fall within the purview of the U.S. Foreign Corrupt Practices Act, its accounting provisions or its anti-bribery provisions or provisions of anti-corruption or anti-bribery laws in other countries.

Any of these factors could harm our ongoing international clinical operations and supply chain, as well as any future international expansion and operations and, consequently, our business, financial condition, prospects and results of operations.

Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that we may develop.

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if we or our collaborator commercializes any resulting products. Product liability claims may be brought against us by subjects enrolled in our clinical trials, patients, healthcare providers or others using, administering or selling our products. If we cannot successfully defend ourselves against claims that our product candidates or products that we may develop caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we may develop;
- termination of clinical trial sites or entire trial programs;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial subjects or patients;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize any products that we may develop.

Our clinical trial liability insurance coverage may not adequately cover all liabilities that we may incur. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. Our inability to obtain product liability insurance at an acceptable cost or to otherwise protect against potential product liability claims could prevent or delay the commercialization of any products or product candidates that we develop. We intend to expand our insurance coverage for products to include the sale of commercial products if we obtain marketing approval for our product candidates in development, but we may be unable to obtain commercially reasonable product liability insurance for any products approved for marketing. Large judgments have been awarded in class action lawsuits based on drugs that had unanticipated side effects. If we are sued for any injury caused by our products, product candidates or processes, our liability could exceed our product liability insurance coverage and our total assets. Claims against us, regardless of their merit or potential outcome, may also generate negative publicity or hurt our ability to obtain physician endorsement of our products or expand our business.

Our relationships with healthcare providers, customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse, transparency and other healthcare laws and regulations, which, if violated, could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.

Healthcare providers, including physicians, and third-party payors will play a primary role in the recommendation and prescription of any product candidates for which we or our collaborator obtains marketing approval. Our arrangements with healthcare providers, third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we research, market, sell and distribute our products for which we or our collaborator obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the federal Anti-Kickback Statute prohibits persons from, among other things, knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, the referral of an individual for the furnishing or arranging for the furnishing, or the purchase, lease or order, or arranging for or recommending purchase, lease or order, of any good or service for which payment may be made under a federal healthcare program, such as Medicare and Medicaid;
- the federal False Claims Act, or FCA, imposes criminal and civil penalties, including through civil whistleblower or *qui tam* actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

- the federal Health Insurance Portability and Accountability Act, or HIPAA, imposes criminal liability for knowingly and willfully executing a scheme to defraud any healthcare benefit program, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense or knowingly and willfully making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 and its implementing regulations, or HITECH, also imposes obligations on certain covered entity healthcare providers, health plans and healthcare clearinghouses, and their business associates that perform certain services involving the use or disclosure of individually identifiable health information as well as their covered subcontractors, including mandatory contractual terms, with respect to safeguarding the privacy, security, processing and transmission of individually identifiable health information;
- the federal Physician Payments Sunshine Act, as amended, and its implementing regulations, requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the HHS information related to "payments or other transfers of value" made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), other health care professionals (such as physician assistants and nurse practitioners) and teaching hospitals, as well as information regarding ownership and investment interests held by physicians and their immediate family members; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; state and local laws requiring the registration of pharmaceutical sales representatives; state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers, marketing expenditures or pricing; and state and foreign laws that govern the privacy and security and other processing of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, additional regulatory oversight, litigation, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found not to be in compliance with applicable laws, that person or entity may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Outside the United States, interactions between pharmaceutical companies and health care professionals are also governed by strict laws, such as national anti-bribery laws of EU member states, national sunshine rules, regulations, industry self-regulation codes of conduct and physicians' codes of professional conduct. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

Risks Related to Regulatory Approvals

The regulatory approval processes of the FDA and comparable foreign health authorities are lengthy and inherently unpredictable. Our inability to obtain regulatory approval for our product candidates would substantially harm our business.

Currently, none of our product candidates has received regulatory approval and we do not expect our product candidates to be commercially available for several years, if at all. The time required to obtain approval from the FDA and comparable foreign health authorities is unpredictable but typically takes many years following the commencement of preclinical studies and clinical trials and depends upon numerous factors, including the substantial discretion of the health authorities. In addition, approval policies, regulations or the type and amount of preclinical and clinical data necessary to gain approval may change during the course of a product candidate's

development and may vary among jurisdictions. It is possible that none of our existing or future product candidates will ever obtain regulatory approval.

Our product candidates could fail to receive regulatory approval from the FDA or a comparable foreign health authority for many reasons, including:

- disagreement with the design or implementation of our clinical trials;
- failure to demonstrate that a product candidate is safe and effective for its proposed indication;
- failure of results of clinical trials to meet the level of statistical significance required for approval;
- failure to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- disagreement with our interpretation of data from preclinical studies or clinical trials;
- the insufficiency of data collected from clinical trials to support the submission and filing of a BLA or other submission or to obtain regulatory approval;
- failure to obtain approval of the manufacturing processes or facilities of third-party manufacturers with whom we contract for clinical and commercial supplies;
- unfavorable quality review or audit findings; or
- changes in the approval policies or regulations that render our preclinical and clinical data insufficient for approval.

The FDA or a comparable foreign health authority may require more information, including additional preclinical or clinical data, to support approval, which may delay or prevent approval and commercialization, or we may decide to abandon the development program for other reasons. If we obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may grant accelerated approval based on a surrogate endpoint and contingent on the successful outcome of costly post-marketing confirmatory clinical trials or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate.

In some jurisdictions such as the United States and the EU, initiating Phase 3 clinical trials and clinical trials in the pediatric population is subject to a requirement to obtain approval or a waiver from the FDA, the competent authorities of the EU member states and/or the EMA. If we do not obtain such waivers or approval, our ability to conduct clinical trials and obtain marketing authorizations or approvals may be severely impaired, and our business may be adversely impacted.

The FDA has a Fast Track program that is intended to expedite or facilitate the process for reviewing new drug products that meet certain criteria. Specifically, new drugs are eligible for Fast Track designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition, and the FDA may grant accelerated approval based on a surrogate endpoint reasonably likely to predict clinical benefit. However, Fast Track designation does not guarantee, or in any way change the standards for, full product approval. Accordingly, although NGM621 has received Fast Track designation from the FDA for GA secondary to age-related macular degeneration and aldafermin has received Fast Track designation from the FDA for NASH, we may not necessarily experience faster development timelines or achieve faster review or approval compared to conventional FDA procedures.

Many agents in development for NASH have, or are expected to, opt for an accelerated approval pathway and rely on surrogate endpoints for initial approval. If we or Merck seek accelerated approval for one of our product candidates based on a surrogate endpoint, the FDA may not accept such endpoint, may require additional studies or analysis or may not approve our product candidate on an accelerated basis, or at all. For example, in June 2020, Intercept Pharmaceuticals, Inc., or Intercept, announced that it had received a complete response letter regarding its New Drug Application for obeticholic acid for the treatment of NASH, in which the FDA indicated that it had determined that the predicted benefit of obeticholic acid based on a surrogate histopathologic endpoint was uncertain and did not sufficiently outweigh the potential risks to support accelerated approval for the treatment of patients with liver fibrosis due to NASH. The FDA recommended that Intercept submit additional post-interim analysis efficacy and safety data from its ongoing Phase 3 study in support of potential accelerated approval and that the long-term outcomes phase of the study should continue, and Intercept has announced that it plans to resubmit its NDA. In addition, if full approval is granted for another product in the same indication for which we are seeking accelerated approval for one of our product candidates, the accelerated approval pathway may no longer be available to us or Merck for our product candidate.

In the EU, innovative products that target an unmet medical need and are expected to be of major public health interest may be eligible for a number of expedited development and review programs, such as the Priority Medicines, or PRIME, scheme, which provides incentives similar to the breakthrough therapy designation in the United States. PRIME is a voluntary scheme aimed at enhancing the EMA's support for the development of medicinal products that target unmet medical needs. It permits increased interaction and early dialogue between regulatory authorities and companies developing promising medicinal products, to optimize their product development plans and speed up their evaluation to help the product potentially reach patients sooner than under the normal review timelines. Product developers that benefit from PRIME designation are potentially eligible for accelerated assessment of their marketing authorization applications, or MAA, although this is not guaranteed. Benefits accrue to sponsors of product candidates with PRIME designation, including but not limited to, early and proactive regulatory dialogue with the EMA, frequent discussions on clinical trial designs and other development program elements, and potentially accelerated MAA assessment once a dossier has been submitted.

Our failure to obtain health authority approval in international jurisdictions would prevent us from marketing our product candidates outside the United States.

If we or our collaborators succeed in developing any products, we intend to market them in the EU and other foreign jurisdictions in addition to the United States. In order to market and sell our products in other jurisdictions, we must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, we must secure product pricing and reimbursement approvals before health authorities will approve the product for sale in that country. Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. Further, clinical trials conducted in one country may not be accepted by health authorities in other countries and regulatory approval in one country does not ensure approval in any other country, while a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory approval process in others. If we fail to obtain approval of any of our product candidates by health authorities in another country, we will be unable to commercialize our product in that country, and the commercial prospects of that product candidate and our business prospects could decline.

Even if our product candidates receive regulatory approval, they may still face future development and regulatory difficulties.

Even if we obtain regulatory approval for a product candidate, it would be subject to ongoing requirements by the FDA and comparable foreign health authorities governing the manufacture, quality control, further development, labeling, packaging, storage, distribution, safety surveillance, import, export, advertising, promotion, recordkeeping and reporting of safety and other post-market information. The FDA and comparable foreign health authorities will continue to closely monitor the safety profile of any product even after approval. If the FDA or comparable foreign health authorities become aware of new safety information after approval of any of our product candidates, they may require labeling changes or establishment of a Risk Evaluation and Mitigation Strategy, or REMS, or similar strategy, impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance. Failure to comply with any related obligations may result in the suspension or withdrawal of an obtained approval and in civil and/or criminal penalties. Receipt of approval for narrower indications than sought, restrictions on marketing through a REMS or similar strategy imposed in an EU member state or other foreign country, or significant labeling restrictions or requirements in an approved label such as a boxed warning, could have a negative impact on our ability to recoup our research and development costs and to successfully commercialize that product, any of which could materially and adversely affect our business, financial condition, results of operations and growth prospects. In any event, if we are unable to comply with our post-marketing obligations imposed as part of the marketing approvals in the United States, the EU, or other countries, our approval may be varied, suspended or revoked, product supply may be delayed and our sales of our products could be materially adversely affected.

In addition, manufacturers of drug substance and drug products and their facilities are subject to continual review and periodic inspections by the FDA and comparable foreign health authorities for compliance with current Good Manufacturing Practices, or cGMP, regulations. If we or a regulatory agency discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing.

If we, our product candidates or the manufacturing facilities for our product candidates fail to comply with applicable regulatory requirements, or undesirable side effects caused by such products are identified, a regulatory agency may:

- issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings about such product;
- mandate modifications to promotional materials or require us to provide corrective information to healthcare practitioners;
- require that we conduct and complete post-marketing studies;
- require us to enter into a consent decree, which can include imposition of various fines, reimbursements for inspection costs, required due dates for specific actions and penalties for noncompliance;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend marketing of, withdraw regulatory approval of or initiate a recall of such product;
- suspend any ongoing clinical trials;
- refuse to approve pending applications or supplements to applications filed by us;
- suspend or impose restrictions on operations, including costly new manufacturing requirements; or
- seize or detain products or refuse to permit the import or export of products.

The occurrence of any event or penalty described above may inhibit our ability to commercialize our products and generate revenue.

Advertising and promotion of any product candidate that obtains approval in the United States will be heavily scrutinized by the FDA, Department of Justice, HHS, Office of Inspector General, state attorneys general, members of Congress and the public. Violations, including promotion of our products for unapproved (or off-label) uses, are subject to enforcement letters, inquiries and investigations and civil and criminal sanctions by the government. Additionally, comparable foreign health authorities, public prosecutors, industry associations, healthcare professionals and other members of the public will heavily scrutinize advertising and promotion of any product candidate outside of the United States.

In the United States, engaging in the impermissible promotion of our products for off-label uses can subject us to false claims litigation under federal and state statutes, which can lead to civil and criminal penalties and fines and agreements that materially restrict the manner in which a company promotes or distributes drug products. These false claims statutes include the federal FCA, which allows any individual to bring a lawsuit against a pharmaceutical company on behalf of the federal government alleging submission of false or fraudulent claims, or causing to present such false or fraudulent claims, for payment by a federal program such as Medicare or Medicaid. If the government prevails in the lawsuit, the individual will share in any fines or settlement funds. Since 2004, these FCA lawsuits against pharmaceutical companies have increased significantly in volume and breadth, leading to several substantial civil and criminal settlements regarding certain sales practices promoting off-label drug uses involving fines in excess of $1 billion. This growth in litigation has increased the risk that a pharmaceutical company will have to defend a false claim action, pay settlement fines or restitution, agree to comply with burdensome reporting and compliance obligations and be excluded from Medicare, Medicaid and other federal and state healthcare programs. If we do not lawfully promote our approved products, we may become subject to such litigation and, if we do not successfully defend against such actions, those actions may have a material adverse effect on our business, financial condition and results of operations.

The FDA's policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

Failure to comply with EU and EU member state laws that apply to the conduct of clinical trials, manufacturing approval, marketing authorization of medicinal products and marketing of such products, both before and after grant of a marketing authorization, or with other applicable regulatory requirements, may result in administrative, civil or criminal penalties. These penalties could include delays or refusal to authorize the conduct of clinical trials, or to grant marketing authorization, product withdrawals and recalls, product seizures, suspension, withdrawal or variation of the marketing authorization, total or partial suspension of production, distribution,

manufacturing or clinical trials, operating restrictions, injunctions, suspension of licenses, fines and criminal penalties.

Many EU member states periodically review their reimbursement of medicinal products, which could have an adverse impact on reimbursement status. In addition, we expect that legislators, policymakers and healthcare insurance funds in the EU member states will continue to propose and implement cost-containing measures, such as lower maximum prices, lower or lack of reimbursement coverage and incentives to use cheaper, usually generic, products as an alternative to branded products, and/or branded products available through parallel import to keep healthcare costs down. Moreover, in order to obtain reimbursement for our products in some EU member states, we may be required to compile additional data comparing the cost-effectiveness of our products to other available therapies. Health Technology Assessment, or HTA, of medicinal products is becoming an increasingly common part of the pricing and reimbursement procedures in some EU member states, including those representing the larger markets. The HTA process, which is currently governed by national laws in each EU member state, is the procedure to assess therapeutic, economic and societal impact of a given medicinal product in the national healthcare systems of the individual country. The outcome of an HTA will often influence the pricing and reimbursement status granted to these medicinal products by the competent authorities of individual EU member states. The extent to which pricing and reimbursement decisions are influenced by the HTA of the specific medicinal product currently varies between EU member states. In June 2021, the European Parliament and Council reached a provisional agreement on a draft HTA regulation that aims to harmonize the clinical benefit assessment of HTA across the EU. Entry into application of the regulation could impose stricter and more detailed procedures to be followed by marketing authorization holders concerning conduct of HTA in relation to their products that may influence related pricing and reimbursement decisions. If we are unable to maintain favorable pricing and reimbursement status in EU member states that represent significant markets, our anticipated revenue from and growth prospects for our products in the EU could be negatively affected.

Legislators, policymakers and healthcare insurance funds in the EU may continue to propose and implement cost-containing measures to keep healthcare costs down, particularly due to the financial strain that the COVID-19 pandemic has placed on national healthcare systems of the EU member states. These measures could include limitations on the prices we will be able to charge for our products or the level of reimbursement available for these products from governmental authorities or third-party payors. Further, an increasing number of EU and other foreign countries use prices for medicinal products established in other countries as “reference prices” to help determine the price of the product in their own territory. Consequently, a downward trend in prices of medicinal products in some countries could contribute to similar downward trends elsewhere.

Even if we are able to obtain regulatory approvals for any of our product candidates, if they exhibit harmful side effects after approval, our regulatory approvals could be revoked or otherwise negatively impacted.

Even if we receive regulatory approval for any of our product candidates, we will have tested them in only a small number of patients during our clinical trials. If an application for marketing is approved for any of our product candidates and more patients begin to use our product, new risks and side effects associated with our products may be discovered. As a result, health authorities may revoke their approvals. If aldafermin is approved by the FDA based on a surrogate endpoint pursuant to accelerated approval regulations (Subpart E regulations), we will be required to conduct additional clinical trials establishing clinical benefit on the ultimate outcome of NASH. Additionally, we may be required to conduct additional clinical trials, make changes in labeling of our product, reformulate our product or make changes and obtain new approvals for our and our suppliers’ manufacturing facilities for our product candidates. We might have to withdraw or recall our products from the marketplace. We may also experience a significant drop in the potential sales of our product if and when regulatory approvals for such product are obtained, experience harm to our reputation in the marketplace or become subject to lawsuits, including class actions. Any of these results could decrease or prevent any sales of our approved product or substantially increase the costs and expenses of commercializing and marketing our product.

Risks Related to Our Intellectual Property

Our success depends in significant part upon our ability to obtain and maintain intellectual property protection for our products and technologies.

Our success depends in significant part on our ability and the ability of our current or future licensors, licensees or collaborators to establish and maintain adequate intellectual property covering the product candidates that we plan to develop. In addition to taking other steps designed to protect our intellectual property, we have applied for, and intend to continue applying for, patents with claims covering our technologies, processes and product candidates when and where we deem it appropriate to do so. However, the patent prosecution process is

expensive and time-consuming, and we and our current or future licensors, licensees or collaborators may not be able to prepare, file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we or our current or future licensors, licensees or collaborators will fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection for them. Pending and future patent applications filed by us or our current or future licensors', licensees' or collaborators' may not result in patents being issued that protect our technology or product candidates, or products resulting therefrom, in whole or in part, or that effectively prevent others from commercializing competitive technologies and products.

We have filed numerous patent applications both in the United States and in certain foreign jurisdictions to obtain patent rights to our inventions, with claims directed to compositions-of-matter, methods of use, formulations, combination therapy and other technologies relating to our product candidates. There can be no assurance that any of these patent applications will issue as patents or, for those applications that do mature into patents, whether the claims of the patents will exclude others from making, using or selling our product or product candidates, or products or product candidates that are substantially similar to ours. In countries where we have not and do not seek patent protection, third parties may be able to manufacture and sell products that are substantially similar or identical to our products or product candidates without our permission, and we may not be able to stop them from doing so.

Similar to other biotechnology companies, our patent position is generally highly uncertain and involves complex legal and factual questions. In this regard, we cannot be certain that we or our current or future licensors, licensees or collaborators were the first to make an invention, or the first inventors to file a patent application claiming an invention in our owned or licensed patents or pending patent applications. In addition, even if patents are issued, given the amount of time required for the development, testing and regulatory review of our product candidates, any patents protecting such candidates might expire before or shortly after the resulting products are commercialized. Moreover, the laws and regulations governing patents could change in unpredictable ways that could weaken the ability of us and our current or future licensors, licensees or collaborators to obtain new patents or to enforce existing patents and patents we may obtain in the future. In any event, the issuance, scope, validity, enforceability and commercial value of our patent rights and those of our current or future licensors, licensees or collaborators are highly uncertain and may not effectively prevent others from commercializing competitive technologies and products.

In some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain or enforce the patents, covering technology that we license from or license to third parties and may be reliant on our current or future licensors, licensees or collaborators to perform these activities, which means that these patent applications may not be prosecuted, and these patents may not be enforced, in a manner consistent with the best interests of our business. If our current or future licensors, licensees or collaborators fail to establish, maintain, protect or enforce such patents and other intellectual property rights, such rights may be reduced or eliminated. If our current or future licensors, licensees or collaborators are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised.

In addition, the legal protection afforded to inventors and owners of intellectual property in countries outside of the United States may not be as broad or effective as that in the United States and we may be unable to acquire and enforce intellectual property rights outside the United States to the same extent as in the United States, if at all. Accordingly, our efforts, and those of our licensors, licensees or collaborators, to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license.

We own one issued United States patent that covers our NGM621 product candidate, although the product and related compositions-of-matter and methods of use are disclosed and claimed in other pending U.S. non-provisional and/or national stage applications in particular foreign countries. We do not currently own or have a license to any issued patents that cover our NGM707, NGM831 and NGM438 product candidates, although these product candidates are disclosed and claimed in our pending U.S. non-provisional and international applications. The patent landscape surrounding all of our product candidates is crowded, and there can be no assurance that we will be able to secure patent protection that would adequately cover such product candidates, that we will obtain sufficiently broad claims to be able to prevent others from selling competing products or that we will be able to protect and maintain any patent protection that we initially secure.

Any changes we make to our product candidates to cause them to have what we view as more advantageous properties may not be covered by our existing patents and patent applications, and we may be required to file new patent applications and/or seek other forms of protection for any such altered product

candidates. The patent landscape surrounding the technology underlying our product candidates is crowded, and there can be no assurance that we would be able to secure patent protection that would adequately cover an alternative to any of our product candidates.

We may be unable to obtain intellectual property rights or technologies necessary to develop and commercialize our product candidates.

Several third parties are actively researching and seeking and obtaining patent protection in the fields of cancer, retinal diseases, CVM-related diseases, including heart failure, and liver and metabolic diseases, and there are issued third-party patents and published third-party patent applications in these fields. The patent landscape around our product candidates is complex, and we are aware of several third-party patents and patent applications containing claims directed to compositions-of-matter, methods of use and related subject matter, some of which pertain, at least in part, to subject matter that might be relevant to our product candidates. However, we may not be aware of all third-party intellectual property rights potentially relating to our product candidates and technologies.

Depending on what patent claims ultimately issue and how courts construe the issued patent claims, as well as the ultimate formulation and method of use of our product candidates, we may need to obtain a license to practice the technology claimed in such patents. There can be no assurance that such licenses will be available on commercially reasonable terms, or at all. If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing rights to third-party intellectual property rights we have, we might be unable to develop and commercialize one or more of our product candidates, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We could lose the ability to continue the development and commercialization of our products or product candidates if we breach any license agreement related to those products or product candidates.

Our commercial success depends upon our ability, and the ability of our current and future licensors, licensees and collaborators, to develop, manufacture, market and sell our products and product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. A third party may hold intellectual property rights, including patent rights that are important or necessary to the development of our products. As a result, we are a party to a number of technology and patent licenses that are important to our business, and we expect to enter into additional licenses in the future. If we fail to comply with the obligations under these agreements, including payment and diligence obligations, our licensors may have the right to terminate these agreements. In the event of a termination of these agreements, we may not be able to develop, manufacture, market or sell any product that is covered by these agreements or to engage in any other activities necessary to our business that require the freedom-to-operate afforded by the agreements, or we may face other penalties under the agreements. For example, we are party to license agreements with multiple vendors, including our licenses with Horizon Discovery Ltd. and Lonza Sales AG, under which we license cell lines and other technology used to produce multiple product candidates, including some that are currently subject to our collaboration with Merck. We require prior consent from some of these vendors to grant sub-licenses under these agreements. Therefore, these vendors may be able to prevent us from granting sub-licenses to third parties, which could affect our ability or Merck's ability to use certain desired manufacturers in order to manufacture our product candidates. In the event of a termination of our license agreements, our ability or Merck's ability to manufacture or develop any product candidates covered by these agreements may be limited or halted unless we can develop or obtain the rights to technology necessary to produce these product candidates.

Any of the foregoing could materially adversely affect the value of the product or product candidate being developed under any such agreement. Termination of these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or amended agreements, which may not be available to us on equally favorable terms, or at all, or cause us to lose our rights under these agreements, including our rights to intellectual property or technology important to our development programs.

We may become involved in lawsuits or other proceedings to protect or enforce our intellectual property, which could be expensive, time-consuming and unsuccessful and have a material adverse effect on the success of our business.

Third parties may infringe patents or misappropriate or otherwise violate intellectual property rights owned or controlled by us or our current or future licensors, licensees or collaborators. In the future, it may be necessary to initiate legal proceedings to enforce or defend these intellectual property rights, to protect trade secrets or to determine the validity or scope of intellectual property rights that are owned or controlled by us or our current or

future licensors, licensees or collaborators. Litigation could result in substantial costs and diversion of management resources, which could harm our business and financial results.

If we or our current or future licensors, licensees or collaborators initiated legal proceedings against a third party to enforce a patent covering a product candidate, the defendant could counterclaim that such patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the United States Patent and Trademark Office, or USPTO, or made a misleading statement, during prosecution. In an infringement or declaratory judgment proceeding, a court may decide that a patent owned by or licensed to us or our current or future licensors, licensees or collaborators is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that the patent does not cover the technology in question. An adverse result in any litigation proceeding could put one or more of the patents at risk of being invalidated, narrowed, held unenforceable or interpreted in such a manner that would not preclude third parties from entering the market with competing products.

Third parties may initiate legal proceedings against us or our current or future licensors, licensees or collaborators to challenge the validity or scope of intellectual property rights we own or control. For example, generic or biosimilar drug manufacturers or other competitors or third parties may challenge the scope, validity or enforceability of patents owned or controlled by us or our current or future licensors, licensees or collaborators. These proceedings can be expensive and time-consuming, and many of our adversaries may have the ability to dedicate substantially greater resources to prosecuting these legal actions than us. Accordingly, despite our efforts, we or our current or future licensors, licensees or collaborators may not be able to prevent third parties from infringing upon or misappropriating intellectual property rights we own, control or have rights to, particularly in countries where the laws may not protect those rights as fully as in the United States.

There is a risk that some of our confidential information could be compromised by disclosure during litigation because of the substantial amount of discovery required. Additionally, many foreign jurisdictions have rules of discovery that are different than those in the United States and that may make defending or enforcing our patents extremely difficult. There also could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of shares of our common stock.

Third-party pre-issuance submission of prior art to the USPTO, opposition, derivation, revocation, reexamination, *inter partes* review or interference proceedings, or other pre-issuance or post-grant proceedings, as well as other patent office proceedings or litigation in the United States or other jurisdictions brought by third parties against patents or patent applications owned or controlled by us or our current or future licensors, licensees or collaborators, may be necessary to determine the inventorship, priority, patentability or validity of these patents or patent applications. An unfavorable outcome could leave our technology or product candidates without patent protection and allow third parties to commercialize our technology or product candidates without payment to us. Additionally, potential licensees or collaborators could be dissuaded from collaborating with us to license, develop or commercialize current or future product candidates if the breadth or strength of protection provided by our patents and patent applications is threatened. Even if we successfully defend such litigation or proceeding, we may incur substantial costs and it may distract our management and other employees.

Third parties may initiate legal proceedings against us alleging that we infringe their intellectual property rights or we may initiate legal proceedings against third parties to challenge the validity or scope of the third-party intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Third parties may initiate legal proceedings against us or our current or future licensors, licensees or collaborators alleging that we infringe their intellectual property rights. Alternatively, we may initiate legal proceedings to challenge the validity or scope of intellectual property rights controlled by third parties, including in oppositions, interferences, revocations, reexaminations, *inter partes* review or derivation proceedings before the USPTO or its counterparts in other jurisdictions. In this regard, we are aware of several third-party patents and patent applications containing claims directed to compositions-of-matter, methods of use and related subject matter, some of which pertain, at least in part, to subject matter that might be relevant to our product candidates. These proceedings can be expensive and time-consuming, and many of our adversaries may have the ability to dedicate substantially greater resources to prosecuting these legal actions than us.

In addition, we may be subject to claims that we or our employees have used or disclosed confidential information or intellectual property, including trade secrets or other proprietary information, of any such employee's former employer, or that third parties have an interest in our patents as an inventor or co-inventor. Likewise, we and our current or future licensors, licensees or collaborators may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets or other intellectual property as an inventor or co-inventor. Litigation may be necessary to defend against these claims.

Even if we believe third-party intellectual property claims are without merit, there is no assurance that a court would find in our favor on questions of infringement, validity, enforceability or priority. In order to successfully challenge the validity of any such U.S. patent in federal court, we would need to overcome a presumption of validity in favor of the granted third-party patent. This is a high burden, requiring us to present clear and convincing evidence as to the invalidity of any such U.S. patent claim.

An unfavorable outcome in any such proceeding could require us and our current or future licensors, licensees or collaborators to cease using the related technology or developing or commercializing the product or product candidate, or to attempt to license rights to it from the prevailing party, which may not be available on commercially reasonable terms, or at all. Additionally, we could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business.

Risks Related to Ownership of Our Common Stock

The market price of our common stock has been and may continue to be volatile, and you could lose all or part of your investment.

The market price for our common stock has fluctuated significantly from time to time, for example, varying between a high of $32.12 on March 17, 2021 and a low of $8.81 on October 7, 2019. The trading price of our common stock has been and may continue to be highly volatile and subject to wide fluctuations in response to various factors, some of which we cannot control. In addition to the factors discussed elsewhere in this "Risk Factors" section, these factors include:

- developments associated with our collaboration with Merck or any termination of the collaboration;
- the success of competitive products or technologies, including disclosure of interim data by our competitors;
- regulatory actions with respect to our product candidates or our competitors' product candidates or products;
- results of clinical trials of our product candidates or those of our competitors;
- timeline delays in our clinical trials, including delays resulting from the evolving effects of the global COVID-19 pandemic or otherwise;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements by us or our competitors or collaborators of significant acquisitions, strategic collaborations, joint ventures, collaborations or capital commitments;
- regulatory, legal or payor developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- the results of our efforts to in-license or acquire additional product candidates or products;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- announcement or expectation of additional financing efforts;

- sales of our common stock by us, our insiders or our other stockholders;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors; and
- general economic, industry and market conditions.

In addition, the stock market in general, and The Nasdaq Global Select Market and biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies, including in connection with the ongoing COVID-19 pandemic and the ongoing Russian invasion of Ukraine, which has resulted in decreased stock prices for many companies notwithstanding the lack of a fundamental change in their underlying business models or prospects. Broad market and industry factors, including worsening economic conditions and other adverse effects or developments relating to the evolving effects of the COVID-19 pandemic, macroeconomic factors including inflation or geopolitical instability, including instability resulting from the ongoing invasion of Ukraine by Russia and the related sanctions imposed against Russia, may negatively affect the market price of our common stock, regardless of our actual operating performance. The realization of any of the above risks or any of a broad range of other risks, including those described elsewhere in this “Risk Factors” section, could have a dramatic and material adverse impact on the market price of our common stock.

Because of potential volatility in our trading price and trading volume, we may incur significant costs from class action securities litigation.

Holders of stock in companies that have a volatile stock price frequently bring securities class action litigation against the company that issued the stock. We may be the target of this type of litigation in the future. If any of our stockholders were to bring a lawsuit of this type against us, even if the lawsuit is without merit, we could incur substantial costs defending the lawsuit and the time and attention of our management could be diverted from other business concerns, either of which could seriously harm our business. Refer to the risk factor titled “*An active trading market for our common stock may not be sustained and sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.*”

Our principal stockholders, including entities affiliated with The Column Group, Merck and management, own a substantial percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Our executive officers, directors, significant stockholders, including entities affiliated with The Column Group and Merck, and their respective affiliates, beneficially own a substantial amount of our voting stock. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders may be able to control elections of directors, amendments of our organizational documents or approval of any merger, sale of assets or other major corporate transaction. The interests of this group of stockholders may not always coincide with your interests or the interests of other stockholders. In addition, if any of our significant stockholders decide to sell a meaningful amount of their ownership position and there is not sufficient demand in the market for our common stock, our stock price could fall.

An active trading market for our common stock may not be sustained and sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.

Our common stock is currently listed on The Nasdaq Global Select Market under the symbol “NGM” and trades on that market. We cannot ensure that an active trading market for our common stock will be sustained. Accordingly, we cannot ensure the liquidity of any trading market, your ability to sell your shares of our common stock when desired or the prices that you may obtain for your shares.

For the trading days during the three months ended June 30, 2022, the average daily trading volume for our common stock on The Nasdaq Global Select Market was only 439,929 shares. As a result, sales of a substantial number of shares of our common stock in the public market, including pursuant to the Sales Agreement or by any of our large stockholders, or even the perception in the market that we or the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. In addition, as a result of the low trading volume of our common stock, the trading of relatively small quantities of shares by our stockholders could disproportionately influence the market price of our common stock in either direction. The price for our shares could, for example, decline significantly in the event that a large number of shares of our common stock are sold on the market without commensurate demand, as compared to an issuer with a higher trading volume that could better absorb those sales without an adverse impact on its stock price. Moreover, certain holders of our common stock

have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock, if any.

Some provisions of our charter documents, Delaware law and our agreement with Merck may have anti-takeover effects or could otherwise discourage an acquisition of us by others, even if an acquisition would benefit our stockholders, and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders, or to remove our current management. These provisions include:

- a board of directors divided into three classes serving staggered three-year terms, such that not all members of the board will be elected at one time;
- authorizing the issuance of “blank check” preferred stock, the terms of which we may establish and shares of which we may issue without stockholder approval;
- prohibiting cumulative voting in the election of directors, which would otherwise allow for less than a majority of stockholders to elect director candidates;
- prohibiting stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;
- eliminating the ability of stockholders to call a special meeting of stockholders; and
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, who are responsible for appointing the members of our management. Because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, or DGCL, which may discourage, delay or prevent someone from acquiring us or merging with us whether or not it is desired by or beneficial to our stockholders. In addition, Section 203 of the DGCL prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder, which is generally a person that together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner.

Certain provisions in our agreement with Merck may also deter a change of control. For example, under the current terms of our agreement with Merck, a change of control gives Merck the right to terminate the research phase of the collaboration as well as additional rights if our acquirer is a qualifying large pharmaceutical company or has a research, development or commercialization program that competes with a program licensed by Merck.

Any provision of our amended and restated certificate of incorporation, amended and restated bylaws, Delaware law or our agreement with Merck that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware and the federal district courts of the United States will be the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or

common law: any derivative action or proceeding brought on our behalf; any action asserting a breach of a fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. This provision would not apply to suits brought to enforce a duty or liability created by the Securities and Exchange Act of 1934, as amended, or the Exchange Act, or any other claim for which the federal courts have exclusive jurisdiction. Furthermore, Section 22 of the Securities Act of 1933, as amended, or the Securities Act, creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated certificate of incorporation further provides that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

These exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees. If a court were to find either exclusive-forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur further significant additional costs associated with resolving the dispute in other jurisdictions, all of which could seriously harm our business.

General Risk Factors

We, our CROs, our CMOs, our current and potential future partners and other third parties we rely on or partner with could experience a cybersecurity incident that could harm our business.

We collect, store and transmit proprietary, confidential and sensitive information, including personal information, in the course of our business. Our technology systems and the information and data processed and stored in our technology systems or otherwise by us or on our behalf, and the technology systems of, and data accessed on our behalf by, our research collaborators, CROs, CMOs, contractors, consultants and other third parties on which we depend to operate our business, may be vulnerable to security breaches, loss, damage, corruption, unauthorized access, use or disclosure or misappropriation. Such incidents may result from the actions of a wide variety of actors, including traditional hackers, our personnel or the personnel of the third parties we work with, sophisticated nation-states and nation-state-supported actors. Threats we and third parties on which we rely may face are constantly evolving and include (without limitation) malware, viruses, software vulnerabilities and bugs, software or hardware failure, hacking, denial of service attacks, social engineering (including phishing), ransomware, inside threats, credential stuffing or other cyberattacks, telecommunications failures, earthquakes, fires, floods and similar threats. Threats such as ransomware attacks, for example, are becoming increasingly prevalent and severe. Extortion payments may alleviate the negative impact of a ransomware attack, but we may be unwilling or unable to make such payments due to, for example, applicable laws or regulations prohibiting such payments.

We may, under certain data privacy and security obligations, be required to, or we may choose to, expend significant resources or modify our business activities (including our clinical trial activities) in an effort to protect against security incidents. While we have developed systems and processes designed to protect the integrity, confidentiality and security of the confidential and personal information under our control, we cannot assure you that any security measures that we or our third-party service providers implement will be effective in preventing cybersecurity incidents. There are many different cyber-crime and hacking techniques, and as such techniques continue to evolve, we may be unable to anticipate attempted security breaches, identify them before our information is exploited or react in a timely manner.

Certain functional areas of our workforce work remotely on a full- or part-time basis outside of our corporate network security protection boundaries, which imposes additional risks to our business, including increased risk of industrial espionage, phishing and other cybersecurity attacks, and unauthorized dissemination of proprietary or confidential information, including personal information, any of which could have a material adverse effect on our business.

Despite our efforts to strengthen security and authentication measures, we have not always been able in the past, and may be unable in the future, to detect vulnerabilities in our information technology systems. We have experienced an overall increase in cybersecurity incidents since 2020, none of which, to date, have caused material disruption to our business, or to our knowledge, involved a material security breach. For example, in December 2020, we detected that an attacker had gained access to a single system on our network and unsuccessfully attempted to use that access to stage a broader attack against us. We or the third parties we rely on or partner with could experience a material system failure, security breach or other cybersecurity incident, including any related to or in connection with any of the aforementioned threats, in the future, which could interrupt our operations, disrupt our development programs and have a material adverse effect on our business, financial condition and results of operations. For example, the loss or corruption of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on third parties for the manufacture of our product candidates, to analyze clinical trial samples and to conduct clinical trials, and cybersecurity incidents experienced by these third parties could have a material adverse effect on our business. Security breaches and other cybersecurity incidents affecting us or the third parties we rely on or partner with could also result in substantial remediation costs and expose us to litigation (including class claims), regulatory enforcement action (for example, investigations, fines, penalties, audits and inspections), additional reporting requirements and/or oversight, fines, penalties, indemnification obligations, negative publicity, reputational harm, monetary fund diversions, interruptions in our operations (including availability of data), financial loss and other liabilities and harms. Additionally, such incidents may trigger data privacy and security obligations requiring us to notify relevant stakeholders. These disclosures are costly, and the disclosures or the failure to comply with such requirements could lead to adverse consequences.

Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from claims related to our data privacy and security obligations. Additionally, we cannot be certain that our insurance coverage will be adequate for data security liabilities actually incurred, will continue to be available to us on economically and commercially reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could adversely affect our reputation, business, financial condition and results of operations.

The withdrawal of the United Kingdom from the EU, commonly referred to as Brexit, could increase our cost of doing business, reduce our gross margins or otherwise negatively impact our business and our financial results.

Brexit created significant uncertainty concerning the future relationship between the United Kingdom, or UK, and the EU, following the UK withdrawal from the EU in January 2020. Since a significant portion of the regulatory framework in the UK is derived from EU laws, Brexit materially impacts the regulatory regime with respect to the development, manufacture, importation, approval and commercialization of our product candidates in the UK or the EU. Among the changes that have occurred are that Great Britain (England, Scotland and Wales) will be treated as a “third country,” a country that is not a member of the EU and whose citizens do not enjoy the EU right to free movement.

In this regard, in December 2020, the EU and UK reached an agreement in principle on the framework for their future relationship, the EU-UK Trade and Cooperation Agreement, or TCA. The TCA was applied provisionally in January 2021 and entered into force in May 2021. The TCA primarily focuses on ensuring free trade between the EU and the UK in relation to goods, including medicinal products. As part of the TCA, the EU and the UK will recognize cGMP inspections carried out by the other party and the acceptance of official cGMP documents issued by the other party. The TCA also encourages, although it does not oblige, the parties to consult one another on proposals to introduce significant changes to technical regulations or inspection procedures. Among the areas of absence of mutual recognition are batch testing and batch release. The UK has unilaterally agreed to accept EU batch testing and batch release for a period of at least two years until January 1, 2023. The UK is completing a review of its future batch testing policy and will report its conclusions no later than December 2022. There will be a two-year notice period before any changes in the current policy are implemented to allow preparation time for industry to implement changes. However, the EU continues to apply EU laws that require batch testing and batch release to take place in the EU territory. This means that medicinal products that are tested and released in the UK must be retested and re-released when entering the EU market for commercial use.

As it relates to marketing authorizations, Great Britain will have a separate regulatory submission process, approval process and national marketing authorization. Northern Ireland will, however, continue to be covered by the marketing authorizations granted by the European Commission. For example, the scope of a marketing

authorization for a medicinal product granted by the European Commission or by the competent authorities of EU member states will no longer encompass Great Britain (England, Scotland and Wales). In these circumstances, a separate marketing authorization granted by the UK competent authorities will be required to place medicinal products on the market in Great Britain. Northern Ireland will, however, continue to be covered by the marketing authorizations granted by the European Commission.

In addition, in June 2021, the European Commission adopted two adequacy decisions for the UK providing that personal data can flow freely from the EU to the UK under substantially equivalent protections to those provided under EU laws. These decisions will remain in effect for four years, after which they will be reevaluated,

The changes effected by the TCA, as well as any future changes, could increase the costs and complexity of doing business in or with the UK, which could adversely affect our business.

We are subject to rapidly changing and increasingly stringent foreign and domestic laws and regulations relating to privacy, data protection and information security. The restrictions imposed by these requirements or our actual or perceived failure to comply with them could harm our business.

We may collect, use, transfer or otherwise process proprietary, confidential and sensitive information, including personal information (including health-related data), which subjects us to numerous evolving and complex data privacy and security obligations, including various laws, regulations, guidance, industry standards, external and internal privacy and security policies, contracts and other obligations that govern the processing of such information by us and on our behalf. For example, we process personal information from clinical trials participants and other individuals located in the European Economic Area, or EEA, and, if any of our product candidates are approved, we may seek to commercialize those products in the EEA. The collection, use and other processing of personal information, including health data, in the EEA or regarding residents of the EEA are governed by the EU's General Data Protection Regulation ((EU) 2016/679), or EU GDPR, and other relevant laws that govern patient confidentiality and storage of personal health data. Companies that violate the EU GDPR can face private litigation, prohibitions on data processing, other administrative measures, reputational damage and fines of up to the greater of 20 million Euros or 4% of their worldwide annual revenue. The EU GDPR requires us to, among other things: give detailed disclosures about how we collect, use and share personal information; contractually commit to data protection measures in our contracts with vendors; maintain adequate data security measures; notify regulators and affected individuals of certain data breaches; meet extensive privacy governance and documentation requirements; and honor individuals' data protection rights, including their rights to access, correct and delete their personal information. The UK has incorporated an amended version of the EU GDPR into UK law, commonly referred to as the UK GDPR, which is independent from, but aligned with, the EU GDPR, which together with the UK Data Protection Act of 2018, or UK DPA, covers the processing of personal data of UK residents. Non-compliance with UK data protection laws may result in monetary penalties of up to £17.5 million or 4% of worldwide revenue, whichever is higher.

The EU GDPR and accompanying laws are evolving and subject to interpretation and may impose limitations on our activities or otherwise adversely affect our business. Because of the remote and hybrid work policies we implemented due to the COVID-19 pandemic, information that is normally protected, including company confidential information, may be less secure. Cybersecurity and data security threats continue to evolve and raise the risk of an incident that could affect our operations or compromise our business information or sensitive personal data, including health data. We may also need to collect more extensive health-related information from our employees to manage our workforce.

Certain jurisdictions, including the EEA, UK and Switzerland, have enacted data localization laws and laws restricting cross-border transfers of personal information. For example, the EU GDPR generally restricts the transfer of personal information from the EEA to countries outside of the EEA, such as the United States, which the European Commission does not consider is providing an adequate level of data privacy and security. One of the primary mechanisms designed to allow United States companies to continue to import personal information from the EA has been the European Commission's Standard Contractual Clauses, or SCCs. SCCs are standard contractual obligations that may be entered between a party exporting personal information from the EU and a party receiving the personal information in a third country that has not been deemed by the European Commission to provide an adequate level of data privacy and security. In addition to implementing and complying with such contractual obligations, the European Commission's most recent version of the SCCs, released on June 4, 2021, requires parties to meet additional obligations, such as conducting transfer impact assessments to determine whether additional security measures are necessary to protect the data at issue. If adequate data protection cannot be guaranteed, EEA residents may complain to the data protection authorities, which may require data transfers under the contract to be suspended. The European Commission's updated SCCs may further increase the legal risks and

liabilities under European privacy, data protection and information security laws. Additionally, due to potential legal challenges, there exists some uncertainty regarding whether the SCCs will remain a valid mechanism for transfers of personal information out of the EEA. Laws in the UK and Switzerland similarly restrict transfers of personal information outside of those jurisdictions to countries such as the United States that are deemed not to provide an adequate level of personal information protection.

We continue to monitor changes in data protection laws related to the cross-border transfer of personal information; however, uncertainty remains regarding any future regulations, interpretations or guidance that may be issued, particularly by the EU authorities. At present, we primarily rely on individuals' explicit consent, which can be revoked at any time, to transfer their personal information from the EU to the United States and other countries, but in certain cases we have relied or may rely on the SCCs. If we are unable to rely on explicit consent to transfer individuals' personal information from the EU, or if we are otherwise unable to implement a valid compliance solution for cross-border transfers of personal information, we will face increased exposure to substantial fines, regulatory actions, as well as injunctions against the export and processing of personal information from Europe. Our inability to import personal information from the EEA, UK or Switzerland or other countries may also restrict our clinical trial activities in those countries; limit our ability to collaborate with CROs, service providers, contractors and other companies subject to laws restricting cross-border data transfers; require us to increase our data processing capabilities in other countries at significant expense and may otherwise negatively impact our business operations.

Additionally, other countries have enacted or are considering enacting similar cross-border data transfer restrictions and laws requiring local data residency, which could increase the cost and complexity of delivering our services and operating our business.

Privacy and data security laws in the United States at the federal, state and local level are increasingly complex and changing rapidly. For example, at the federal level, HIPAA, as amended by HITECH, imposes specific requirements relating to the privacy, security and transmission of individually identifiable health information. Additionally, at the state level, the privacy and data protection landscape is changing rapidly. For example, just over a month after the EU GDPR took effect, the California legislature passed the California Consumer Privacy Act of 2018, or CCPA, which took effect on January 1, 2020. The CCPA gives California residents certain rights similar to the individual rights given under the EU GDPR, including the right to access and delete their personal information, opt-out of certain personal information sharing and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, including statutory fines for noncompliance and a limited private right of action in connection with certain data breaches. Since the enactment of the CCPA, new privacy and data security laws have been proposed in more than half of the states and in United States Congress, reflecting a trend toward more stringent privacy legislation in the United States. The evolving patchwork of differing state and federal privacy and data security laws increases the cost and complexity of operating our business and increase our exposure to liability. The CCPA itself will expand substantially as a result of California voters approving a November 2020 ballot measure that adopted the California Privacy Rights Act of 2020, or CPRA, which becomes fully effective on January 1, 2023, and will, among other things, create a new administrative agency to implement and enforce California's privacy laws. While certain clinical trials activities are exempt from the CCPA's requirements, other personal information that we handle may be subject to the CCPA, forthcoming CPRA and similar laws, including laws that have been or may be adopted in states other than California, which may increase our compliance costs, exposure to regulatory enforcement action and other liabilities.

Our obligations related to data privacy and security are quickly changing in an increasingly stringent fashion. These obligations may be subject to differing applications and interpretations, which may be inconsistent or in conflict among jurisdictions. Preparing for and complying with these obligations requires us to devote significant resources (including, without limitation, financial and time-related resources). These obligations may necessitate changes to our information technologies, systems and practices and to those of any third parties that process personal information on our behalf. In addition, these obligations may require us to change aspects of our business model. Although we endeavor to comply with applicable data privacy and security obligations, we may at times fail (or be perceived to have failed) to do so. Moreover, despite our efforts, our personnel or third parties upon whom we rely may fail to comply with such obligations, which could impact whether or not we are in compliance.

If we fail, or are perceived to have failed, to address or comply with data privacy and security obligations, we could face significant consequences, including (without limitation): government enforcement actions (e.g., investigations, fines, penalties, audits, inspections and similar); litigation (including class-related claims); additional reporting requirements and/or oversight; bans on processing personal information; orders to destroy or not use personal information; and imprisonment of company officials. Any of these events could have a material adverse effect on our reputation, business or financial condition, including but not limited to: loss of customers; interruptions or stoppages in our business operations (including clinical trials); inability to process personal information or to

operate in certain jurisdictions; limited ability to develop or commercialize our products; expenditure of time and resources to defend any claim or inquiry; adverse publicity; or revision or restructuring of our operations.

We use and generate materials that may expose us to material liability.

Our research programs involve the use of hazardous materials, chemicals and radioactive and biological materials. We are subject to foreign, federal, state and local environmental and health and safety laws and regulations governing, among other matters, the use, manufacture, handling, storage and disposal of hazardous materials and waste products. We may incur significant costs to comply with these current or future environmental and health and safety laws and regulations. In addition, we cannot completely eliminate the risk of contamination or injury from hazardous materials and may incur material liability as a result of such contamination or injury. In the event of an accident, an injured party may seek to hold us liable for any damages that result. Any liability could exceed the limits or fall outside the coverage of our workers' compensation, property and business interruption insurance and we may not be able to maintain insurance on acceptable terms, if at all. We currently carry no insurance specifically covering environmental claims.

Our operations are vulnerable to interruption by fire, earthquake, power loss, telecommunications failure, terrorist activity and other events beyond our control, which could harm our business.

Our facilities have experienced electrical blackouts as a result of a shortage of available electrical power. Future blackouts, which may be implemented by the local electricity provider in the face of high winds and dry conditions, could disrupt our operations. Our facility is located in a seismically active region. We have not undertaken a systematic analysis of the potential consequences to our business and financial results from a major earthquake, fire, power loss, terrorist activity or other disasters and do not have a comprehensive recovery plan for such disasters. In addition, we do not carry sufficient insurance to compensate us for actual losses from interruption of our business that may occur, and any losses or damages incurred by us could harm our business. In addition, the sole supplier of clinical drug substances for NGM120, NGM621, NGM707, NGM831 and NGM438 is located in Lithuania, a region that has experienced political unrest. Refer to the risk factor titled "*We rely completely on CMOs for the manufacture of our product candidates and are subject to many manufacturing risks, any of which could substantially increase our costs and limit supply of our product candidates and any future products*." If our operations or the operations of third parties providing services to us are disrupted by any such occurrences, our business and future prospects may be negatively affected.

Our ability to use net operating loss carryforwards to offset taxable income could be limited.

We plan to use our current year operating losses to offset taxable income from any revenue generated from operations, including corporate collaborations. To the extent that our taxable income exceeds any current year operating losses, we plan to use our net operating loss carryforwards to offset income that would otherwise be taxable. Our net operating loss carryforwards generated in tax years ended on or prior to December 31, 2017 are only permitted to be carried forward for 20 years under applicable U.S. tax law. Under the 2017 Tax Act, as modified by the Coronavirus Aid, Relief and Economic Security Act, or the CARES Act, our federal net operating losses generated in tax years beginning after December 31, 2017 may be carried forward indefinitely, but the ability to deduct such federal net operating losses generated in tax years beginning after December 31, 2020 is limited to 80% of taxable income. It is uncertain if and to what extent various states will conform to the 2017 Tax Act or the CARES Act.

In addition, under Section 382 of the U.S. Internal Revenue Code of 1986, as amended, or the Code, and corresponding provisions of state law, if we experience an "ownership change," generally defined as a greater than 50% change, by value, in equity ownership over a three-year period, our ability to use our pre-change net operating loss carryforwards to offset our post-change income may be limited. Due to our initial public offering and other shifts in our stock ownership, we have experienced ownership changes in the past and may experience ownership changes in the future as a result of subsequent shifts in our stock ownership, some of which are outside our control. As a result, our use of federal net operating loss carryforwards could be limited. State net operating loss carryforwards may be similarly limited. In addition, at the state level, there may be periods during which the use of net operating losses is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. For example, California has imposed limits on the usability of California net operating loss carryforwards and certain tax credits to offset California taxable income or California tax liabilities in tax years beginning after 2019 and before 2023. Any such limitations may result in greater tax liabilities than we would incur in the absence of such limitations and any increased liabilities could adversely affect our business, results of operations, financial position and cash flows.

New tax laws or regulations, changes to existing tax laws or regulations or changes in their application to us or our customers may have a material adverse effect on our business, cash flows, financial condition or results of operations.

New income, sales, use or other tax laws, statutes, rules, regulations, directives, decrees or ordinances could be enacted at any time, which could adversely affect our business and financial condition. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us. For example, the 2017 Tax Act sanctioned many significant changes to the U.S. tax laws. Future guidance from the U.S. Internal Revenue Service, or IRS, and other tax authorities with respect to the 2017 Tax Act may affect us, and certain aspects of the 2017 Tax Act may be repealed or modified in future legislation. For example, the CARES Act modified certain provisions of the 2017 Tax Act. Changes in corporate tax rates, the realization of net deferred tax assets relating to our operations, the taxation of foreign earnings and the deductibility of expenses under the 2017 Tax Act or future reform legislation could have a material impact on the value of our deferred tax assets, could result in significant one-time charges and could increase our future U.S. tax expense.

Future changes in financial accounting standards or practices may cause adverse and unexpected revenue fluctuations and adversely affect our reported results of operations.

Future changes in financial accounting standards may cause adverse, unexpected revenue fluctuations and affect our reported financial position or results of operations. Financial accounting standards in the United States are constantly under review and new pronouncements and varying interpretations of pronouncements have occurred frequently in the past and are expected to occur again in the future. As a result, we may be required to make changes in our accounting policies. Those changes could affect our financial condition and results of operations or the way in which such financial condition and results of operations are reported. Compliance with new accounting standards may also result in additional expenses. As a result, we intend to invest all reasonably necessary resources to comply with evolving standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from business activities to compliance activities.

We continue to incur increased costs as a result of operating as a public company, and our management devotes substantial time to new compliance initiatives. In addition, we are obligated to develop and maintain proper and effective internal control over financial reporting. In the future, we may not complete our analysis of our internal control over financial reporting in a timely manner, or our internal control over financial reporting may not be determined to be effective, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.

As a public company, we incur significant legal, accounting, insurance and other expenses, and these expenses further increased in connection with our loss of “emerging growth company” status as of December 31, 2021. As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and the Dodd-Frank Act, as well as rules adopted, and to be adopted, by the SEC and The Nasdaq Global Select Market. Our management and other personnel devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations increase our legal and financial compliance costs and may make some activities more time-consuming and costly. The increased costs will increase our net loss. For example, these rules and regulations make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain sufficient coverage. We cannot predict or estimate the amount or timing of additional costs we may incur in the future to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

Specifically, in order to comply with the requirements of being a public company, we need to undertake various actions, including maintaining effective internal controls and procedures. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls and other procedures that are designed to ensure that information required to be disclosed by us in the 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 information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers. In addition, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404(b) of the Sarbanes-Oxley Act, and to allow our independent registered public accounting firm to issue an attestation report on the effectiveness of our internal control over financial reporting. Our compliance with Section 404(b) of the Sarbanes-Oxley Act requires that we incur substantial

accounting expense and expend significant management efforts. We currently do not have an internal audit staff, and we have hired and will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. If we are not able to comply with the requirements of Section 404(b) of the Sarbanes-Oxley Act in a timely manner, or if we or our independent registered public accounting firm identify deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, investors may lose confidence in our operating results and the price of our common stock could decline. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on The Nasdaq Global Select Market.

Our ability to successfully implement our business plan and comply with Section 404(b) of the Sarbanes-Oxley Act requires us to be able to prepare timely and accurate financial statements. We expect that we will need to continue to improve existing, and implement new operational and financial systems, procedures and controls to manage our business effectively. Any delay in the implementation of, or disruption in the transition to, new or enhanced systems, procedures or controls may cause our operations to suffer, and we may be unable to conclude that our internal control over financial reporting is effective and to obtain an attestation report from our independent registered public accounting firm as required under Section 404(b) of the Sarbanes-Oxley Act. This, in turn, could have an adverse impact on the price for our common stock and could adversely affect our ability to access the capital markets.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

We designed our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty and breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

If securities or industry analysts do not publish research, or publish inaccurate or unfavorable research, about our business, our stock price and trading volume could decline.

Our stock price and trading volume is heavily influenced by the way analysts and investors interpret our clinical trial results, any collaborations we may enter into, our financial information and other disclosures. If securities or industry analysts do not publish research or reports about our business, delay publishing reports about our business or publish negative reports about our business, regardless of accuracy, our stock price and trading volume could decline.

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

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	Description	Incorporated by Reference			
		Schedule Form	File Number	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation	8-K	001-38853	3.1	4/8/19
3.2	Amended and Restated Bylaws	S-1	333-227608	3.4	9/28/18
10.1	Lease agreement, by and between NGM Biopharmaceuticals, Inc. and HCP BTC, LLC, dated as of July 7, 2022.				
31.1+	Certification of Chief Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2+	Certification of Chief Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1+*	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS	Inline XBRL Instance Document				
101.SCH	Inline XBRL Taxonomy Extension Schema Document				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)				

+ Filed herewith.

* The certifications attached as Exhibit 32.1 accompany this Quarterly Report on Form 10-Q are not deemed filed with the SEC and are not to be incorporated by reference into any filing of NGM Biopharmaceuticals, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Quarterly Report on Form 10-Q, irrespective of any general incorporation language contained in such filing.

SIGNATURES

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

NGM Biopharmaceuticals, Inc.

Date: August 4, 2022

By: /s/ David J. Woodhouse
David J. Woodhouse, Ph.D.
Chief Executive Officer and Director

Date: August 4, 2022

By: /s/ Siobhan Nolan Mangini
Siobhan Nolan Mangini
President and Chief Financial Officer
(Principal Financial Officer)

Exhibit 10.1

BRITANNIA OYSTER POINT

LEASE

This Lease (the "**Lease**"), dated as of the date set forth in Section 1 of the Summary of Basic Lease Information (the "**Summary**"), below, is made by and between **HCP BTC, LLC,** a Delaware limited liability company ("**Landlord**"), and **NGM BIOPHARMACEUTICALS, INC.**, a Delaware corporation ("**Tenant**").

SUMMARY OF BASIC LEASE INFORMATION

TERMS OF LEASE	DESCRIPTION
1. Date:	July 7, 2022 (the "**Effective Date**").
2. Premises (Article 1).	
2.1 Building:	That certain building containing approximately 121,706 rentable square feet of space ("**RSF**") located at 333 Oyster Point Boulevard, South San Francisco, California 94080 (the "**Building**").
2.2 Premises:	Approximately 121,706 rentable square feet of space consisting of the entire Building, as further set forth in **Exhibit A** to the Lease.
3. Lease Term (Article 2).	
3.1 Length of Term:	Ten (10) years.
3.2 Lease Commencement Date:	January 1, 2024.
3.3 Lease Expiration Date:	December 31, 2033.

4. Base Rent (Article 3):

Lease Year	Annual Base Rent	Monthly Installment of Base Rent	Approximate Monthly Base Rent per Rentable Square Foot
1	$10,807,492.80	$900,624.40	$7.40
2	$11,185,755.05	$932,146.25	$7.66
3	$11,577,256.47	$964,771.37	$7.93
4	$11,982,460.45	$998,538.37	$8.20
5	$12,401,846.57	$1,033,487.21	$8.49
6	$12,835,911.20	$1,069,659.27	$8.79
7	$13,285,168.09	$1,107,097.34	$9.10
8	$13,750,148.97	$1,145,845.75	$9.41
9	$14,231,404.19	$1,185,950.35	$9.74
10	$14,729,503.33	$1,227,458.61	$10.09

*Note: Tenant shall have no obligation to pay any Base Rent for the Premises attributable to the first three (3) full calendar months of the Lease Term (the "**Base Rent Abatement Period**"); provided, however, Tenant shall be required to pay Tenant's Share of Direct Expenses attributable to such period, as well as for all utilities and other services.

5. Tenant Improvement Allowance (**Exhibit B**): An amount equal to $40.00 per rentable square foot of the Premises (*i.e.*, $4,868,240.00 based upon 121,706 rentable square feet in the Premises).

6. Tenant's Share (Article 4): One hundred percent (100%) of the Building and 36.25% of the Project.

7. Permitted Use (Article 5): The Premises shall be used only for general office, research and development, engineering, laboratory, vivarium, storage and/or warehouse uses, including, but not limited to, administrative offices and other lawful uses reasonably related to or incidental to such specified uses, all (i) consistent with first class life sciences projects in South San Francisco, California ("**First Class Life Sciences Projects**"), and (ii) in compliance with, and subject to, Applicable Laws (as that term is defined in Article 24) and the terms of this Lease.

8. Letter of Credit (Article 21): $2,454,917.20.

9. Parking (Article 28):	2.5 unreserved parking spaces for every 1,000 rentable square feet of the Premises, subject to the terms of Article 28 of the Lease.
10. Address of Tenant (Section 29.18):	NGM Biopharmaceuticals, Inc. 333 Oyster Point Boulevard South San Francisco, California 94080
11. Address of Landlord (Section 29.18):	See Section 29.18 of the Lease.
12. Brokers (Section 29.24):	Jones Lang LaSalle and CBRE, Inc.

1. PREMISES, BUILDING, PROJECT, AND COMMON AREAS

1.1 **Premises, Building, Project and Common Areas**.

1.1.1 **The Premises; Tender of Possession**. Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the premises set forth in Section 2.2 of the Summary (the "**Premises**"). The outline of the Premises is set forth in **Exhibit A** attached hereto. The outline of the "Building" and the "Project," as those terms are defined in Section 1.1.2 below, are further depicted on the Site Plan attached hereto as **Exhibit A-1**. The parties hereto agree that the lease of the Premises is upon and subject to the terms, covenants and conditions herein set forth, and Tenant covenants as a material part of the consideration for this Lease to keep and perform each and all of such terms, covenants and conditions by it to be kept and performed and that this Lease is made upon the condition of such performance. The parties hereto hereby acknowledge that the purpose of **Exhibit A** is to show the approximate location of the Premises only, and such Exhibit is not meant to constitute an agreement, representation or warranty as to the construction of the Premises, the precise area thereof or the specific location of the "Common Areas," as that term is defined in Section 1.1.3, below, or the elements thereof or of the accessways to the Premises or the "Project," as that term is defined in Section 1.1.2, below. As Tenant is in occupancy of the Premises pursuant to the "Sublease" (as that term is defined in Section 1.3 below), except as specifically set forth in this Lease and in the Tenant Work Letter attached hereto as **Exhibit B** (the "**Tenant Work Letter**"), Tenant shall continue to accept possession of the Premises to Tenant in its existing, "as is" condition, and Landlord shall not be obligated to provide or pay for any improvement work or services related to the improvement of the Premises. Neither Landlord nor any agent of Landlord has made any representation or warranty regarding the condition of the Premises, the Building or the Project or with respect to the suitability of any of the foregoing for the conduct of Tenant's business, except as specifically set forth in this Lease and the Tenant Work Letter. Any process utilities shall be provided without warranty, in their currently existing, "as-is" condition. Notwithstanding anything in this Lease to the contrary, in connection with the foregoing Landlord shall, at Landlord's sole cost and expense (which shall not be deemed an "Operating Expense," as that term is defined in Section 4.2.4 or otherwise passed through to Tenant), repair or replace any failed or inoperable portion of the systems serving the Premises which are set forth on **Exhibit G** attached hereto only (the "**Warranty Systems**") during the first twelve (12) months after the Lease Commencement Date ("**Warranty Period**"), provided that the need to repair or replace was not caused by the misuse, misconduct, damage, destruction, omissions, and/or negligence of Tenant, its subtenants and/or assignees, if any, or any company which is acquired, sold or merged with Tenant (collectively, "**Tenant Damage**"), or by any modifications, Alterations or improvements constructed by or on behalf of Tenant. Landlord shall coordinate such work with Tenant and shall utilize commercially reasonable efforts to perform the same in a manner designed to minimize interference with Tenant's use of the Premises. To the extent repairs which Landlord is required to make pursuant to this Section 1.1.1 are necessitated in part by Tenant Damage, then Tenant shall reimburse Landlord for an equitable proportion of the cost of such repair.

1.1.2 **The Building and The Project**. The Premises constitutes the entire building set forth in Section 2.1 of the Summary (the "**Building**"). The Building is part of an office/laboratory project currently known as "Britannia Oyster Point." The term "**Project**," as used in this Lease, shall mean (i) the Building and the Common Areas, (ii) the land (which is improved with landscaping, parking facilities and other improvements) upon which the Building and the Common Areas are located, (iii) the other office/laboratory buildings located at Britannia Oyster Point, and the land upon which such adjacent office/laboratory buildings are located, and (iv) at Landlord's discretion, any additional real property, areas, land, buildings or other improvements added thereto outside of the Project.

1.1.3 **Common Areas**. Tenant shall have the non-exclusive right to use in common with other tenants in the Project, and subject to the rules and regulations referred to in Article 5 of this Lease, those portions of the Project which are provided, from time to time, for use in common by Landlord, Tenant and any other tenants of the Project (such areas, together with such other portions of the Project reasonably designated by Landlord, in its discretion, are collectively referred to herein as the "**Common Areas**"). The manner in which the Common Areas are maintained and operated shall be at the sole discretion of Landlord (but shall be materially consistent with reasonably prudent landlords of First Class Life Sciences Projects) and the use thereof shall be subject to such rules, regulations and restrictions as Landlord may make from time to time. Landlord reserves the right to close temporarily, make alterations or additions to, or change the location of elements of the Project and the Common Areas, provided that, in connection therewith, Landlord shall perform such closures, alterations, additions or changes in a commercially reasonable manner and, in connection therewith, shall use commercially reasonable efforts to minimize any material interference with Tenant's use of and access to the Premises. Except when and where Tenant's right of access is specifically excluded in this Lease, Tenant shall have the right of access to the Premises, the Building, and the Project parking facility twenty-four (24) hours per day, seven (7) days per week during the Lease Term (hereinafter defined).

1.2 **Rentable Square Feet of Premises**. The rentable square footage of the Premises is hereby deemed to be as set forth in Section 2.2 of the Summary, and shall not be subject to measurement or adjustment during the Lease Term or any extension thereof.

1.3 **Existing Sublease**. As of the date hereof Tenant is occupying the Premises pursuant to that certain Sublease dated December 11, 2015, between Tenant, as subtenant, and Amgen Inc., a Delaware corporation ("**Amgen**"), as Sublandlord (the "**Sublease**"). The Sublease has been made subject to that certain Build-to-Suit Lease dated December 20, 2001 between Landlord, as landlord, and Amgen, as tenant (as amended, the "**Amgen Lease**"). The Sublease and Amgen Lease are each scheduled to expire on December 31, 2023, and the Lease Commencement Date under this Lease shall occur immediately upon such termination and following such Lease Commencement Date Tenant's occupancy of the Premises shall be governed by the terms of this Lease only (and not the Sublease). As Tenant is currently occupying the Premises, Landlord shall have no obligation to deliver the Premises to Tenant.

1.4 **Right of First Offer**. For the period commencing on the Lease Commencement Date and ending on the fifth (5^{th}) anniversary of the Lease Commencement Date only, Landlord hereby grants to the named Tenant in the Lease (the "**Original Tenant**") an ongoing right of first offer with respect to any space located in the building with an address of 331 Oyster Point Boulevard (the "**First Offer Space**"). Notwithstanding the foregoing, such first offer right of Tenant shall commence only following the expiration or earlier termination of the existing leases of the First Offer Space (including renewals of any such lease, irrespective of whether any such renewal is currently set forth in such lease or is subsequently granted or agreed upon, and regardless of whether such renewal is consummated pursuant to a lease amendment or a new lease). Such right of first offer shall be subordinate to all rights of other tenants of the Project, which rights relate to the First Offer Space and are set forth in leases of space in the Project existing as of the date hereof, including, without limitation, any expansion, first offer, first refusal, first negotiation and other rights, regardless of whether such rights are executed strictly in accordance with their respective terms or pursuant to a lease amendment or a new lease (the "**Superior Rights**"), as disclosed by Landlord to Tenant in writing prior to the execution of this Lease. Notwithstanding any contrary provision in the lease of any Superior Right Holder, such rights of any Superior Right Holder shall continue to be Superior Rights in the event that such Superior Right Holder's lease is renewed or otherwise modified (and irrespective of whether any such renewal is currently set forth in such lease or is subsequently granted or agreed upon, and regardless of whether such renewal is consummated pursuant to a lease amendment or a new lease). All such tenants of the First Offer Space, and all such third-party tenants in the Project holding Superior Rights, and all tenants under "Intervening Leases," as that term is defined in Section 1.4.5, below, are collectively referred to as the "**Superior Right Holders**". Tenant's right of first offer shall be on the terms and conditions set forth in this Section 1.4.

1.4.1 **Procedure for Offer**. Subject to the terms of this Section 1.4, Landlord shall notify Tenant (the "**First Offer Notice**") prior to leasing the applicable portion of the First Offer Space to a third party (other than an existing tenant), subject to the rights of any Superior Right Holder. Pursuant to such First Offer Notice, Landlord shall offer to lease to Tenant the then available First Offer Space. The First Offer Notice shall describe the space so offered to Tenant and the base rent, and other fundamental material economic terms upon which Landlord is willing to lease such space to Tenant.

1.4.2 **Procedure for Acceptance**. If Tenant wishes to exercise Tenant's right of first offer with respect to the space described in the First Offer Notice, then within seven (7) business days of delivery of the First Offer Notice to Tenant (the "**First Offer Exercise Period**"), Tenant shall deliver notice to Landlord (the "**First Offer Exercise Notice**") of Tenant's election to exercise its right of first offer with respect to the entire space described in the First Offer Notice on the terms contained in such notice. If Tenant does not so notify Landlord within such seven (7) business day period, then Landlord shall be free to lease the space described in the First Offer Notice to anyone to whom Landlord desires on any terms Landlord desires. Notwithstanding the foregoing, in the event that Landlord shall fail to lease the subject First Offer Space for a period of nine (9) months following the expiration of the First Offer Exercise Period (such 9-month period to be referred to herein as the "**Landlord Lease Period**"), subject to the terms of this Section 1.4, prior to leasing the subject First Offer Space, Landlord shall deliver a new First Offer Notice to Tenant. Notwithstanding anything to the contrary contained herein, Tenant must elect to exercise its right of first offer, if at all, with respect to all of the space offered by Landlord to Tenant at any particular time, and Tenant may not elect to lease only a portion thereof.

1.4.3 **Construction in First Offer Space**. Tenant shall take the First Offer Space in its "as is" condition, and the construction of improvements in the First Offer Space shall comply with the terms of Article 8 of this Lease. Any improvement allowance to which Tenant may be entitled shall be as set forth in the First Offer Notice.

1.4.4 **Amendment to Lease**. If Tenant timely exercises Tenant's right to lease the First Offer Space as set forth herein, then Landlord and Tenant shall within thirty (30) days thereafter execute an amendment to the Lease for such First Offer Space upon the terms and conditions as set forth in the First Offer Notice and this Section 1.4. The rentable square footage of any First Offer Space leased by Tenant shall be determined by Landlord in accordance with Landlord's then current standard of measurement for the Building. Tenant shall commence payment of rent for the First Offer Space, and the term of Tenant's lease of the First Offer Space shall commence, upon the date of delivery of the First Offer Space to Tenant (the "**First Offer Commencement Date**") and shall terminate on the date set forth in the First Offer Notice.

1.4.5 **Termination of Right of First Offer**. Tenant's rights under this Section 1.4 shall be personal to the Original Tenant (as that term is defined in Section 2.2.1 below) or a Permitted Assignee (as that term is defined in Section 2.2.1 below) and may only be exercised by the Original Tenant or a Permitted Assignee (and not any other assignee, sublessee or other transferee of the Original Tenant's interest in the Lease) if the Original Tenant occupies the entire Premises. The right of first offer granted herein shall not terminate as to particular First Offer Space upon the failure by Tenant to exercise its right of first offer with respect to such First Offer Space as offered by Landlord and Landlord shall re-offer such space to Tenant upon the expiration or earlier termination of any lease (an "**Intervening Lease**") entered into by Landlord during the Landlord Lease Period, subject, however, to Landlord's right to renew any such Intervening Lease, irrespective of whether any such renewal is initially set forth in such lease or is subsequently granted or agreed upon, and regardless of whether any such renewal is exercised strictly in accordance with its terms or pursuant to a lease amendment or a new lease. In addition, any expansion or similar rights granted under an Intervening Lease shall be deemed to be "Superior Rights", and the tenant under any Intervening Lease shall be a "Superior Right Holder". Tenant shall not have the right to lease First Offer Space, as provided in this Section 1.4, if, as of the date of the attempted exercise of any right of first offer by Tenant, or, at Landlord's option, as of the scheduled date of delivery of such First Offer Space to Tenant, Tenant is in monetary or material non-monetary default under the Lease (beyond the applicable notice and cure periods).

1.5 **Right of First Negotiation**. For the period commencing on the Effective Date and ending on December 31, 2022 only, Original Tenant shall have a right of first negotiation with respect to the space located on the fourth (4th) floor of that certain building (the "**331 Building**") located at 331 Oyster Point Boulevard (collectively, the "**Negotiation Space**"). Landlord shall deliver to Tenant notice (the "**Landlord Negotiation Notice**") regarding such Negotiation Space upon Landlord's receipt of a bona-fide offer to lease the Negotiation Space from a third party, which Landlord Negotiation Notice shall state the exact location, configuration and rentable square footage of the Negotiation Space and the date upon which it is expected to become available. If, in addition to leasing the Negotiation Space, the bona-fide third party offer includes the lease of space in the 331 Building that is outside of the Negotiation Space (i.e., includes space that is not on the fourth (4th) floor of the 331 Building), then the Landlord Negotiation Notice shall include such additional space as well as the Negotiation Space and in such event the additional space shall be deemed included as part of the Negotiation Space for all purposes set forth in this Section 1.5 and Tenant may only lease the entire space in such bona-fide third party offer (and not a portion thereof). Tenant shall have seven (7) business days thereafter to deliver to Landlord notice (the "**Tenant Negotiation Notice**") exercising Tenant's right of first negotiation with respect to the Negotiation Space. Failure of Tenant to deliver the Tenant Negotiation Notice within the seven (7) business day period shall be deemed failure by Tenant to exercise the right herein granted and thereafter Landlord shall be free to lease the Negotiation Space to another tenant. In the event Tenant timely delivers the Tenant Negotiation Notice, Tenant and Landlord shall thereafter negotiate in good faith for a period of twenty-five (25) days (the "**Negotiation Period**") with respect to the base rent, allowance amounts if any, length of term, and other economic terms (the "**Fundamental Terms**") for the Negotiation Space, in each party's sole and absolute discretion, subject to the above requirement to negotiate in good faith. If Tenant and Landlord cannot agree on the Fundamental Terms, despite each parties' good faith in determining the proposed Fundamental Terms, within such Negotiation Period, then Tenant's right to expand the Premises to include the Negotiation Space shall terminate and be of no further force or effect and Landlord shall be free to lease the Negotiation Space to another tenant. Neither party shall have the right to have a court or other third party determine the Fundamental Terms for the Negotiation Space. If Landlord and Tenant agree on the Fundamental Terms for the Negotiation Space within such time period, then Landlord and Tenant shall promptly execute an amendment to this Lease (or at Landlord's election, a new lease for such Negotiation Space (which new lease shall be on all the terms and conditions of this Lease and include the agreed upon Fundamental Terms)) and, on the date on which the Negotiation Space becomes available, the Premises shall be expanded to include the Negotiation Space. Notwithstanding the foregoing, if Tenant is in default on the date Landlord would be required to give the Landlord Negotiation Notice, Landlord shall have no obligation to provide such notice to negotiate with Tenant regarding the Negotiation Space, and if Tenant is in monetary or material non-monetary default (beyond the applicable notice and cure periods) on the date the Premises are to be expanded, the Premises shall not be so

expanded. Upon the expansion of the Premises, Tenant's Share shall be increased to reflect the rentable square footage of the Negotiation Space. The term of the lease with respect to the Negotiation Space shall be coterminous with the Lease Term for the Premises.

2. LEASE TERM; OPTION TERM

2.1 **Lease Term**. The terms and provisions of this Lease shall be effective as of the date of this Lease. The term of this Lease (the "**Lease Term**") shall be as set forth in Section 3.1 of the Summary, shall commence on the date set forth in Section 3.2 of the Summary (the "**Lease Commencement Date**"), and shall terminate on the date set forth in Section 3.3 of the Summary (the "**Lease Expiration Date**") unless this Lease is sooner terminated as hereinafter provided. For purposes of this Lease, the term "**Lease Year**" shall mean each consecutive twelve (12) month period during the Lease Term. At any time during the Lease Term, Landlord may deliver to Tenant a notice in the form as set forth in **Exhibit C**, attached hereto, as a confirmation only of the information set forth therein, which Tenant shall execute (or provide factual corrections thereto) and return to Landlord within ten (10) days of receipt thereof.

2.2 **Option Term**.

2.2.1 **Option Right**. Landlord hereby grants the Tenant originally named in this Lease (the "**Original Tenant**"), and any assignee of Original Tenant's entire interest in the Lease that has been approved in accordance with the terms of Article 14, below (a "**Permitted Assignee**"), one (1) option to extend the Lease Term for a period of either eight (8) years or ten (10) years (as applicable, the "**Option Term**"). Such option to extend shall be exercisable only by written notice (the "**Option Exercise Notice**") delivered by Tenant to Landlord not more than fifteen (15) months nor less than twelve (12) months prior to the expiration of the initial Lease Term, stating that Tenant is thereby irrevocably exercising its option to lease the Premises during the Option Term, and which Option Exercise Notice shall indicate whether Tenant shall extend the Lease Term for a period of eight (8) years or ten (10) years. Upon the proper exercise of the option to extend, and provided that, at Landlord's option, as of the date of delivery of such notice, Tenant is not in default under this Lease and has not previously been in default under this Lease more than once during the prior twenty-four (24) month period, and as of the end of the initial Lease Term, Tenant is not in monetary or material non-monetary default (beyond the applicable notice and cure periods) under this Lease, the Lease Term shall be extended for a period of either eight (8) years or ten (10) years, as applicable. The rights contained in this Section 2.2 shall be personal to Original Tenant and any Permitted Assignee (and not any other assignee, sublessee or "Transferee," as that term is defined in Section 14.1, below, of Tenant's interest in this Lease).

2.2.2 **Option Rent**. The annual Rent payable by Tenant during the first (1st) year of the Option Term (the "**Option Rent**") shall be equal to the "Fair Rental Value," as that term is defined below, for the Premises as of the commencement date of the Option Term. The "**Fair Rental Value**," as used in this Lease, shall be equal to the annual rent per rentable square foot (including additional rent and considering any "base year" or "expense stop" applicable thereto), including all escalations, at which tenants (pursuant to leases consummated within the twelve (12) month period preceding Tenant's delivery of the Option Exercise Notice), are leasing non-sublease, non-encumbered, non-equity space which is not significantly greater or smaller in size than the subject space, with a comparable level of improvements (excluding any property that Tenant would be allowed to remove from the Premises at the termination of the Lease), for a comparable lease term, in an arm's length transaction, which comparable space is located in the "Comparable Buildings," as that term is defined in this Section 2.2.2, below (transactions satisfying the foregoing criteria shall be known as the "**Comparable Transactions**"), taking into consideration the following concessions (the "**Concessions**"): (a) rental abatement concessions, if any, being granted such tenants in connection with such comparable space; (b) tenant improvements or allowances provided or to be provided for such comparable space, and taking into account the value, if any, of the existing improvements in the subject space (other than improvements installed by Tenant at Tenant's sole cost and expense), such value to be based upon the age, condition, design, quality of finishes and layout of the improvements and the extent to which the same can be utilized by a general office/lab user other than Tenant; and (c) other reasonable monetary concessions being granted such tenants in connection with such comparable space; provided, however, that in calculating the Fair Rental Value, no consideration shall be given to the fact that Landlord is or is not required to pay a real estate brokerage commission in connection with Tenant's exercise of its right to extend the Lease Term, or the fact that landlords are or are not paying real estate brokerage commissions in connection with such comparable space. The Concessions shall be reflected in the effective rental rate (which effective rental rate shall take into consideration the total dollar value of such Concessions as amortized on a straight-line basis over the applicable term of the Comparable Transaction (in which case such Concessions evidenced in the effective rental rate shall not be granted

to Tenant)) payable by Tenant. The term "**Comparable Buildings**" shall mean the Building and those other life sciences buildings which are comparable to the Building in terms of age (based upon the date of completion of construction or major renovation of to the building), quality of construction, level of services and amenities, size and appearance, and are located in South San Francisco, California and the surrounding commercial area.

2.2.3 **Determination of Option Rent**. In the event Tenant timely and appropriately exercises an option to extend the Lease Term, Landlord shall notify Tenant of Landlord's determination of the Option Rent within thirty (30) days thereafter. If Tenant, on or before the date which is ten (10) business days following the date upon which Tenant receives Landlord's determination of the Option Rent, in good faith objects to Landlord's determination of the Option Rent, then Landlord and Tenant shall attempt to agree upon the Option Rent using their best good-faith efforts. If Landlord and Tenant fail to reach agreement within ten (10) business days following Tenant's objection to the Option Rent (the "**Outside Agreement Date**"), then Tenant shall have the right to withdraw its exercise of the option by delivering written notice thereof to Landlord within five (5) days thereafter, in which event Tenant's right to extend the Lease pursuant to this Section 2.2 shall be of no further force or effect. If Tenant does not withdraw its exercise of the extension option, each party shall make a separate determination of the Option Rent, as the case may be, within ten (10) days after the Outside Agreement Date, and such determinations shall be submitted to arbitration in accordance with Sections 2.2.3.1 through 2.2.3.7, below. If Tenant fails to object to Landlord's determination of the Option Rent within the time period set forth herein, then Tenant shall be deemed to have objected to Landlord's determination of Option Rent.

2.2.3.1 Landlord and Tenant shall each appoint one arbitrator who shall be a real estate appraiser who shall have been active over the five (5) year period ending on the date of such appointment in the appraisal of other class A life sciences buildings located in the South San Francisco market area. The determination of the arbitrators shall be limited solely to the issue of whether Landlord's or Tenant's submitted Option Rent is the closest to the actual Option Rent, taking into account the requirements of Section 2.2.2 of this Lease, as determined by the arbitrators. Each such arbitrator shall be appointed within fifteen (15) days after the Outside Agreement Date. Landlord and Tenant may consult with their selected arbitrators prior to appointment and may select an arbitrator who is favorable to their respective positions. The arbitrators so selected by Landlord and Tenant shall be deemed "**Advocate Arbitrators**."

2.2.3.2 The two (2) Advocate Arbitrators so appointed shall be specifically required pursuant to an engagement letter within ten (10) days of the date of the appointment of the last appointed Advocate Arbitrator to agree upon and appoint a third arbitrator ("**Neutral Arbitrator**") who shall be qualified under the same criteria set forth hereinabove for qualification of the two Advocate Arbitrators, except that neither the Landlord or Tenant or either parties' Advocate Arbitrator may, directly or indirectly, consult with the Neutral Arbitrator prior or subsequent to his or her appearance, nor shall any Neutral Arbitrator have been retained by either Landlord or Tenant previously. The Neutral Arbitrator shall be retained via an engagement letter jointly prepared by Landlord's counsel and Tenant's counsel.

2.2.3.3 The three arbitrators shall, within thirty (30) days of the appointment of the Neutral Arbitrator, reach a decision as to whether the parties shall use Landlord's or Tenant's submitted Option Rent, and shall notify Landlord and Tenant thereof.

2.2.3.4 The decision of the majority of the three arbitrators shall be binding upon Landlord and Tenant.

2.2.3.5 If either Landlord or Tenant fails to appoint an Advocate Arbitrator within fifteen (15) days after the Outside Agreement Date, then either party may petition the presiding judge of the Superior Court of San Mateo County to appoint such Advocate Arbitrator subject to the criteria in Section 2.2.3.1 of this Lease, or if he or she refuses to act, either party may petition any judge having jurisdiction over the parties to appoint such Advocate Arbitrator.

2.2.3.6 If the two (2) Advocate Arbitrators fail to agree upon and appoint the Neutral Arbitrator, then either party may petition the presiding judge of the Superior Court of San Mateo County to appoint the Neutral Arbitrator, subject to criteria in Section 2.2.3.1 of this Lease, or if he or she refuses to act, either party may petition any judge having jurisdiction over the parties to appoint such arbitrator.

2.2.3.7 The cost of the arbitration shall be paid by Landlord and Tenant equally.

2.2.3.8 In the event that the Option Rent shall not have been determined pursuant to the terms hereof prior to the commencement of the Option Term, Tenant shall be required to pay as Option Rent an amount equal to 103.5% of the Base Rent payable as of the expiration of the initial Lease Term, and upon the final determination of the Option Rent, the payments made by Tenant shall be reconciled with the actual amounts of Option Rent due, and the appropriate party shall make any corresponding payment to the other party.

3. BASE RENT Tenant shall pay, without prior notice or demand, to Landlord or Landlord's agent at the management office of the Project, or, at Landlord's option, at such other place as Landlord may from time to time designate in writing, by a check, wire transfer, ACH or other electronic means acceptable to Landlord for currency which, at the time of payment, is legal tender for private or public debts in the United States of America, base rent ("**Base Rent**") as set forth in Section 4 of the Summary, payable in equal monthly installments as set forth in Section 4 of the Summary in advance on or before the first day of each and every calendar month during the Lease Term, without any setoff or deduction whatsoever, except to the extent expressly provided otherwise in this Lease. The Base Rent for the fourth (4th) full month of the Lease Term shall be paid at the time of Tenant's execution of this Lease. If any Rent payment date (including the Lease Commencement Date) falls on a day of the month other than the first day of such month or if any payment of Rent is for a period which is shorter than one month, the Rent for any fractional month shall accrue on a daily basis for the period from the date such payment is due to the end of such calendar month or to the end of the Lease Term at a rate per day which is equal to 1/365 of the applicable annual Rent. All other payments or adjustments required to be made under the terms of this Lease that require proration on a time basis shall be prorated on the same basis.

4. ADDITIONAL RENT

4.1 **General Terms**.

4.1.1 **Direct Expenses; Additional Rent**. In addition to paying the Base Rent specified in Article 3 of this Lease, Tenant shall pay "**Tenant's Share**" of the annual "**Direct Expenses**," as those terms are defined in Sections 4.2.6 and 4.2.2 of this Lease, respectively. Such payments by Tenant, together with any and all other amounts payable by Tenant to Landlord pursuant to the terms of this Lease, are hereinafter collectively referred to as the "**Additional Rent**", and the Base Rent and the Additional Rent are herein collectively referred to as "**Rent**." All amounts due under this Article 4 as Additional Rent shall be payable for the same periods and in the same manner as the Base Rent. Without limitation on other obligations of Tenant which survive the expiration of the Lease Term, the obligations of Tenant to pay the Additional Rent provided for in this Article 4 shall survive the expiration of the Lease Term.

4.1.2 **Triple Net Lease**. Landlord and Tenant acknowledge that, except as otherwise provided to the contrary in this Lease, it is their intent and agreement that this Lease be a "**TRIPLE NET**" lease and that as such, the provisions contained in this Lease are intended to pass on to Tenant or reimburse Landlord for the costs and expenses reasonably associated with this Lease, the Building and the Project, and Tenant's operation therefrom. To the extent such costs and expenses payable by Tenant cannot be charged directly to, and paid by, Tenant, such costs and expenses shall be paid by Landlord but reimbursed by Tenant as Additional Rent.

4.2 **Definitions of Key Terms Relating to Additional Rent**. As used in this Article 4, the following terms shall have the meanings hereinafter set forth:

4.2.1 Intentionally Deleted.

4.2.2 "**Direct Expenses**" shall mean "**Operating Expenses**" and "**Tax Expenses**."

4.2.3 "**Expense Year**" shall mean each calendar year in which any portion of the Lease Term falls, through and including the calendar year in which the Lease Term expires, provided that Landlord, upon notice to Tenant, may change the Expense Year from time to time to any other twelve (12) consecutive month period, and, in the event of any such change, Tenant's Share of Direct Expenses shall be equitably adjusted for any Expense Year involved in any such change.

4.2.4 "**Operating Expenses**" shall mean all expenses, costs and amounts of every kind and nature which Landlord pays or accrues during any Expense Year because of or in connection with the ownership, management, maintenance, security, repair, replacement, restoration or operation of the Project, or any portion thereof. Without limiting the generality of the foregoing, Operating Expenses shall specifically include any and all of the following: (i) the cost of supplying all utilities, the cost of operating, repairing, maintaining, and renovating the utility, telephone, mechanical, sanitary, storm drainage, and elevator systems, and the cost of maintenance and service contracts in connection therewith; (ii) the cost of licenses, certificates, permits and inspections and the cost of contesting any governmental enactments which may affect Operating Expenses, and the costs incurred in connection with a governmentally mandated transportation system management program or similar program; (iii) the cost of all insurance carried by Landlord in connection with the Project and Premises as reasonably determined by Landlord; (iv) the cost of landscaping, relamping, and all supplies, tools, equipment and materials used in the operation, repair and maintenance of the Project, or any portion thereof; (v) the cost of parking area operation, repair, restoration, and maintenance; (vi) fees and other costs, including management and/or incentive fees (subject to item (x) below), consulting fees, legal fees and accounting fees, of all contractors and consultants in connection with the management, operation, maintenance and repair of the Project; (vii) payments under any equipment rental agreements and the fair rental value of any management office space; (viii) subject to item (f), below, wages, salaries and other compensation and benefits, including taxes levied thereon, of all persons engaged in the operation, maintenance and security of the Project; (ix) costs under any instrument pertaining to the sharing of costs by the Project; (x) operation, repair, maintenance and replacement of all systems and equipment and components thereof of the Project; (xi) the cost of janitorial, alarm, security and other services, replacement of wall and floor coverings, ceiling tiles and fixtures in common areas, maintenance and replacement of curbs and walkways, repair to roofs and re-roofing; (xii) amortization (including commercially reasonable interest on the unamortized cost) over such period of time as Landlord shall reasonably determine, of the cost of acquiring or the rental expense of personal property used in the maintenance, operation and repair of the Project, or any portion thereof; (xiii) the cost of capital improvements or other costs incurred in connection with the Project (A) which are intended to effect economies in the operation or maintenance of the Project, or any portion thereof, or to reduce current or future Operating Expenses or to enhance the safety or security of the Project or its occupants, (B) that are required to comply with present or future mandatory conservation programs, (C) which are replacements or modifications of nonstructural items located in the Common Areas required to keep the Common Areas in good order or condition, (D) that are required under any governmental law or regulation first enacted or enforced after the Commencement Date, or (E) which are repairs, replacements or modifications to the Building Systems (as defined in Section 7.1, below); provided, however, that any capital expenditure shall be amortized (including interest on the amortized cost) over the reasonable useful life of such items as Landlord shall reasonably determine in accordance with sound real estate management and accounting principles, consistently applied; and (xiv) costs, fees, charges or assessments imposed by, or resulting from any mandate imposed on Landlord by, any federal, state or local government for fire and police protection, trash removal, community services, or other services which do not constitute "Tax Expenses" as that term is defined in Section 4.2.5, below, (xv) cost of tenant relation programs reasonably established by Landlord, and (xvi) payments under any easement, license, operating agreement, declaration, restrictive covenant, or instrument pertaining to the sharing of costs by the Building, including, without limitation, any covenants, conditions and restrictions affecting the property, and reciprocal easement agreements affecting the property, any parking licenses, and any agreements with transit agencies affecting the Property (collectively, "**Underlying Documents**"). Notwithstanding the foregoing, for purposes of this Lease, Operating Expenses shall not, however, include:

(a) costs, including legal fees, space planners' fees, advertising and promotional expenses, and brokerage fees incurred in connection with the original construction or development, or original or future leasing of the Project, and costs, including permit, license and inspection costs, incurred with respect to the installation of tenant improvements made for new tenants of the Project or incurred in renovating or otherwise improving, decorating, painting or redecorating vacant space for tenants or other

occupants of the Project (excluding, however, such costs relating to any common areas of the Project or parking facilities), any costs or expenses incurred in connection with the relocation of any tenants;

(b) except as set forth in items (xii), (xiii), and (xiv) above, depreciation, interest and principal payments on mortgages and other debt costs, if any, penalties and interest, costs of capital repairs, replacements and alterations, and costs of capital improvements and equipment, and any costs incurred in financing or refinancing the Building, Project or other operational debts of Landlord;

(c) costs for which the Landlord is reimbursed by any tenant or occupant of the Project or by insurance by its carrier or any tenant's carrier or by anyone else, and electric power costs for which any tenant directly contracts with the local public service company;

(d) any bad debt loss, rent loss, or reserves for bad debts or rent loss;

(e) costs associated with the operation of the business of the partnership or entity which constitutes the Landlord, as the same are distinguished from the costs of operation of the Project (which shall specifically include, but not be limited to, accounting costs associated with the operation of the Project). Costs associated with the operation of the business of the partnership or entity which constitutes the Landlord include costs of partnership accounting and legal matters, costs of defending any lawsuits with any mortgagee (except as the actions of the Tenant may be in issue), costs of selling, syndicating, financing, mortgaging or hypothecating any of the Landlord's interest in the Project, and costs incurred in connection with any disputes between Landlord and its employees, between Landlord and Project management, or between Landlord and other tenants or occupants;

(f) the wages and benefits of any employee who does not devote substantially all of his or her employed time to the Project unless such wages and benefits are prorated to reflect time spent on operating and managing the Project vis-a-vis time spent on matters unrelated to operating and managing the Project; provided, that in no event shall Operating Expenses for purposes of this Lease include wages and/or benefits attributable to personnel above the level of Project manager;

(g) amount paid as ground rental for the Project by the Landlord;

(h) except for a Project management fee to the extent allowed pursuant to item (l) below, overhead and profit increment paid to the Landlord or to subsidiaries or affiliates of the Landlord for services in the Project to the extent the same exceeds the costs of such services rendered by qualified, first-class unaffiliated third parties on a competitive basis;

(i) any compensation paid to clerks, attendants or other persons in commercial concessions operated by the Landlord, provided that any compensation paid to any concierge at the Project shall be includable as an Operating Expense;

(j) rentals and other related expenses incurred in leasing air conditioning systems, elevators, or other equipment which if purchased the cost of which would be excluded from Operating Expenses as a capital cost, except equipment not affixed to the Project which is used in providing engineering, janitorial or similar services and, further excepting from this exclusion such equipment rented or leased to remedy or ameliorate an emergency condition in the Project;

(k) all items and services for which Tenant or any other tenant in the Project reimburses Landlord or which Landlord provides selectively to one or more tenants (other than Tenant) without reimbursement;

(l) any costs expressly excluded from Operating Expenses elsewhere in this Lease;

(m) rent for any office space occupied by Project management personnel to the extent the size or rental rate of such office space exceeds the size or fair market rental value of office space occupied by management personnel of the comparable buildings in the vicinity of the Building, with adjustment where appropriate for the size of the applicable project;

(n) costs arising from the gross negligence or willful misconduct of Landlord in connection with this Lease; and

(o) costs incurred to comply with laws relating to the removal of hazardous material (as defined under Applicable Law) which was in existence in the Building or on the Project prior to the Lease Commencement Date, and was of such a nature that a federal, State or municipal governmental authority, if it had then had knowledge of the presence of such hazardous material, in the state, and under the conditions that it then existed in the Building or on the Project, would have then required the removal of such hazardous material or other remedial or containment action with respect thereto; and costs incurred to remove, remedy, contain, or treat hazardous material, which hazardous material is brought into the Building or onto the Project after the date hereof by Landlord or any other tenant of the Project and is of such a nature, at that time, that a federal, State or municipal governmental authority, if it had then had knowledge of the presence of such hazardous material, in the state, and under the conditions, that it then exists in the Building or on the Project, would have then required the removal of such hazardous material or other remedial or containment action with respect thereto;

(p) costs of repairs or other work occasioned by fire, windstorm or other Casualty (other than those amounts within the deductible limits of insurance policies actually carried by Landlord, which amounts shall be includable as Operating Expenses so long as such deductibles are within the generally prevailing range of deductibles to policies carried by landlords of the Comparable Buildings) which are covered by Landlord's insurance policies or would be covered if Landlord had maintained insurance in accordance with this Lease;

(q) janitorial services, except for janitorial services for the Common Areas;

(r) the cost of correcting defects in the construction of the Building, Project or in the Building equipment;

(s) costs, attorneys' and other professional fees and expenses incurred in connection with lease negotiations with prospective Project tenants or the enforcement of leases affecting the Project;

(t) costs reimbursed to Landlord under any warranty carried by Landlord for the Building and/or the Project, which warranties Landlord shall use commercially reasonable efforts to enforce;

(u) penalties, fines or interest incurred as a result of Landlord's inability or failure to make payments when due;

(v) costs of Landlord's charitable or political contributions;

(w) costs of acquisition of any sculptures, paintings or other objects of art; or

(x) fees payable by Landlord for management of the Project and incentive fees, in excess of three percent (3%) (the "**Management Fee Cap**") of Landlord's gross rental revenues.

Landlord shall not make a profit by charging items to Operating Expenses that are otherwise also charged separately (i.e., not as the equivalent to Operating Expenses under this Lease) to tenants (including Tenant) of the Project.

4.2.5 **Taxes**.

4.2.5.1 "**Tax Expenses**" shall mean all federal, state, county, or local governmental or municipal taxes, fees, charges or other impositions of every kind and nature, whether general, special, ordinary or extraordinary (including, without limitation, real estate taxes, general and special assessments, transit taxes, leasehold taxes or taxes based upon the receipt of rent, including gross receipts or sales taxes applicable to the receipt of rent, unless required to be paid by Tenant, personal property taxes imposed upon the fixtures, machinery, equipment, apparatus, systems and equipment, appurtenances, furniture and other personal property used in connection with the Project, or any portion thereof), which shall be paid or accrued during any Expense Year (without regard to any different fiscal year used by such governmental or municipal authority) because of or in connection with the ownership, leasing and operation of the Project, or any portion thereof.

4.2.5.2 Tax Expenses shall include, without limitation: (i) Any tax on the rent, right to rent or other income from the Project, or any portion thereof, or as against the business of leasing the Project, or any portion thereof; (ii) Any assessment, tax, fee, levy or charge in addition to, or in substitution, partially or totally, of any assessment, tax, fee, levy or charge previously included within the definition of real property tax; (iii) Any assessment, tax, fee, levy, or charge allocable to or measured by the area of the Premises or the Rent payable hereunder, including, without limitation, any business or gross income tax or excise tax with respect to the receipt of such rent, or upon or with respect to the possession, leasing, operating, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises, or any portion thereof; and (iv) Any assessment, tax, fee, levy or charge, upon this transaction or any document to which Tenant is a party, creating or transferring an interest or an estate in the Premises or the improvements thereon.

4.2.5.3 Any costs and expenses (including, without limitation, reasonable attorneys' and consultants' fees) incurred in attempting to protest, reduce or minimize Tax Expenses shall be included in Tax Expenses in the Expense Year such expenses are incurred. Tax refunds shall be credited against Tax Expenses and refunded to Tenant regardless of when received, based on the Expense Year to which the refund is applicable, provided that in no event shall the amount to be refunded to Tenant for any such Expense Year exceed the total amount paid by Tenant as Additional Rent under this Article 4 for such Expense Year. If Tax Expenses for any period during the Lease Term or any extension thereof are increased after payment thereof for any reason, including, without limitation, error or reassessment by applicable governmental or municipal authorities, Tenant shall pay Landlord upon demand Tenant's Share of any such increased Tax Expenses. Notwithstanding anything to the contrary contained in this Section 4.2.5, there shall be excluded from Tax Expenses (i) all excess profits taxes, franchise taxes, gift taxes, capital stock taxes, inheritance and succession taxes, estate taxes, federal and state income taxes, and other taxes to the extent applicable to Landlord's net income (as opposed to rents, receipts or income attributable to operations at the Project), (ii) any items included as Operating Expenses, and (iii) any items paid by Tenant under Section 4.5 of this Lease.

4.2.6 "**Tenant's Share**" shall mean the percentage set forth in Section 6 of the Summary.

4.3 **Allocation of Direct Expenses**. The parties acknowledge that the Building is a part of a multi-building project and that the costs and expenses incurred in connection with the Project (i.e., the Direct Expenses) should be shared between the Building and the other buildings in the Project. Accordingly, as set forth in Section 4.2 above, Direct Expenses (which consist of Operating Expenses and tax Expenses) are determined annually for the Project as a whole, and a portion of the Direct Expenses, which portion shall be determined by Landlord on an equitable basis, shall be allocated to the Building (as opposed to other buildings in the Project). Such portion of Direct Expenses allocated to the Building shall include all Direct Expenses attributable solely to the Building and an equitable portion of the Direct Expenses attributable to the Project as a whole, and shall not include Direct Expenses attributable solely to other buildings in the Project.

4.4 **Calculation and Payment of Additional Rent**. Tenant shall pay to Landlord, in the manner set forth in Section 4.4.1, below, and as Additional Rent, Tenant's Share of Direct Expenses for each Expense Year.

4.4.1 **Statement of Actual Direct Expenses and Payment by Tenant**. Landlord shall give to Tenant following the end of each Expense Year, a statement (the "**Statement**") which shall state the Direct Expenses incurred or accrued for such preceding Expense Year, and which shall indicate the amount of Tenant's Share of Direct Expenses. Landlord shall endeavor to provide such Statement within four (4) months following the end of

the applicable Expense Year, and shall provide such Statement within eight (8) months following the end of the applicable Expense Year. Upon receipt of the Statement for each Expense Year commencing or ending during the Lease Term, Tenant shall pay, with its next installment of Base Rent due, the full amount of Tenant's Share of Direct Expenses for such Expense Year, less the amounts, if any, paid during such Expense Year as "**Estimated Direct Expenses**," as that term is defined in Section 4.4.2, below, and if Tenant paid more as Estimated Direct Expenses than the actual Tenant's Share of Direct Expenses, Tenant shall receive a credit in the amount of Tenant's overpayment against Rent next due under this Lease or within thirty (30) days if the Lease Term has expired. The failure of Landlord to timely furnish the Statement for any Expense Year shall not prejudice Landlord or Tenant from enforcing its rights under this Article 4. Even though the Lease Term has expired and Tenant has vacated the Premises, when the final determination is made of Tenant's Share of Direct Expenses for the Expense Year in which this Lease terminates, Tenant shall pay to Landlord such amount within thirty (30) days, and if Tenant paid more as Estimated Direct Expenses than the actual Tenant's Share of Direct Expenses, Landlord shall, within thirty (30) days, deliver a check payable to Tenant in the amount of the overpayment or apply such overpayment against any unpaid Rent. The provisions of this Section 4.4.1 shall survive the expiration or earlier termination of the Lease Term.

4.4.2 **Statement of Estimated Direct Expenses**. In addition, Landlord shall give Tenant a yearly expense estimate statement (the "**Estimate Statement**") which shall set forth Landlord's reasonable estimate (the "**Estimate**") of what the total amount of Direct Expenses for the then-current Expense Year shall be and the estimated Tenant's Share of Direct Expenses (the "**Estimated Direct Expenses**"). Landlord shall endeavor to provide such Estimate Statement within four (4) months following the end of the applicable Expense Year, and shall provide such Estimate Statement within eight (8) months following the end of the applicable Expense Year. The failure of Landlord to timely furnish the Estimate Statement for any Expense Year shall not preclude Landlord from enforcing its rights to collect any Estimated Direct Expenses under this Article 4, nor shall Landlord be prohibited from revising any Estimate Statement or Estimated Direct Expenses theretofore delivered to the extent necessary, but in no event more than once per Estimated Statement. Thereafter, Tenant shall pay, with its next installment of Base Rent due, a fraction of the Estimated Direct Expenses for the then-current Expense Year (reduced by any amounts paid pursuant to the last sentence of this Section 4.4.2). Such fraction shall have as its numerator the number of months which have elapsed in such current Expense Year, including the month of such payment, and twelve (12) as its denominator. Until a new Estimate Statement is furnished (which Landlord shall have the right to deliver to Tenant at any time), Tenant shall pay monthly, with the monthly Base Rent installments, an amount equal to one-twelfth (1/12) of the total Estimated Direct Expenses set forth in the previous Estimate Statement delivered by Landlord to Tenant.

4.5 **Taxes and Other Charges for Which Tenant Is Directly Responsible**. Tenant shall be liable for and shall pay ten (10) days before delinquency, taxes levied against Tenant's equipment, furniture, fixtures and any other personal property located in or about the Premises. If any such taxes on Tenant's equipment, furniture, fixtures and any other personal property are levied against Landlord or Landlord's property or if the assessed value of Landlord's property is increased by the inclusion therein of a value placed upon such equipment, furniture, fixtures or any other personal property and if Landlord pays the taxes based upon such increased assessment, which Landlord shall have the right to do regardless of the validity thereof but only under proper protest if requested by Tenant, Tenant shall upon demand repay to Landlord the taxes so levied against Landlord or the proportion of such taxes resulting from such increase in the assessment, as the case may be.

4.6 **Landlord's Books and Records**. Within one hundred twenty (120) days after receipt by Tenant of a Statement, if Tenant disputes the amount of Additional Rent set forth in the Statement, a member of Tenant's finance department, or an independent certified public accountant (which accountant is a member of a nationally recognized accounting firm and is not working on a contingency fee basis) ("**Tenant's Accountant**"), designated and paid for by Tenant, may, after reasonable notice to Landlord and at reasonable times, inspect Landlord's records with respect to the Statement at Landlord's offices, provided that there is no existing Event of Default and Tenant has paid all amounts required to be paid under the applicable Estimate Statement and Statement, as the case may be. In connection with such inspection, Tenant and Tenant's agents must agree in advance to follow Landlord's reasonable rules and procedures regarding inspections of Landlord's records, and shall execute a commercially reasonable confidentiality agreement regarding such inspection. Tenant's failure to dispute the amount of Additional Rent set forth in any Statement within one hundred twenty (120) days of Tenant's receipt of such Statement shall be deemed to be Tenant's approval of such Statement and Tenant, thereafter, waives the right or ability to dispute the amounts set forth in such Statement. If after such inspection, Tenant still disputes such Additional Rent, a determination as to the proper amount shall be made, at Tenant's expense, by an independent certified public accountant (the "**Accountant**") selected by Landlord and subject to Tenant's reasonable approval; provided that if such Accountant determines that Direct Expenses were overstated by more than five percent (5%), then the cost of the Accountant and the cost of such determination shall be paid for by Landlord, and Landlord shall reimburse Tenant for the cost of the Tenant's Accountant (provided that such cost shall be a reasonable market cost for such

services). Tenant hereby acknowledges that Tenant's sole right to inspect Landlord's books and records and to contest the amount of Direct Expenses payable by Tenant shall be as set forth in this Section 4.6, and Tenant hereby waives any and all other rights pursuant to applicable law to inspect such books and records and/or to contest the amount of Direct Expenses payable by Tenant.

5. USE OF PREMISES

5.1 **Permitted Use**. Tenant shall use the Premises solely for the Permitted Use set forth in Section 7 of the Summary and Tenant shall not use or permit the Premises or the Project to be used for any other purpose or purposes whatsoever without the prior written consent of Landlord, which may be withheld in Landlord's sole discretion. For the avoidance of all doubt, Landlord confirms that Tenant's use of the Premises as of the Lease Commencement Date is a Permitted Use.

5.2 **Prohibited Uses**. Tenant further covenants and agrees that Tenant shall not use, or suffer or permit any person or persons to use, the Premises or any part thereof for any use or purpose in violation of the laws of the United States of America, the State of California, or the ordinances, regulations or requirements of the local municipal or county governing body or other lawful authorities having jurisdiction over the Project) including, without limitation, any such laws, ordinances, regulations or requirements relating to hazardous materials or substances, as those terms are defined by Applicable Laws now or hereafter in effect, or any Underlying Documents. Landlord shall have the right to impose reasonable and customary rule and regulations regarding the use of the Project that do not unreasonably interfere with Tenant's use of the Premises, as reasonably deemed necessary by Landlord with respect to the orderly operation of the Project, and Tenant shall comply with such reasonable rules and regulations. Landlord's current set of such rules and regulations are attached hereto as **Exhibit H**. Tenant shall not do or permit anything to be done in or about the Premises which will in any way damage the reputation of the Project or obstruct or interfere with the rights of other tenants or occupants of the Building, or use or allow the Premises to be used for any unlawful purpose, nor shall Tenant cause, maintain or permit any nuisance in, on or about the Premises. Tenant shall comply with, and Tenant's rights and obligations under the Lease and Tenant's use of the Premises shall be subject and subordinate to, all recorded easements, covenants, conditions, and restrictions now or hereafter affecting the Project.

5.3 **Hazardous Materials**.

5.3.1 **Tenant's Obligations**.

5.3.1.1 **Prohibitions**. As a material inducement to Landlord to enter into this Lease with Tenant, Tenant has fully and accurately completed Landlord's Pre-Leasing Environmental Exposure Questionnaire (the "**Environmental Questionnaire**"), which is attached as **Exhibit E**. Tenant agrees that except for those chemicals or materials, and their respective quantities, specifically listed on the Environmental Questionnaire, neither Tenant nor Tenant's employees, contractors and subcontractors of any tier, entities with a contractual relationship with Tenant (other than Landlord), or any entity acting as an agent or sub-agent of Tenant (collectively, "**Tenant's Agents**") will produce, use, store or generate any "Hazardous Materials," as that term is defined below, on, under or about the Premises, nor cause or permit any Hazardous Material to be brought upon, placed, stored, manufactured, generated, blended, handled, recycled, used or "Released," as that term is defined below, on, in, under or about the Premises. If any information provided to Landlord by Tenant on the Environmental Questionnaire, or otherwise relating to information concerning Hazardous Materials is false, incomplete, or misleading in any material respect, the same shall be deemed an Event of Default if not timely cured by Tenant under this Lease. Tenant shall notify Landlord prior to using any Hazardous Materials in the Premises not described on the initial Environmental Questionnaire, and, to the extent such use would, in Landlord's reasonable judgment, cause a material increase in the risk of liability compared to the uses previously allowed in the Premises, such additional use shall be subject to Landlord's prior consent, which may be withheld in Landlord's reasonable discretion. Tenant shall not install or permit any underground storage tank on the Premises. For purposes of this Lease, "**Hazardous Materials**" means all flammable explosives, petroleum and petroleum products, waste oil, radon, radioactive materials, toxic pollutants, asbestos, polychlorinated biphenyls ("**PCBs**"), medical waste, chemicals known to cause cancer or reproductive toxicity, pollutants, contaminants, hazardous wastes, toxic substances or related materials, including without limitation any chemical, element, compound, mixture, solution, substance, object, waste or any combination thereof, which is or may be hazardous to human health, safety or to the environment due to its radioactivity, ignitability, corrosiveness, reactivity, explosiveness, toxicity, carcinogenicity,

infectiousness or other harmful or potentially harmful properties or effects, or defined as, regulated as or included in, the definition of "hazardous substances," "hazardous wastes," "hazardous materials," or "toxic substances" under any Environmental Laws, except de minimis quantities of customary office supplies and cleaning materials used in strict compliance with Environmental Laws. The term "Hazardous Materials" for purposes of this Lease shall also include any mold, fungus or spores, whether or not the same is defined, listed, or otherwise classified as a "hazardous material" under any Environmental Laws, if such mold, fungus or spores may pose a risk to human health or the environment or negatively impact the value of the Premises. For purposes of this Lease, "**Release**" or "**Released**" or "**Releases**" shall mean any release, deposit, discharge, emission, leaking, spilling, seeping, migrating, injecting, pumping, pouring, emptying, escaping, dumping, disposing, or other movement of Hazardous Materials into the environment.

5.3.1.2 **Notices to Landlord**. Tenant shall notify Landlord in writing as soon as possible but in no event later than five (5) days after (i) Tenant becomes aware of the occurrence of any actual, alleged or threatened Release of any Hazardous Material in, on, under, from, about or in the vicinity of the Premises (whether past or present), regardless of the source or quantity of any such Release, or (ii) Tenant becomes aware of any regulatory actions, inquiries, inspections, investigations, directives, or any cleanup, compliance, enforcement or abatement proceedings (including any threatened or contemplated investigations or proceedings) relating to or potentially affecting the Premises, or (iii) Tenant becomes aware of any claims by any person or entity relating to any Hazardous Materials in, on, under, from, about or in the vicinity of the Premises, whether relating to damage, contribution, cost recovery, compensation, loss or injury. Collectively, the matters set forth in clauses (i), (ii) and (iii) above are hereinafter referred to as "**Hazardous Materials Claims**". Tenant shall promptly forward to Landlord copies of all orders, notices, permits, applications and other communications and reports in connection with any Hazardous Materials Claims. Additionally, Tenant shall promptly advise Landlord in writing of Tenant's discovery of any occurrence or condition on, in, under or about the Premises that could subject Tenant or Landlord to any liability, or restrictions on ownership, occupancy, transferability or use of the Premises under any "Environmental Laws," as that term is defined below. Tenant shall not enter into any legal proceeding or other action, settlement, consent decree or other compromise with respect to any Hazardous Materials Claims without first notifying Landlord of Tenant's intention to do so and affording Landlord the opportunity to join and participate, as a party if Landlord so elects, in such proceedings and in no event shall Tenant enter into any agreements which are binding on Landlord or the Premises without Landlord's prior written consent. Landlord shall have the right to appear at and participate in, any and all legal or other administrative proceedings concerning any Hazardous Materials Claim. For purposes of this Lease, "**Environmental Laws**" means all applicable present and future laws relating to the protection of human health, safety, wildlife or the environment, including, without limitation, (i) all requirements pertaining to reporting, licensing, permitting, investigation and/or remediation of emissions, discharges, Releases, or threatened Releases of Hazardous Materials, whether solid, liquid, or gaseous in nature, into the air, surface water, groundwater, or land, or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport, or handling of Hazardous Materials; and (ii) all requirements pertaining to the health and safety of employees or the public. Environmental Laws include, but are not limited to, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 USC § 9601, et seq., the Hazardous Materials Transportation Authorization Act of 1994, 49 USC § 5101, et seq., the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, and Hazardous and Solid Waste Amendments of 1984, 42 USC § 6901, et seq., the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977, 33 USC § 1251, et seq., the Clean Air Act of 1966, 42 USC § 7401, et seq., the Toxic Substances Control Act of 1976, 15 USC § 2601, et seq., the Safe Drinking Water Act of 1974, 42 USC §§ 300f through 300j, the Occupational Safety and Health Act of 1970, as amended, 29 USC § 651 et seq., the Oil Pollution Act of 1990, 33 USC § 2701 et seq., the Emergency Planning and Community Right-To-Know Act of 1986, 42 USC § 11001 et seq., the National Environmental Policy Act of 1969, 42 USC § 4321 et seq., the Federal Insecticide, Fungicide and Rodenticide Act of 1947, 7 USC § 136 et seq., California Carpenter-Presley-Tanner Hazardous Substance Account Act, California Health & Safety Code §§ 25300 et seq., Hazardous Materials Release Response Plans and Inventory Act, California Health & Safety Code, §§ 25500 et seq., Underground Storage of Hazardous Substances provisions, California Health & Safety Code, §§ 25280 et seq., California Hazardous Waste Control Law, California Health & Safety Code, §§ 25100 et seq., and any other state or local law counterparts, as amended, as such Applicable Laws, are in effect as of the Lease Commencement Date, or thereafter adopted, published, or promulgated.

5.3.1.3 **Releases of Hazardous Materials**. If, due to the acts or omissions of Tenant or any Tenant's Agent, any Release of any Hazardous Material in, on, under, from or about the Premises shall occur at any time during the Lease Term and/or if, due to the acts or omissions of Tenant or any Tenant's Agent, any other Hazardous Material condition exists at the Premises that requires response actions of any kind, in addition to notifying Landlord as specified above, Tenant, at its own sole cost and expense, shall (i) immediately comply with any and all reporting requirements imposed pursuant to any and all Environmental Laws, (ii) provide a written certification to Landlord indicating that Tenant has complied with all applicable reporting requirements, (iii) take any and all necessary investigation, corrective and remedial action in accordance with any and all applicable Environmental Laws, utilizing an environmental consultant approved by Landlord (in its reasonable discretion), all in accordance with the provisions and requirements of this Section 5.3, including, without limitation, Section 5.3.4, and (iv) take any such additional investigative, remedial and corrective actions as Landlord shall in its reasonable discretion deem necessary such that the Premises are remediated to a condition that is substantially similar to the condition existing prior to such Release.

5.3.1.4 **Indemnification**.

5.3.1.4.1 **In General**. Without limiting in any way Tenant's obligations under any other provision of this Lease, Tenant shall be solely responsible for and shall protect, defend, indemnify and hold the Landlord Parties harmless from and against any and all claims, judgments, losses, damages, costs, expenses, penalties, enforcement actions, taxes, fines, remedial actions, liabilities (including, without limitation, actual attorneys' fees, litigation, arbitration and administrative proceeding costs, expert and consultant fees and laboratory costs) including, without limitation, consequential damages and sums paid in settlement of claims, which arise during or after the Lease Term, whether foreseeable or unforeseeable, that arise during or after the Lease Term in whole or in part, foreseeable or unforeseeable, directly or indirectly arising out of or attributable to the presence, use, generation, manufacture, treatment, handling, refining, production, processing, storage, Release or presence of Hazardous Materials in, on, under or about the Premises by Tenant or Tenant's Agents.

5.3.1.4.2 **Limitations**. Notwithstanding anything in Section 5.3.1.4, above, to the contrary, Tenant's indemnity of Landlord as set forth in Section 5.3.1.4, above, shall not be applicable to claims based upon Hazardous Materials which may exist in, on or about the Premises as of the date of this Lease ("**Existing Hazardous Materials**"), except to the extent that Tenant's construction activities and/or Tenant's other acts or omissions (including Tenant's failure to remove, remediate or otherwise treat or "Clean-up," as that term is defined in Section 5.3.4, below, the subject Existing Hazardous Materials during the tenancy of the Premises) caused or exacerbated the subject claim.

5.3.1.5 **Compliance with Environmental Laws**. Without limiting the generality of Tenant's obligation to comply with Applicable Laws as otherwise provided in this Lease, Tenant shall, at its sole cost and expense, comply with all Environmental Laws. Tenant shall obtain and maintain any and all necessary permits, licenses, certifications and approvals appropriate or required for the use, handling, storage, and disposal of any Hazardous Materials used, stored, generated, transported, handled, blended, or recycled by Tenant on the Premises. Landlord shall have a continuing right, without obligation, to require Tenant to obtain, and to review and inspect any and all such permits, licenses, certifications and approvals, together with copies of any and all Hazardous Materials management plans and programs, any and all Hazardous Materials risk management and pollution prevention programs, and any and all Hazardous Materials emergency response and employee training programs respecting Tenant's use of Hazardous Materials. Upon request of Landlord, Tenant shall deliver to Landlord a narrative description explaining the nature and scope of Tenant's activities involving Hazardous Materials and showing to Landlord's satisfaction compliance with all Environmental Laws and the terms of this Lease.

5.3.2 **Assurance of Performance**.

5.3.2.1 **Environmental Assessments in General**. Landlord may, but shall not be required to, engage from time to time such contractors as Landlord determines to be appropriate to perform environmental assessments of a scope reasonably determined by Landlord (an "**Environmental Assessment**") to ensure Tenant's compliance with the requirements of this Lease with respect to Hazardous Materials.

5.3.2.2 **Costs of Environmental Assessments**. All costs and expenses incurred by Landlord in connection with any such Environmental Assessment initially shall be paid by Landlord; provided that if any such Environmental Assessment shows that Tenant has failed to comply with the provisions of this Section 5.3, then all of the costs and expenses of such Environmental Assessment shall be reimbursed by Tenant as Additional Rent within ten (10) days after receipt of written demand therefor.

5.3.3 **Tenant's Obligations upon Surrender**. At the expiration or earlier termination of the Lease Term, Tenant, at Tenant's sole cost and expense, shall: (i) cause an Environmental Assessment of the Premises to be conducted in accordance with Section 15.3; (ii) cause all Hazardous Materials brought onto the Premises by Tenant or Tenant's Agents to be removed from the Premises and disposed of in accordance with all Environmental Laws and as necessary to allow the Premises to be used for any purpose; and (iii) cause to be removed all containers installed or used by Tenant or Tenant's Agents to store any Hazardous Materials on the Premises, and cause to be repaired any damage to the Premises caused by such removal.

5.3.4 **Clean-up**.

5.3.4.1 **Environmental Reports; Clean-Up**. If any written report, including any report containing results of any Environmental Assessment (an "**Environmental Report**") shall indicate (i) the presence of any Hazardous Materials as to which Tenant has a removal or remediation obligation under this Section 5.3, and (ii) that as a result of same, the investigation, characterization, monitoring, assessment, repair, closure, remediation, removal, or other clean-up (the "**Clean-up**") of any Hazardous Materials is required, Tenant shall immediately prepare and submit to Landlord within thirty (30) days after receipt of the Environmental Report a comprehensive plan, subject to Landlord's written approval, which approval shall not be unreasonably withheld, conditioned, or delayed, specifying the actions to be taken by Tenant to perform the Clean-up so that the Premises are restored to the conditions required by this Lease. Upon Landlord's approval of the Clean-up plan, Tenant shall, at Tenant's sole cost and expense, without limitation on any rights and remedies of Landlord under this Lease, immediately implement such plan with a consultant reasonably acceptable to Landlord and proceed to Clean-Up Hazardous Materials in accordance with all Applicable Laws and as required by such plan and this Lease. If, within thirty (30) days after receiving a copy of such Environmental Report, Tenant fails either (a) to complete such Clean-up, or (b) with respect to any Clean-up that cannot be completed within such thirty-day period, fails to proceed with diligence to prepare the Clean-up plan and complete the Clean-up as promptly as practicable, then Landlord shall have the right, but not the obligation, and without waiving any other rights under this Lease, to carry out any Clean-up recommended by the Environmental Report or required by any governmental authority having jurisdiction over the Premises, and recover all of the costs and expenses thereof from Tenant as Additional Rent, payable within ten (10) days after receipt of written demand therefor.

5.3.4.2 **No Rent Abatement**. Tenant shall continue to pay all Rent due or accruing under this Lease during any Clean-up, and shall not be entitled to any reduction, offset or deferral of any Base Rent or Additional Rent due or accruing under this Lease during any such Clean-up.

5.3.4.3 **Surrender of Premises**. Tenant shall complete any Clean-up prior to surrender of the Premises upon the expiration or earlier termination of this Lease. Tenant shall obtain and deliver to Landlord a letter or other written determination from the overseeing governmental authority confirming that the Clean-up has been completed in accordance with all requirements of such governmental authority and that no further response action of any kind is required for the unrestricted use of the Premises ("**Closure Letter**"). Upon the expiration or earlier termination of this Lease, Tenant shall also be obligated to close all permits obtained in connection with Hazardous Materials in accordance with Applicable Laws.

5.3.4.4 **Failure to Timely Clean-Up**. Should any Clean-up for which Tenant is responsible not be completed, or should Tenant not receive the Closure Letter and any governmental approvals required under Environmental Laws in conjunction with such Clean-up prior to the expiration or earlier termination of this Lease, then Tenant shall be liable to Landlord as a holdover tenant (as more particularly provided in Article 16) until Tenant has fully complied with its obligations under this Section 5.3.

5.3.5 **Confidentiality**. Unless compelled to do so by Applicable Law, Tenant agrees that Tenant shall not disclose, discuss, disseminate or copy any information, data, findings, communications, conclusions and

reports regarding the environmental condition of the Premises to any Person (other than Tenant's consultants, attorneys, property managers and employees that have a need to know such information), including any governmental authority, without the prior written consent of Landlord. In the event Tenant reasonably believes that disclosure is compelled by Applicable Law, to the extent legally permissible it shall provide Landlord ten (10) days' advance notice of disclosure of confidential information so that Landlord may attempt to obtain a protective order. Tenant may additionally release such information to attorneys, accountants and other consultants and advisors and bona fide prospective purchasers or lenders, subject to any such parties' written agreement to be bound by the terms of this Section 5.3.

5.3.6 **Copies of Environmental Reports**. Within thirty (30) days of receipt thereof, Tenant shall provide Landlord with a copy of any and all environmental assessments, audits, studies and reports regarding Tenant's activities with respect to the Premises, or ground water beneath the Land, or the environmental condition or Clean-up thereof. Tenant shall be obligated to provide Landlord with a copy of such materials without regard to whether such materials are generated by Tenant or prepared for Tenant, or how Tenant comes into possession of such materials.

5.3.7 **Intentionally Omitted**.

5.3.8 **Signs, Response Plans, Etc**. Tenant shall be responsible for posting on the Premises any signs required under applicable Environmental Laws in connection with any required Clean-up necessitated by Tenant's use of the Premises. Tenant shall also complete and file any business response plans or inventories required by any Applicable Laws in connection with any required Clean-up necessitated by Tenant's use of the Premises. Tenant shall concurrently file a copy of any such business response plan or inventory with Landlord.

5.3.9 **Survival**. Each covenant, agreement, representation, warranty and indemnification made by Tenant set forth in this Section 5.3 shall survive the expiration or earlier termination of this Lease and shall remain effective until all of Tenant's obligations under this Section 5.3 have been completely performed and satisfied.

6. SERVICES AND UTILITIES

6.1 **In General**. Tenant will be responsible, at its sole cost and expense, for the furnishing of all services and utilities to the Premises, including, but not limited to heating, ventilation and air-conditioning, electricity, water, telephone, janitorial and interior Building security services.

6.1.1 All utilities (including without limitation, electricity, gas, sewer and water) to the Building are separately metered at the Premises and shall be paid directly by Tenant to the applicable utility provider.

6.1.2 Landlord shall not provide janitorial services for the Premises. Tenant shall be solely responsible for performing all janitorial services and other cleaning of the Premises, all in compliance with Applicable Laws. The janitorial and cleaning of the Premises shall be adequate to maintain the Premises in a manner consistent with First Class Life Sciences Projects.

Tenant shall cooperate fully with Landlord at all times and abide by all regulations and requirements that Landlord may reasonably prescribe for the proper functioning and protection of the HVAC, electrical, mechanical and plumbing systems. Provided that Landlord agrees to provide and maintain and keep in continuous service utility connections to the Project, including electricity, water and sewage connections, Landlord shall have no obligation to provide any services or utilities to the Building, including, but not limited to heating, ventilation and air-conditioning, electricity, water, telephone, janitorial and interior Building security services.

6.2 **Interruption of Use**. Tenant agrees that Landlord shall not be liable for damages, by abatement of Rent or otherwise, for failure to furnish or delay in furnishing any service (including telephone and telecommunication services), or for any diminution in the quality or quantity thereof, when such failure or delay or diminution is occasioned, in whole or in part, by breakage, repairs, replacements, or improvements, by any strike, lockout or other labor trouble, by inability to secure electricity, gas, water, or other fuel at the Building or Project after reasonable effort to do so, by any riot or other dangerous condition, emergency, accident or Casualty (as that term is defined in Section 11.1 below) whatsoever, by act or default of Tenant or other parties, or by any other cause beyond Landlord's reasonable control (provided that the foregoing shall not limit Landlord's liability, if any,

pursuant to applicable law for personal injury and property damage to the extent caused by the gross negligence or willful misconduct of Landlord, its agents, employees or contractors); and such failures or delays or diminution shall never be deemed to constitute an eviction or disturbance of Tenant's use and possession of the Premises or relieve Tenant from paying Rent or performing any of its obligations under this Lease. Furthermore, Landlord shall not be liable under any circumstances for a loss of, or injury to, property or for injury to, or interference with, Tenant's business, including, without limitation, loss of profits, however occurring, through or in connection with or incidental to a failure to furnish any of the services or utilities as set forth in this Article 6.

6.3 **Energy Performance Disclosure Information**. Tenant hereby acknowledges that Landlord may be required to disclose certain information concerning the energy performance of the Building pursuant to California Public Resources Code Section 25402.10 and the regulations adopted pursuant thereto (collectively the "**Energy Disclosure Requirements**"). Tenant hereby acknowledges prior receipt of the Data Verification Checklist, as defined in the Energy Disclosure Requirements (the "**Energy Disclosure Information**"), and agrees that Landlord has timely complied in full with Landlord's obligations under the Energy Disclosure Requirements. Tenant acknowledges and agrees that (i) Landlord makes no representation or warranty regarding the energy performance of the Building or the accuracy or completeness of the Energy Disclosure Information, (ii) the Energy Disclosure Information is for the current occupancy and use of the Building and that the energy performance of the Building may vary depending on future occupancy and/or use of the Building, and (iii) Landlord shall have no liability to Tenant for any errors or omissions in the Energy Disclosure Information. If and to the extent not prohibited by Applicable Laws, Tenant hereby waives any right Tenant may have to receive the Energy Disclosure Information, including, without limitation, any right Tenant may have to terminate this Lease as a result of Landlord's failure to disclose such information. Further, Tenant hereby releases Landlord from any and all losses, costs, damages, expenses and/or liabilities relating to, arising out of and/or resulting from the Energy Disclosure Requirements, including, without limitation, any liabilities arising as a result of Landlord's failure to disclose the Energy Disclosure Information to Tenant prior to the execution of this Lease. Tenant's acknowledgment of the AS-IS condition of the Premises pursuant to the terms of this Lease shall be deemed to include the energy performance of the Building. Tenant further acknowledges that pursuant to the Energy Disclosure Requirements, Landlord may be required in the future to disclose information concerning Tenant's energy usage to certain third parties, including, without limitation, prospective purchasers, lenders and tenants of the Building (the "**Tenant Energy Use Disclosure**"). Tenant hereby (A) consents to all such Tenant Energy Use Disclosures, and (B) acknowledges that Landlord shall not be required to notify Tenant of any Tenant Energy Use Disclosure. Further, Tenant hereby releases Landlord from any and all losses, costs, damages, expenses and liabilities relating to, arising out of and/or resulting from any Tenant Energy Use Disclosure. The terms of this Section 6.3 shall survive the expiration or earlier termination of this Lease.

6.4 **Emergency Generators**.

6.4.1 **Existing Generator**. There is an existing emergency generator (all such equipment defined collectively as the "**Existing Generator**") serving the Building, and Tenant shall have the continuing right to remain connected the Existing Generator for up to Tenant's Share of the electrical capacity provided by such Existing Generator at no additional cost to Tenant. Tenant's use of the Existing Generator shall be at Tenant's sole risk, and Tenant acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty regarding the Existing Generator. Except with respect to bodily injury and property damage to the extent caused by the gross negligence or willful misconduct of Landlord, Tenant hereby waives any claims against Landlord or any Landlord Parties resulting from Tenant's use of the Existing Generator, or any failure of the Existing Generator to operate as designed, and agrees that Landlord shall not be liable for any damages resulting from any failure in operation of the Existing Generator, including, without limitation any injury or damage to, or interference with, Tenant's business, including but not limited to, loss of profits, loss of rents or other revenues, loss of business opportunity, loss of goodwill or loss of use, or loss to equipment, inventory, scientific research, scientific experiments, laboratory animals, products, specimens, samples, and/or scientific, business, accounting and other records of every kind and description kept at the Premises and any and all income derived or derivable therefrom. If Landlord fails to install the Existing Generator for any reason whatsoever, Landlord shall not be liable for any damages resulting therefrom. Tenant shall not be charged any additional rental or other costs for the use of the location in which the Existing Generator is located.

6.4.2 **Tenant's Emergency Generator**. In the event Tenant wishes to install a separate generator to provide back-up generator services to the Premises instead of, or in addition to, the existing Emergency Generator, subject to the receipt of all necessary approvals from the applicable governmental authority, Tenant shall have the right to install a back-up generator in the Premises, or outside the Premises in the location reasonably designated by Landlord (subject to the same being approved by the city), as an Alteration (in which case such installation shall be governed by the terms of Article 8) (the "**Tenant Generator**"). Tenant acknowledges that Landlord has not made any representation regarding the receipt of approvals for the Tenant Generator, and if Tenant is unable for any reason to receive such approvals, Landlord shall not be liable for any damages resulting therefrom. In the event such Tenant Generator is installed, then during the Lease Term, Tenant shall maintain such Tenant Generator at Tenant's sole cost and expense. Notwithstanding the foregoing, Landlord shall not be liable for any damages whatsoever resulting from any failure in operation of the Tenant Generator, or the failure of the Tenant Generator to provide suitable or adequate back-up power to the Premises, including but not limited to, loss of profits, loss of rents or other revenues, loss of business opportunity, loss of goodwill or loss of use, in each case, however occurring, or loss to inventory, scientific research, scientific experiments, laboratory animals, products, specimens, samples, and/or scientific, business, accounting and other records of every kind and description kept at the Premises and any and all income derived or derivable therefrom. Tenant's obligations with respect to the Premises, including the insurance and indemnification obligations contained in Article 10, below, shall apply to Tenant's use of the Tenant Generator and Tenant shall carry industry standard Boiler and machinery insurance covering the Tenant Generator. Tenant shall maintain all required permits in connection with the Tenant Generator throughout the Lease Term. If installed, at Landlord's election prior to the expiration or earlier termination of this Lease, Tenant shall either (A) leave the Tenant Generator in place, in which event Tenant shall surrender the Generator (and shall transfer to Landlord all permits maintained by Tenant in connection with the Generator during the Lease Term) concurrent with the surrender of the Premises to Landlord as required hereunder in good operating and working order, with all permits current, or (B) remove the Tenant Generator prior to the expiration or earlier termination of this Lease, and repair all damage to the Building and Premises resulting from such removal, at Tenant's sole cost and expense. In the event that Landlord fails to expressly elect to have the Tenant Generator left in place upon the expiration or earlier termination of this Lease, then Landlord shall be deemed to have elected to have Tenant remove such Tenant Generator.

7. REPAIRS

7.1 **Tenant Repair Obligations**. Subject to Landlord's Repair Obligations set forth in Section 7.4, Tenant shall, throughout the Term, at its sole cost and expense, maintain, repair, replace and improve as required, the Premises and Building and every part thereof in a good standard of maintenance, repair and replacement as required, and in good and sanitary condition, all in accordance with the standards of First Class Life Sciences Projects, except for Landlord Repair Obligations, whether or not such maintenance, repair, replacement or improvement is required in order to comply with Applicable Laws ("**Tenant's Repair Obligations**"), including, without limitation, the following: (1) glass, windows, window frames, window casements (including the repairing, resealing, cleaning and replacing of both interior and exterior windows) and skylights; (2) interior and exterior doors, door frames and door closers; (3) interior lighting (including, without limitation, light bulbs and ballasts); (4) the plumbing, sewer, drainage, electrical, fire protection, elevator, escalator, life safety and security systems and equipment, existing heating, ventilation and air-conditioning systems, and all other mechanical, electrical and communications systems and equipment (collectively, the "**Building Systems**"), including without limitation (i) any specialty or supplemental Building Systems installed by or for Tenant and (ii) all electrical facilities and equipment, including lighting fixtures, lamps, fans and any exhaust equipment and systems, electrical motors and all other appliances and equipment of every kind and nature located in, upon or about the Premises; (5) all communications systems serving the Premises; (6) all of Tenant's security systems in or about or serving the Premises; (7) Tenant's signage; (8) interior demising walls and partitions (including painting and wall coverings), equipment, floors, and any roll-up doors, ramps and dock equipment; and (9) the non-structural portions of the roof of the Building. Tenant shall additionally be responsible, at Tenant's sole cost and expense, to furnish all expendables, including light bulbs, paper goods and soaps, used in the Premises, and, to the extent that Landlord notifies Tenant in writing of its intention to no longer arrange for such monitoring, cause the fire alarm systems serving the Premises to be monitored by a monitoring or protective services firm approved by Landlord in writing.

7.2 **Service Contracts**. All Building Systems, including HVAC, elevators, main electrical, plumbing and fire/life-safety systems, shall be maintained, repaired and replaced by Tenant (i) in a commercially reasonable first-class condition, (ii) in accordance with any applicable manufacturer specifications relating to any particular component of such Building Systems, (iii) in accordance with Applicable Laws. Tenant shall contract with a qualified, experienced professional third-party service companies (a "**Service Contract**"). Tenant shall regularly, in accordance with commercially reasonable standards, generate and maintain preventive maintenance records relating

to each Building's mechanical and main electrical systems, including life safety, elevators and the central plant ("Preventative Maintenance Records"). In addition, upon Landlord's request, Tenant shall deliver a copy of all current Service Contracts to Landlord and/or a copy of the Preventative Maintenance Records.

7.3 **Landlord's Right to Perform Tenant's Repair Obligations**. Tenant shall notify Landlord in writing at least thirty (30) days prior to performing any material Tenant's Repair Obligations, including without limitation, any Tenant's Repair Obligation which affect the Building Systems, or which is reasonably anticipated to cost more than $100,000.00. Upon receipt of such notice from Tenant, Landlord shall have the right to either (i) perform such material Tenant's Repair Obligation by delivering notice of such election to Tenant within thirty (30) days following receipt of Tenant's notice, and Tenant shall pay Landlord the cost thereof (including Landlord's reasonable supervision fee) within thirty (30) days after receipt of an invoice therefor, or (ii) require Tenant to perform such Tenant's Repair Obligation at Tenant's sole cost and expense. If Tenant fails to perform any Tenant's Repair Obligation within a reasonable time period, as reasonably determined by Landlord, then Landlord may, but need not, following delivery of notice to Tenant of such election, make such Tenant Repair Obligation, and Tenant shall pay Landlord the cost thereof, (including Landlord's reasonable supervision fee) within thirty (30) days after receipt of an invoice therefor.

7.4 **Landlord Repair Obligations**. Landlord shall be responsible for repairs, and replacement as necessary to (i) the exterior walls, foundation and roof of the Building, the structural portions of the floors of the Building (the "**Building Structure**"), and (ii) the exterior doors and windows and waterproofing of the Building envelope, roof membrane, gutters, flashings and downspouts of the Building, utility connections to the Building, and the base Building plumbing, sewer, drainage, electrical, fire protection, elevator, life safety, heating, ventilation and air-conditioning systems, all except to the extent that such repairs are required due to the negligence or willful misconduct of Tenant (the "**Landlord Repair Obligation**"); provided, however, that if such repairs are due to the negligence or willful misconduct of Tenant, Landlord shall nevertheless make such repairs at Tenant's expense, or, if covered by Landlord's insurance, Tenant shall only be obligated to pay any deductible in connection therewith. In connection with the foregoing, Landlord hereby agrees that the repair and maintenance of the Building Structure shall be at Landlord's sole cost and expense, while the cost of all other Landlord Repair Obligation items set forth in item (ii) shall be permitted to be included in Operating Expenses.

8. ADDITIONS AND ALTERATIONS

8.1 **Landlord's Consent to Alterations**. Tenant may not make any improvements, alterations, additions or changes to the Premises or any mechanical, plumbing or HVAC facilities or systems pertaining to the Premises (collectively, the "**Alterations**") without first procuring the prior written consent of Landlord to such Alterations, which consent shall be requested by Tenant not less than twenty (20) days prior to the commencement thereof, and which consent shall not be unreasonably withheld, conditioned or delayed by Landlord, provided it shall be deemed reasonable for Landlord to withhold its consent to any Alteration which adversely affects the structural portions or the systems or equipment of the Building or is visible from the exterior of the Building. Notwithstanding the foregoing, Tenant shall be permitted to make Alterations following ten (10) business days' notice to Landlord, but without Landlord's prior consent, to the extent that such Alterations (i) do not affect the building systems or equipment, (ii) are not visible from the exterior of the Building, and (iii) cost less than $250,000.00 for a particular job of work. The construction of the initial improvements to the Premises shall be governed by the terms of the Tenant Work Letter and not the terms of this Article 8.

8.2 **Manner of Construction**. Landlord may impose, as a condition of its consent to any and all Alterations or repairs of the Premises or about the Premises, such requirements as Landlord in its reasonable discretion may deem desirable, including, but not limited to, the requirement that upon Landlord's request, Tenant shall, at Tenant's expense, remove such Alterations upon the expiration or any early termination of the Lease Term, only if such Alterations are Specialty Improvements which are not standard office and laboratory improvements. For the avoidance of doubt, Tenant shall only be responsible for removing Specialty Improvements (hereafter defined), if at the time of its consent to such Specialty Improvements, Landlord advises in writing in its consent that Tenant is obligated to remove such Specialty Improvements at the expiration of the Term. "**Specialty Improvements**" means, collectively, any alterations, additions or improvements to the Premises which are not typical alterations, additions or improvements found in similar, First Class Life Sciences Projects. Tenant shall not be required to remove any other Alterations or improvements at the surrender of the Premises and Tenant shall not be required to remove any of the Original Improvements (as that term is defined in Section 10.3.2 below). Tenant

shall construct such Alterations and perform such repairs in a good and workmanlike manner, in conformance with any and all applicable federal, state, county or municipal laws, rules and regulations and pursuant to a valid building permit, issued by the city in which the Building is located (or other applicable governmental authority). Tenant shall not use (and upon notice from Landlord shall cease using) contractors, services, workmen, labor, materials or equipment that, in Landlord's reasonable judgment, would disturb labor harmony with the workforce or trades engaged in performing other work, labor or services in or about the Building or the Common Areas. Upon completion of any Alterations (or repairs), Tenant shall deliver to Landlord final lien waivers from all contractors, subcontractors and materialmen who performed such work. In addition to Tenant's obligations under Article 9 of this Lease, upon completion of any Alterations, Tenant agrees to cause a Notice of Completion to be recorded in the office of the Recorder of the County San Mateo in accordance with Section 3093 of the Civil Code of the State of California or any successor statute, and Tenant shall deliver to the Project construction manager a reproducible copy of the "**as built**" drawings of the Alterations as well as all permits, approvals and other documents issued by any governmental agency in connection with the Alterations.

8.3 **Payment for Improvements**. If Tenant orders any work directly from Landlord, Tenant shall pay to Landlord an amount equal to three percent (3%) of the cost of such work to compensate Landlord for all overhead, general conditions, fees and other costs and expenses arising from Landlord's involvement with such work. If Tenant does not order any work directly from Landlord, Tenant shall reimburse Landlord for Landlord's reasonable, actual, out-of-pocket costs and expenses actually incurred in connection with Landlord's review of such work.

8.4 **Construction Insurance**. In addition to the requirements of Article 10 of this Lease, in the event that Tenant makes any Alterations, prior to the commencement of such Alterations, Tenant shall provide Landlord with evidence that Tenant carries "**Builder's All Risk**" insurance in an amount approved by Landlord covering the construction of such Alterations, and such other insurance as Landlord may reasonably require, it being understood and agreed that all of such Alterations shall be insured by Tenant pursuant to Article 10 of this Lease immediately upon completion thereof. In addition, Tenant's contractors and subcontractors shall be required to carry (i) Commercial General Liability Insurance in an amount approved by Landlord, with Landlord, and, at Landlord's option, Landlord's property manager and project manager, as additional insureds in an amount approved by Landlord, and otherwise in accordance with the requirements of Article 10 of this Lease, and (ii) workers compensation insurance with a waiver of subrogation in favor of Landlord. Landlord may, in its discretion, require Tenant to obtain a lien and completion bond or some alternate form of security satisfactory to Landlord in an amount sufficient to ensure the lien-free completion of such Alterations and naming Landlord as a co-obligee.

8.5 **Landlord's Property**. All Alterations, improvements, fixtures, equipment and/or appurtenances (other than non-affixed trade fixtures and equipment) which may be installed or placed in or about the Premises, from time to time, shall be at the sole cost of Tenant and shall be and become the property of Landlord and remain in place at the Premises following the expiration or earlier termination of this Lease, except that Tenant may remove any trade fixtures or equipment not permanently affixed to the Premises. Notwithstanding the foregoing, Landlord may, by written notice to Tenant at the time of its approval of working drawings, require Tenant, at Tenant's expense, to remove Specialty Improvements only and to repair any damage to the Premises and Building caused by such removal and return the affected portion of the Premises to a building standard tenant improved condition as reasonably determined by Landlord. This shall only apply to Specialty Improvements which are not standard office and laboratory improvements. If Tenant fails to complete such removal and/or to repair any damage caused by the removal of any Specialty Improvements in the Premises and return the affected portion of the Premises to a building standard tenant improved condition as reasonably determined by Landlord, Landlord may do so and may charge the cost thereof to Tenant.

9. COVENANT AGAINST LIENS Tenant shall keep the Project and Premises free from any liens or encumbrances arising out of the work performed, materials furnished, or obligations incurred by or on behalf of Tenant, and shall protect, defend, indemnify and hold Landlord harmless from and against any claims, liabilities, judgments or costs (including, without limitation, reasonable attorneys' fees and costs) arising out of same or in connection therewith. Tenant shall give Landlord notice at least twenty (20) days prior to the commencement of any such work on the Premises (or such additional time as may be necessary under Applicable Laws) to afford Landlord the opportunity of posting and recording appropriate notices of non-responsibility (to the extent applicable pursuant to then Applicable Laws). Tenant shall remove any such lien or encumbrance by bond or otherwise within ten (10) business days after notice by Landlord, and if Tenant shall fail to do so, Landlord may pay the amount necessary to remove such lien or encumbrance, without being responsible for investigating the validity thereof.

10. INSURANCE

10.1 **Indemnification and Waiver**. Except to the extent arising from the negligence or willful misconduct of Landlord, Tenant hereby assumes all risk of damage to property or injury to persons in, upon or about the Premises from any cause whatsoever and agrees that Landlord, its partners, subpartners and their respective officers, agents, servants, employees, lenders, any property manager and independent contractors (collectively, "**Landlord Parties**") shall not be liable for, and are hereby released from any responsibility for, any damage either to person or property or resulting from the loss of use thereof, which damage is sustained by Tenant or by other persons claiming through Tenant. Except to the extent arising from the negligence or willful misconduct of Landlord, Tenant shall indemnify, defend, protect, and hold harmless the Landlord Parties from any and all claims, loss, cost, damage, injury, expense and liability (including without limitation court costs and reasonable attorneys' fees) incurred in connection with or arising from any cause in, on or about the Premises, any acts, omissions or negligence of Tenant or of any person claiming by, through or under Tenant, or of the contractors, agents, servants, employees, invitees, guests or licensees of Tenant or any such person, in, on or about the Project or any breach of the terms of this Lease, either prior to, during, or after the expiration of the Lease Term, provided that the terms of the foregoing indemnity shall not apply if and from the time that a final adjudication has resulted in a finding of gross negligence or willful misconduct of Landlord or the Landlord Parties. Should Landlord be named as a defendant in any suit brought against Tenant in connection with or arising out of Tenant's occupancy of the Premises, Tenant shall pay to Landlord its costs and expenses incurred in such suit, including without limitation, its actual professional fees such as reasonable appraisers', accountants' and attorneys' fees. The provisions of this Section 10.1 shall survive the expiration or sooner termination of this Lease with respect to any claims or liability arising in connection with any event occurring prior to such expiration or termination.

10.2 **Tenant's Compliance with Landlord's Property Insurance**. Landlord shall insure the Building during the Lease Term against loss or damage under an "all risk" property insurance policy. Such coverage shall be in such amounts, from such companies, and on such other terms and conditions, as Landlord may from time to time reasonably determine. Additionally, at the option of Landlord, such insurance coverage may include the risks of earthquakes and/or flood damage and additional hazards, a rental loss endorsement and one or more loss payee endorsements in favor of the holders of any mortgages or deeds of trust encumbering the interest of Landlord in the Building or the ground or underlying lessors of the Building, or any portion thereof. Tenant shall, at Tenant's expense, comply with all reasonable and customary insurance company requirements pertaining to the use of the Premises. If Tenant's conduct or use of the Premises causes any increase in the premium for such insurance policies, then Tenant shall reimburse Landlord for any such increase. Tenant, at Tenant's expense, shall comply with all rules, orders, regulations or requirements of the American Insurance Association (formerly the National Board of Fire Underwriters) and with any similar body. Tenant shall also provide Landlord and Landlord's insurer(s) with such information regarding the use of the Premises and any damage to the Premises as they may require in connection with the placement of insurance for the Premises or the adjusting of any losses to the Premises.

10.3 **Tenant's Insurance**. Tenant shall maintain the following coverages in the following amounts.

10.3.1 Commercial General Liability Insurance on an occurrence form (except products liability) covering the insured against claims of bodily injury, personal injury and property damage (including loss of use thereof) arising out of Tenant's operations, and contractual liabilities, and including products and completed operations coverage, for limits of liability on a per location basis of not less than:

Bodily Injury and Property Damage Liability	$5,000,000 each occurrence $5,000,000 annual aggregate
Personal Injury Liability	$3,000,000 each occurrence $3,000,000 annual aggregate

10.3.2 Property Insurance covering (i) all office furniture, business and trade fixtures, office equipment, free-standing cabinet work, movable partitions, merchandise and all other items of Tenant's property on the Premises installed by, for, or at the expense of Tenant, (ii) the "**Tenant Improvements**," as that term is defined in the Tenant Work Letter, and any other improvements which exist in the Premises as of the Lease Commencement Date (excluding the Base Building) (the "**Original Improvements**"). Such insurance shall be written on a special form of physical loss or damage basis, for the full replacement cost value (subject to reasonable deductible amounts) new without deduction for depreciation of the covered items and in amounts that meet any co-insurance clauses of the policies of insurance and shall include coverage for damage or other loss caused by fire or other peril including, but not limited to, vandalism and malicious mischief, theft, water damage, including sprinkler leakage, bursting or stoppage of pipes, and explosion. Tenant hereby acknowledges that flood and earthquake risk exist with respect to the Premises and that it is responsible for obtaining the appropriate insurance coverages with respect to same, should Tenant desire to provide coverage for such risk. Tenant further acknowledges that Landlord shall not be liable for any damage caused by flood or earthquake with respect to Tenant's responsibilities under this Lease.

10.3.3 Business Income Interruption for one (1) year plus Extra Expense insurance in such amounts as will reimburse Tenant for actual direct or indirect loss of earnings attributable to the risks outlined in Section 10.3.2 above.

10.3.4 Worker's Compensation and Employer's Liability or other similar insurance pursuant to all applicable state and local statutes and regulations. The policy shall include a waiver of subrogation in favor of Landlord, its employees, Lenders and any property manager or partners.

10.4 **Form of Policies**. The minimum limits of policies of insurance required of Tenant under this Lease shall in no event limit the liability of Tenant under this Lease. Such insurance shall (i) name Landlord, its subsidiaries and affiliates, its property manager (if any) and any other party the Landlord so specifies, as an additional insured or loss payee, as applicable, including Landlord's managing agent, if any; (ii) be issued by an insurance company having a rating of not less than A:IX in Best's Insurance Guide or which is otherwise acceptable to Landlord and licensed to do business in the State of California; (iv) be primary insurance as to all claims thereunder and provide that any insurance carried by Landlord is excess and is non-contributing with any insurance required of Tenant; (v) be in form and content reasonably acceptable to Landlord; and (vi) provide that said insurance shall not be canceled or coverage changed unless thirty (30) days' prior written notice shall have been given to Landlord and any mortgagee of Landlord (unless such cancellation is the result of non-payment of premiums). Tenant shall deliver said policy or policies or certificates thereof to Landlord on or before the Lease Commencement Date and at least ten (10) days before the expiration dates thereof. In the event Tenant shall fail to procure such insurance, or to deliver such policies or certificate, Landlord may, at its option, procure such policies for the account of Tenant, and the cost thereof shall be paid to Landlord within five (5) days after delivery to Tenant of bills therefor.

10.5 **Subrogation**. Landlord and Tenant hereby agree to look solely to, and seek recovery only from, their respective insurance carriers in the event of a property or business interruption loss to the extent that such coverage is agreed to be provided hereunder. The parties each hereby waive all rights and claims against each other for such losses, and waive all rights of subrogation of their respective insurers, provided such waiver of subrogation shall not affect the right to the insured to recover thereunder. The parties agree that their respective insurance policies do now, or shall, contain the waiver of subrogation.

10.6 **Additional Insurance Obligations**. Tenant shall carry and maintain during the entire Lease Term, at Tenant's sole cost and expense, increased amounts of the insurance required to be carried by Tenant pursuant to this Article 10 and such other reasonable types of insurance coverage and in such reasonable amounts covering the Premises and Tenant's operations therein, as may be reasonably requested by Landlord or Landlord's lender, but in no event in excess of the amounts and types of insurance then being required by landlords of buildings comparable to and in the vicinity of the Building.

11. DAMAGE AND DESTRUCTION

11.1 **Repair of Damage**. Tenant shall promptly notify Landlord of any damage to the Premises resulting from fire or any other casualty ("**Casualty**"). If the Premises or any Common Areas serving or providing access to the Premises shall be damaged by Casualty, Landlord shall promptly and diligently, subject to reasonable delays for insurance adjustment or other matters beyond Landlord's reasonable control, and subject to all other terms of this Article 11, restore the Base Building and such Common Areas. Such restoration shall be to substantially the same condition of the Base Building and the Common Areas prior to the Casualty, except for modifications required by zoning and building codes and other laws or by the holder of a mortgage on the Building or Project or any other modifications to the Common Areas deemed desirable by Landlord, which are consistent with the character of the Project, provided that access to the Premises shall not be materially impaired. Subject to the terms of Section 11.2, below, Tenant shall, at its sole cost and expense, repair any injury or damage to the Tenant Improvements and the Original Improvements installed in the Premises and shall return such Tenant Improvements and Original Improvements to their original condition. Whether or not Landlord delivers a "Landlord Repair Notice," as that term is defined in Section 11.2 below, prior to the commencement of construction, Tenant shall submit to Landlord, for Landlord's review and approval, all plans, specifications and working drawings relating thereto, and Landlord shall select the contractors to perform such improvement work. Tenant shall in addition cooperate with requests for information regarding any repairs from Landlord's insurer(s) by providing the requested information within ten (10) days after Tenant receives the request. Landlord shall not be liable for any inconvenience or annoyance to Tenant or its visitors, or injury to Tenant's business resulting in any way from such damage or the repair thereof; provided however, that if such Casualty shall have damaged the Premises or Common Areas necessary to Tenant's occupancy, and the Premises are not occupied by Tenant as a result thereof, then during the time and to the extent the Premises are unfit for occupancy, the Rent shall be abated in proportion to the ratio that the amount of rentable square feet of the Premises which is unfit for occupancy for the purposes permitted under this Lease bears to the total rentable square feet of the Premises. In the event that Landlord shall not deliver the Landlord Repair Notice, Tenant's right to rent abatement pursuant to the preceding sentence shall terminate as of the date which is reasonably determined by Landlord to be the date Tenant should have completed repairs to the Premises assuming Tenant used reasonable due diligence in connection therewith. Notwithstanding any contrary provision of this Article 11, the parties hereby agree as follows: (i) the closure of the Project, the Building, the Common Areas, or any part thereof to protect public health shall not constitute a Casualty for purposes of this Lease, and (ii) Casualty under this Article 11 shall not be deemed to occur merely because Tenant is unable to productively use the Premises in the event that the physical and structural integrity of the Premises is undamaged.

11.2 **Landlord's Option to Repair**. Upon the occurrence of any damage to the Premises, Landlord may, at Landlord's option, deliver a notice (the "**Landlord Repair Notice**") to Tenant, and upon receipt of a Landlord Repair Notice Tenant shall assign to Landlord (or to any party designated by Landlord) all insurance proceeds payable to Tenant under Tenant's insurance required under Section 10.3 of this Lease, and Landlord shall repair any injury or damage to the Tenant Improvements and the Original Improvements installed in the Premises and shall return such Tenant Improvements and Original Improvements to their original condition; provided that if the cost of such repair by Landlord exceeds the amount of insurance proceeds received by Landlord from Tenant's insurance carrier (including by taking into account any deductible or self-insured retention), as assigned by Tenant, the cost of such repairs shall be paid by Tenant to Landlord prior to Landlord's commencement of repair of the damage. Notwithstanding the terms of Section 11.1 of this Lease, Landlord may elect not to rebuild and/or restore the Premises, Building and/or Project, and instead terminate this Lease, by notifying Tenant in writing of such termination within ninety (90) days after the date of discovery of the damage, such notice to include a termination date giving Tenant sixty (60) days to vacate the Premises, but Landlord may so elect only if the Building or Project shall be damaged by Casualty, whether or not the Premises are affected, and one or more of the following conditions is present: (i) in Landlord's reasonable judgment, repairs cannot reasonably be completed within one hundred eighty (180) days after the date of discovery of the damage (when such repairs are made without the payment of overtime or other premiums); (ii) the holder of any mortgage on the Building or Project or ground lessor with respect to the Building or Project shall require that the insurance proceeds or any portion thereof be used to retire the mortgage debt, or shall terminate the ground lease, as the case may be; (iii) the damage is not fully covered by Landlord's insurance policies; (iv) the damage occurs during the last twelve (12) months of the Lease Term; or (v) any owner of any other portion of the Project, other than Landlord, does not intend to repair the damage to such portion of the Project; provided, however, that if Landlord does not elect to terminate this Lease pursuant to Landlord's termination right as provided above, and the repairs cannot, in the reasonable opinion of Landlord, be completed within one (1) year after being commenced or the damage occurs during the last twelve (12) months of the Lease Term , Tenant may elect, no earlier than sixty (60) days after the date of the damage and not later than ninety (90) days after the date of such damage, to terminate this Lease by written notice to Landlord effective as of the date specified in the notice, which date shall not be less than thirty (30) days nor more than sixty (60) days after the date such notice is given by Tenant. Notwithstanding the provisions of this Section 11.2, Tenant shall have the right to terminate this Lease under this Section 11.2 only if each of the following conditions is satisfied: (a) the damage to the Project by

Casualty was not caused by the gross negligence or intentional act of Tenant or its partners or subpartners and their respective officers, agents, servants, employees, and independent contractors; (b) Tenant is not then in monetary or material non-monetary default under this Lease (beyond the applicable notice and cure periods); (c) as a result of the damage, Tenant cannot reasonably conduct business from fifty percent (50%) or more of the Premises for the Permitted Use; and, (d) as a result of the damage to the Project, Tenant does not occupy or use at least fifty percent (50%) of the Premises for the Permitted Use (as opposed to temporary storage purposes, or continued utilization of any server room within the Premises).

11.3 **Waiver of Statutory Provisions**. The provisions of this Lease, including this Article 11, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, the Building or the Project, and any statute or regulation of the State of California, including, without limitation, Sections 1932(2) and 1933(4) of the California Civil Code, with respect to any rights or obligations concerning damage or destruction in the absence of an express agreement between the parties, and any other statute or regulation, now or hereafter in effect, shall have no application to this Lease or any damage or destruction to all or any part of the Premises, the Building or the Project.

12. NONWAIVER No provision of this Lease shall be deemed waived by either party hereto unless expressly waived in a writing signed thereby. The waiver by either party hereto of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of any subsequent breach of same or any other term, covenant or condition herein contained. The subsequent acceptance of Rent hereunder by Landlord shall not be deemed to be a waiver of any preceding breach by Tenant of any term, covenant or condition of this Lease, other than the failure of Tenant to pay the particular Rent so accepted, regardless of Landlord's knowledge of such preceding breach at the time of acceptance of such Rent. No acceptance of a lesser amount than the Rent herein stipulated shall be deemed a waiver of Landlord's right to receive the full amount due, nor shall any endorsement or statement on any check or payment or any letter accompanying such check or payment be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the full amount due. No receipt of monies by Landlord from Tenant after the termination of this Lease shall in any way alter the length of the Lease Term or of Tenant's right of possession hereunder, or after the giving of any notice shall reinstate, continue or extend the Lease Term or affect any notice given Tenant prior to the receipt of such monies, it being agreed that after the service of notice or the commencement of a suit, or after final judgment for possession of the Premises, Landlord may receive and collect any Rent due, and the payment of said Rent shall not waive or affect said notice, suit or judgment.

13. CONDEMNATION If the whole or any part of the Premises, Building or Project shall be taken by power of eminent domain or condemned by any competent authority for any public or quasi-public use or purpose, or if any adjacent property or street shall be so taken or condemned, or reconfigured or vacated by such authority in such manner as to require the use, reconstruction or remodeling of any part of the Premises, Building or Project, or if Landlord shall grant a deed or other instrument in lieu of such taking by eminent domain or condemnation, Landlord shall have the option to terminate this Lease effective as of the date possession is required to be surrendered to the authority. If more than twenty-five percent (25%) of the rentable square feet of the Premises is taken, or if access to the Premises is substantially impaired, in each case for a period in excess of one hundred twenty (120) days, Tenant shall have the option to terminate this Lease effective on not less than ninety (90) days prior written notice or, if sooner as of the date possession is required to be surrendered to the authority. Tenant shall not because of such taking assert any claim against Landlord or the authority for any compensation because of such taking and Landlord shall be entitled to the entire award or payment in connection therewith, except that Tenant shall have the right to file any separate claim available to Tenant for any taking of Tenant's personal property and fixtures belonging to Tenant and removable by Tenant upon expiration of the Lease Term pursuant to the terms of this Lease, and for moving expenses, so long as such claims do not diminish the award available to Landlord, its ground lessor with respect to the Building or Project or its mortgagee, and such claim is payable separately to Tenant. All Rent shall be apportioned as of the date of such termination. If any part of the Premises shall be taken, and this Lease shall not be so terminated, the Rent shall be proportionately abated. Tenant hereby waives any and all rights it might otherwise have pursuant to Section 1265.130 of The California Code of Civil Procedure. Notwithstanding anything to the contrary contained in this Article 13, in the event of a temporary taking of all or any portion of the Premises for a period of one hundred and eighty (180) days or less, then this Lease shall not terminate but the Base Rent and the Additional Rent shall be abated for the period of such taking in proportion to the ratio that the amount of rentable square feet of the Premises taken bears to the total rentable square feet of the Premises. Landlord shall be entitled to receive the entire award made in connection with any such temporary taking. Notwithstanding any contrary provision of this Lease, the following governmental actions shall not constitute a taking or condemnation, either permanent or temporary: (i) an action that requires Tenant's business or the Building or Project to close during the Lease Term, and (ii) an action taken for the purpose of protecting public safety (e.g., to protect against acts of war,

the spread of communicable diseases, or an infestation), and no such governmental actions shall entitle Tenant to any compensation from Landlord or any authority, or Rent abatement or any other remedy under this Lease.

14. ASSIGNMENT AND SUBLETTING

14.1 **Transfers**. Tenant shall not, without the prior written consent of Landlord (to be granted or withheld pursuant to the terms of Section 14.2 below), assign, mortgage, pledge, hypothecate, encumber, or permit any lien to attach to, or otherwise transfer, this Lease or any interest hereunder, permit any assignment, or other transfer of this Lease or any interest hereunder by operation of law, sublet the Premises or any part thereof, or enter into any license or concession agreements or otherwise permit the occupancy or use of the Premises or any part thereof by any persons other than Tenant and its employees and contractors (all of the foregoing are hereinafter sometimes referred to collectively as "**Transfers**" and any person to whom any Transfer is made or sought to be made is hereinafter sometimes referred to as a "**Transferee**"). If Tenant desires Landlord's consent to any Transfer, Tenant shall notify Landlord in writing, which notice (the "**Transfer Notice**") shall include (i) the proposed effective date of the Transfer, which shall not be less than thirty (30) days nor more than one hundred eighty (180) days after the date of delivery of the Transfer Notice, (ii) a description of the portion of the Premises to be transferred (the "**Subject Space**"), (iii) all of the terms of the proposed Transfer and the consideration therefor, including calculation of the "**Transfer Premium**", as that term is defined in Section 14.3 below, in connection with such Transfer, the name and address of the proposed Transferee, and a copy of all existing executed and/or proposed documentation pertaining to the proposed Transfer, and (iv) current financial statements of the proposed Transferee certified by an officer, partner or owner thereof, business credit and personal references and history of the proposed Transferee and any other information reasonably required by Landlord which will enable Landlord to determine the financial responsibility, character, and reputation of the proposed Transferee, nature of such Transferee's business and proposed use of the Subject Space. Any Transfer made without Landlord's prior written consent shall, at Landlord's option, be null, void and of no effect, and shall, at Landlord's option, constitute an Event of Default by Tenant under this Lease. Whether or not Landlord consents to any proposed Transfer, Tenant shall pay Landlord's reasonable review and processing fees, as well as any reasonable professional fees (including, without limitation, attorneys', accountants', architects', engineers' and consultants' fees) incurred by Landlord, within thirty (30) days after written request by Landlord, provided that such fees shall not exceed $3,000.00 for any such Transfer in the ordinary course of business. For purposes of this Lease, "in the ordinary course of business" shall include, without limitation, the review of documents on no more than three (3) occasions in connection with any particular Transfer.

14.2 **Landlord's Consent**. Landlord shall not unreasonably withhold or delay its consent to any proposed Transfer of the Subject Space to the Transferee on the terms specified in the Transfer Notice. Without limitation as to other reasonable grounds for withholding consent, the parties hereby agree that it shall be reasonable under this Lease and under any Applicable Law for Landlord to withhold consent to any proposed Transfer where one or more of the following apply:

14.2.1 The Transferee is of a character or reputation or engaged in a business which is not consistent with the quality of the Building or the Project;

14.2.2 The Transferee is either a governmental agency or instrumentality thereof;

14.2.3 The Transferee under an assignment is not a party of reasonable financial worth and/or financial stability in light of the responsibilities to be undertaken in connection with the Transfer on the date consent is requested; or

14.2.4 The proposed Transfer would cause a violation of another lease for space in the Project, or would give an occupant of the Project a right to cancel its lease.

If Landlord consents to any Transfer pursuant to the terms of this Section 14.2 (and does not exercise any recapture rights Landlord may have under Section 14.4 of this Lease), Tenant may within six (6) months after Landlord's consent, but not later than the expiration of said six-month period, enter into such Transfer of the Premises or portion thereof, upon substantially the same terms and conditions as are set forth in the Transfer Notice furnished by Tenant to Landlord pursuant to Section 14.1 of this Lease, provided that if there are any changes in the terms and conditions from those specified in the Transfer Notice such that Landlord would initially have been entitled to refuse its consent to such Transfer under this Section 14.2, Tenant shall again submit the Transfer to Landlord for its approval and other action under this Article 14 (including Landlord's right of recapture, if any, under Section 14.4 of this Lease). Notwithstanding anything to the contrary in this Lease, if Tenant or any proposed Transferee claims that Landlord has unreasonably withheld or delayed its consent under Section 14.2 or otherwise has breached or acted unreasonably under this Article 14, their sole remedies shall be a suit for contract damages (other than damages for injury to, or interference with, Tenant's business including, without limitation, loss of profits, however occurring) or declaratory judgment and an injunction for the relief sought, and Tenant hereby waives all other remedies, including, without limitation, any right at law or equity to terminate this Lease, on its own behalf and, to the extent permitted under all Applicable Laws, on behalf of the proposed Transferee.

14.3 **Transfer Premium**. If Landlord consents to a Transfer, as a condition thereto which the parties hereby agree is reasonable, Tenant shall pay to Landlord fifty percent (50%) of any "**Transfer Premium**," as that term is defined in this Section 14.3, received by Tenant from such Transferee. "**Transfer Premium**" shall mean all rent, additional rent or other consideration payable by such Transferee in connection with the Transfer in excess of the Rent and Additional Rent payable by Tenant under this Lease during the term of the Transfer on a per rentable square foot basis if less than all of the Premises is transferred, and after deduction of (i) any costs of improvements made to the Subject Space in connection with such Transfer, (ii) brokerage commissions paid in connection with such Transfer, and (iii) reasonable legal fees incurred in connection with such Transfer. "**Transfer Premium**" shall also include, but not be limited to, key money, bonus money or other cash consideration paid by Transferee to Tenant in connection with such Transfer, and any payment in excess of fair market value for services rendered by Tenant to Transferee or for assets, fixtures, inventory, equipment, or furniture transferred by Tenant to Transferee in connection with such Transfer. The determination of the amount of Landlord's applicable share of the Transfer Premium shall be made on a monthly basis as rent or other consideration is received by Tenant under the Transfer.

14.4 **Landlord's Option as to Subject Space**. Notwithstanding anything to the contrary contained in this Article 14, in the event Tenant contemplates a Transfer which, together with all prior Transfers then remaining in effect, would cause fifty percent (50%) or more of the Premises to be Transferred for more than seventy-five percent (75%) of the then remaining Lease Term (taking into account any extension of the Lease Term which has irrevocably exercised by Tenant), Tenant shall give Landlord notice (the "**Intention to Transfer Notice**") of such contemplated Transfer (whether or not the contemplated Transferee or the terms of such contemplated Transfer have been determined). The Intention to Transfer Notice shall specify the portion of and amount of rentable square feet of the Premises which Tenant intends to Transfer (the "**Contemplated Transfer Space**"), the contemplated date of commencement of the Contemplated Transfer (the "**Contemplated Effective Date**"), and the contemplated length of the term of such contemplated Transfer, and shall specify that such Intention to Transfer Notice is delivered to Landlord pursuant to this Section 14.4 in order to allow Landlord to elect to recapture the Contemplated Transfer Space. Thereafter, Landlord shall have the option, by giving written notice to Tenant within thirty (30) days after receipt of any Intention to Transfer Notice, to recapture the Contemplated Transfer Space. Such recapture shall cancel and terminate this Lease with respect to such Contemplated Transfer Space as of the Contemplated Effective Date. In the event of a recapture by Landlord, if this Lease shall be canceled with respect to less than the entire Premises, the Rent reserved herein shall be prorated on the basis of the number of rentable square feet retained by Tenant in proportion to the number of rentable square feet contained in the Premises, and this Lease as so amended shall continue thereafter in full force and effect, and upon request of either party, the parties shall execute written confirmation of the same. If Landlord declines, or fails to elect in a timely manner, to recapture such Contemplated Transfer Space under this Section 14.4, then, subject to the other terms of this Article 14, for a period of nine (9) months (the "**Nine Month Period**") commencing on the last day of such thirty (30) day period, Landlord shall not have any right to recapture the Contemplated Transfer Space with respect to any Transfer made during the Nine Month Period, provided that any such Transfer is substantially on the terms set forth in the Intention to Transfer Notice, and provided further that any such Transfer shall be subject to the remaining terms of this Article 14. If such a Transfer is not so consummated within the Nine Month Period (or if a Transfer is so consummated, then upon the expiration of the term of any Transfer of such Contemplated Transfer Space consummated within such Nine Month Period), Tenant shall again be required to submit a new Intention to Transfer Notice to Landlord with respect any contemplated Transfer, as provided above in this Section 14.4.

14.5 **Effect of Transfer**. If Landlord consents to a Transfer, (i) the terms and conditions of this Lease shall in no way be deemed to have been waived or modified, (ii) such consent shall not be deemed consent to any further Transfer by either Tenant or a Transferee, (iii) Tenant shall deliver to Landlord, promptly after execution, an original executed copy of all documentation pertaining to the Transfer in form reasonably acceptable to Landlord, (iv) Tenant shall furnish upon Landlord's request a complete statement, certified by an independent certified public accountant, or Tenant's chief financial officer, setting forth in detail the computation of any Transfer Premium Tenant has derived and shall derive from such Transfer, and (v) no Transfer relating to this Lease or agreement entered into with respect thereto, whether with or without Landlord's consent, shall relieve Tenant or any guarantor of the Lease from any liability under this Lease, including, without limitation, in connection with the Subject Space. Landlord or its authorized representatives shall have the right at all reasonable times upon commercially reasonable prior written notice to audit the books, records and papers of Tenant relating to any Transfer, and shall have the right to make copies thereof. If the Transfer Premium respecting any Transfer shall be found understated, Tenant shall, within thirty (30) days after demand, pay the deficiency, and if understated by more than two percent (2%), Tenant shall pay Landlord's costs of such audit.

14.6 **Additional Transfers**. For purposes of this Lease, the term "**Transfer**" shall also include (i) if Tenant is a partnership, the withdrawal or change, voluntary, involuntary or by operation of law, of fifty percent (50%) or more of the partners, or transfer of fifty percent (50%) or more of partnership interests, within a twelve (12)-month period, or the dissolution of the partnership without immediate reconstitution thereof, and (ii) if Tenant is a closely held corporation (*i.e.*, whose stock is not publicly held and not traded through an exchange or over the counter), (A) the dissolution, merger, consolidation or other reorganization of Tenant or (B) the sale or other transfer of an aggregate of fifty percent (50%) or more of the voting shares of Tenant (other than to immediate family members by reason of gift or death), within a twelve (12)-month period, or (C) the sale, mortgage, hypothecation or pledge of an aggregate of fifty percent (50%) or more of the value of the unencumbered assets of Tenant within a twelve (12)-month period.

14.7 **Occurrence of Default**. Any Transfer hereunder shall be subordinate and subject to the provisions of this Lease, and if this Lease shall be terminated during the term of any Transfer, Landlord shall have the right to: (i) treat such Transfer as cancelled and repossess the Subject Space by any lawful means, or (ii) require that such Transferee attorn to and recognize Landlord as its landlord under any such Transfer. If Tenant shall be in default under this Lease (beyond any applicable notice and cure periods), Landlord is hereby irrevocably authorized, as Tenant's agent and attorney-in-fact, to direct any Transferee to make all payments under or in connection with the Transfer directly to Landlord (which Landlord shall apply towards Tenant's obligations under this Lease) until such default is cured. Such Transferee shall rely on any representation by Landlord that Tenant is in default hereunder, without any need for confirmation thereof by Tenant. Upon any assignment, the assignee shall assume in writing all obligations and covenants of Tenant thereafter to be performed or observed under this Lease. No collection or acceptance of rent by Landlord from any Transferee shall be deemed a waiver of any provision of this Article 14 or the approval of any Transferee or a release of Tenant from any obligation under this Lease, whether theretofore or thereafter accruing. In no event shall Landlord's enforcement of any provision of this Lease against any Transferee be deemed a waiver of Landlord's right to enforce any term of this Lease against Tenant or any other person. If Tenant's obligations hereunder have been guaranteed, Landlord's consent to any Transfer shall not be effective unless the guarantor also consents to such Transfer.

14.8 **Non-Transfers**. Notwithstanding anything to the contrary contained in this Article 14, (i) an assignment or subletting of all or a portion of the Premises to an affiliate of Tenant (an entity which is controlled by, controls, or is under common control with, Tenant), (ii) an assignment of the Premises to an entity which acquires all or substantially all of the assets or interests (partnership, stock, membership or other) of Tenant, (iii) an assignment of the Premises to an entity which is the resulting entity of a merger or consolidation of Tenant, or (iv) a sale of interests (partnership, stock, membership or other) in Tenant in connection with either a *bona fide* financing for the benefit of the Tenant or an initial public offering of Tenant's stock on a nationally-recognized stock exchange (collectively, a "**Permitted Transferee**"), shall not be deemed a Transfer under this Article 14, provided that (A) following execution Tenant notifies Landlord of any such assignment or sublease and promptly supplies Landlord with any documents or information reasonably requested by Landlord regarding such assignment or sublease or such affiliate, (B) such assignment or sublease is not a subterfuge by Tenant to avoid its obligations under this Lease, (C) such Permitted Transferee shall be of a character and reputation consistent with the quality of the Building, and (D) such Permitted Transferee shall have a tangible net worth (not including goodwill as an asset) computed in accordance with generally accepted accounting principles ("**Net Worth**") at least equal to the Net Worth of Tenant on the date of this Lease. An assignee of Tenant's entire interest that is also a Permitted Transferee may also be known as a "**Permitted Assignee**". "**Control**," as used in this Section 14.8, shall mean the ownership, directly or

indirectly, of at least fifty-one percent (51%) of the voting securities of, or possession of the right to vote, in the ordinary direction of its affairs, of at least fifty-one percent (51%) of the voting interest in, any person or entity. No such permitted assignment or subletting shall serve to release Tenant from any of its obligations under this Lease.

15. SURRENDER OF PREMISES; OWNERSHIP AND REMOVAL OF TRADE FIXTURES

15.1 **Surrender of Premises**. No act or thing done by Landlord or any agent or employee of Landlord during the Lease Term shall be deemed to constitute an acceptance by Landlord of a surrender of the Premises unless such intent is specifically acknowledged in writing by Landlord. The delivery of keys to the Premises to Landlord or any agent or employee of Landlord shall not constitute a surrender of the Premises or effect a termination of this Lease, whether or not the keys are thereafter retained by Landlord, and notwithstanding such delivery Tenant shall be entitled to the return of such keys at any reasonable time upon request until this Lease shall have been properly terminated. The voluntary or other surrender of this Lease by Tenant, whether accepted by Landlord or not, or a mutual termination hereof, shall not work a merger, and at the option of Landlord shall operate as an assignment to Landlord of all subleases or subtenancies affecting the Premises or terminate any or all such sublessees or subtenancies.

15.2 **Removal of Tenant Property by Tenant**. Upon the expiration of the Lease Term, or upon any earlier termination of this Lease, Tenant shall, subject to the provisions of this Article 15, quit and surrender possession of the Premises to Landlord in as good order and condition as when Tenant took possession and as thereafter improved by Landlord and/or Tenant, reasonable wear and tear and repairs which are specifically made the responsibility of Landlord hereunder excepted. Upon such expiration or termination, Tenant shall, without expense to Landlord, remove or cause to be removed from the Premises all debris and rubbish, and such items of furniture, equipment, free-standing cabinet work, movable partitions and other articles of personal property owned by Tenant or installed or placed by Tenant at its expense in the Premises, and such similar articles of personal property of any other persons claiming under Tenant, as Landlord may, in its reasonable discretion, require to be removed, and Tenant shall repair at its own expense all damage to the Premises and Building resulting from such removal. For the avoidance of doubt, Landlord will not require Tenant to remove any improvements in existence as of the date of this Lease and Tenant is hereby released from any obligation to complete any such removal.

15.3 **Environmental Assessment**. In connection with its surrender of the Premises, Tenant shall submit to Landlord, at least one hundred twenty (120) days prior to the expiration date of this Lease (or in the event of an earlier termination of this Lease, as soon as reasonably possible following such termination), an environmental Assessment of the Premises by a competent and experienced environmental engineer or engineering firm reasonably satisfactory to Landlord (pursuant to a contract approved by Landlord and providing that Landlord can rely on the Environmental Assessment), which (i) evidences that the Premises are in a clean and safe condition and free and clear of any Hazardous Materials; and (ii) includes a review of the Premises by an environmental consultant for asbestos, mold, fungus, spores, and other moisture conditions, on-site chemical use, and lead-based paint. If such Environmental Assessment reveals that remediation or Clean-up is required under any Environmental Laws, Tenant shall submit a remediation plan prepared by a recognized environmental consultant and shall be responsible for all costs of remediation and Clean-up, as more particularly provided in Section 5.3, above.

15.4 **Condition of the Building and Premises Upon Surrender**. In addition to the above requirements of this Article 15, upon the expiration of the Lease Term, or upon any earlier termination of this Lease, Tenant shall, surrender the Premises and Building such that the same are in compliance with all Applicable Laws and with Tenant having complied with all of Tenant's obligations under this Lease, including those relating to improvement, repair, maintenance, compliance with law, testing and other related obligations of Tenant set forth in Article 7 of this Lease. In the event that the Building and Premises shall be surrendered in a condition which does not comply with the terms of this Section 15.4, because Tenant failed to comply with its obligations set forth in Lease, then following thirty (30) days' notice to Tenant, during which thirty (30) day period Tenant shall have the right to cure such noncompliance, Landlord shall be entitled to expend all reasonable costs in order to cause the same to comply with the required condition upon surrender and Tenant shall immediately reimburse Landlord for all such costs upon notice and Tenant shall be deemed during the period that Tenant or Landlord, as the case may be, perform obligations relating to the Surrender Improvements to be in holdover under Article 16 of this Lease.

16. HOLDING OVER If Tenant holds over after the expiration of the Lease Term or earlier termination thereof, with the express or implied consent of Landlord, such tenancy shall be from month-to-month only, and shall not constitute a renewal hereof or an extension for any further term. If Tenant holds over after the expiration of the Lease Term of earlier termination thereof, without the express or implied consent of Landlord, such tenancy shall be deemed to be a tenancy by sufferance only, and shall not constitute a renewal hereof or an extension for any further term. In either case, Rent shall be payable at a monthly rate equal to 150% of the Rent applicable during the last rental period of the Lease Term under this Lease. Such month-to-month tenancy or tenancy by sufferance, as the case may be, shall be subject to every other applicable term, covenant and agreement contained herein. Nothing contained in this Article 16 shall be construed as consent by Landlord to any holding over by Tenant, and Landlord expressly reserves the right to require Tenant to surrender possession of the Premises to Landlord as provided in this Lease upon the expiration or other termination of this Lease. The provisions of this Article 16 shall not be deemed to limit or constitute a waiver of any other rights or remedies of Landlord provided herein or at law. If Tenant fails to surrender the Premises within thirty (30) days following the termination or expiration of this Lease, in addition to any other liabilities to Landlord accruing therefrom, Tenant shall protect, defend, indemnify and hold Landlord harmless from all loss, costs (including reasonable attorneys' fees) and liability resulting from such failure, including, without limiting the generality of the foregoing, any claims made by any succeeding tenant founded upon such failure to surrender and any lost profits to Landlord resulting therefrom.

17. ESTOPPEL CERTIFICATES Within ten (10) business days following a request in writing by Landlord, Tenant shall execute, acknowledge and deliver to Landlord an estoppel certificate, which, as submitted by Landlord, shall be substantially in the form of **Exhibit D**, attached hereto (or such other form as may be reasonably required by any prospective mortgagee or purchaser of the Project, or any portion thereof), indicating therein any exceptions thereto that may exist at that time, and shall also contain any other information reasonably requested by Landlord or Landlord's mortgagee or prospective mortgagee. Any such certificate may be relied upon by any prospective mortgagee or purchaser of all or any portion of the Project. Tenant shall execute and deliver whatever other instruments may be reasonably required for such purposes. At any time during the Lease Term (but not more than once in any calendar year unless in connection with the sale or proposed sale, or the financing/refinancing, of the Project or any portion thereof), Landlord may require Tenant to provide Landlord with a current financial statement and financial statements of the two (2) years prior to the current financial statement year. Such statements shall be prepared in accordance with generally accepted accounting principles and, if such is the normal practice of Tenant, shall be audited by an independent certified public accountant. Failure of Tenant to timely execute, acknowledge and deliver such estoppel certificate or other instruments shall constitute an acceptance of the Premises and an acknowledgment by Tenant that statements included in the estoppel certificate are true and correct, without exception.

18. SUBORDINATION Landlord hereby represents and warrants to Tenant that the Project is not currently subject to any ground lease, or to the lien of any mortgage or deed of trust. This Lease shall be subject and subordinate to all present and future ground or underlying leases of the Building or Project and to the lien of any mortgage, trust deed or other encumbrances now or hereafter in force against the Building or Project or any part thereof, if any, and to all renewals, extensions, modifications, consolidations and replacements thereof, and to all advances made or hereafter to be made upon the security of such mortgages or trust deeds, unless the holders of such mortgages, trust deeds or other encumbrances, or the lessors under such ground lease or underlying leases, require in writing that this Lease be superior thereto (collectively, the **"Superior Holders")**, provided that in consideration of, and as a condition precedent to, Tenant's agreement to permit its interest pursuant to this Lease to be subordinated to any future Superior Holder, Landlord shall use commercially reasonable efforts to deliver to Tenant a subordination and non-disturbance agreement ("**SNDA**") executed by any future Superior Holder on such Superior Holder's standard form (subject to commercially reasonable agreed upon changes); provided, however, that in no event shall Landlord's failure to deliver such SNDA be construed as a default by Landlord under this Lease. Tenant covenants and agrees in the event any proceedings are brought for the foreclosure of any such mortgage or deed in lieu thereof (or if any ground lease is terminated), to attorn, without any deductions or set-offs whatsoever, to the lienholder or purchaser or any successors thereto upon any such foreclosure sale or deed in lieu thereof (or to the ground lessor), if so requested to do so by such purchaser or lienholder or ground lessor, and to recognize such purchaser or lienholder or ground lessor as the lessor under this Lease, provided such lienholder or purchaser or ground lessor shall agree to accept this Lease and not disturb Tenant's occupancy, so long as Tenant timely pays the rent and observes and performs the terms, covenants and conditions of this Lease to be observed and performed by Tenant. Landlord's interest herein may be assigned as security at any time to any lienholder. Tenant shall, within ten (10) days of request by Landlord, execute such further instruments or assurances as Landlord may reasonably deem necessary to evidence or confirm the subordination or superiority of this Lease to any such mortgages, trust deeds, ground leases or underlying leases. Tenant waives the provisions of any current or future statute, rule or law which may give or purport to give Tenant any right or election to terminate or otherwise adversely affect this Lease and the obligations of the Tenant hereunder in the event of any foreclosure proceeding or sale.

19. DEFAULTS; REMEDIES

19.1 **Events of Default**. In addition to any other Events of Default specified in this Lease, the occurrence of any of the following shall constitute a default of this Lease by Tenant (each, an "**Event of Default**"):

19.1.1 Any failure by Tenant to pay any Rent or any other charge required to be paid under this Lease, or any part thereof, within five (5) days following the date due (provided that, with respect to the first late payment of Rent during any twelve (12) month period, Tenant shall be entitled to a period of five (5) business days after written notice by Landlord to Tenant that such amount is past due before such late payment of Rent shall constitute a default of this Lease by Tenant); or

19.1.2 Except where a specific time period is otherwise set forth for Tenant's performance in this Lease, in which event the failure to perform by Tenant within such time period shall be a default by Tenant under this Section 19.1.2, any failure by Tenant to observe or perform any other provision, covenant or condition of this Lease to be observed or performed by Tenant where such failure continues for thirty (30) days after written notice thereof from Landlord to Tenant; provided that if the nature of such default is such that the same cannot reasonably be cured within a thirty (30) day period, Tenant shall not be deemed to be in default if it diligently commences such cure within such period and thereafter diligently proceeds to rectify and cure such default; or

19.1.3 Abandonment (as defined by Applicable Laws) of all or a substantial portion of the Premises by Tenant; or

19.1.4 The failure by Tenant to observe or perform according to the provisions of Articles 5, 14, 17 or 18 of this Lease or any provision of the Tenant Work Letter, where, in each instance, such failure continues for more than three (3) business days after notice from Landlord.

Any notices to be provided by Landlord under this Section 19.1 shall be in lieu of, and not in addition to, any notice required under Section 1161 et seq. of the Code of Civil Procedure, and may be served on Tenant in the manner allowed for service of notices under this Lease.

19.2 **Remedies Upon Event of Default**. Upon the occurrence of any event of default by Tenant, Landlord shall have, in addition to any other remedies available to Landlord at law or in equity (all of which remedies shall be distinct, separate and cumulative), the option to pursue any one or more of the following remedies (including, without limitation, during any eviction moratorium, to the extent allowed by Applicable Law), each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever.

19.2.1 Terminate this Lease, in which event Tenant shall immediately surrender the Premises to Landlord, and if Tenant fails to do so, Landlord may, without prejudice to any other remedy which it may have for possession or arrearages in rent, enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be occupying the Premises or any part thereof, without being liable for prosecution or any claim or damages therefor; and Landlord may recover from Tenant the following:

(i) The worth at the time of award of the unpaid rent which has been earned at the time of such termination; plus

(ii) The worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(iii) The worth at the time of award of the amount by which the unpaid rent for the balance of the Lease Term after the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(iv) Any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, specifically including but not limited to, brokerage commissions and advertising expenses incurred, expenses of remodeling the Premises or any portion thereof for a new tenant, whether for the same or a different use, and any special concessions made to obtain a new tenant; and

(v) At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by Applicable Law.

The term "**rent**" as used in this Section 19.2 shall be deemed to be and to mean all sums of every nature required to be paid by Tenant pursuant to the terms of this Lease, whether to Landlord or to others. As used in Sections 19.2.1(i) and (ii), above, the "worth at the time of award" shall be computed by allowing interest at the rate set forth in Article 25 of this Lease, but in no case greater than the maximum amount of such interest permitted by law. As used in Section 19.2.1(iii) above, the "**worth at the time of award**" shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus one percent (1%).

19.2.2 Landlord shall have the remedy described in California Civil Code Section 1951.4 (lessor may continue lease in effect after lessee's breach and abandonment and recover rent as it becomes due, if lessee has the right to sublet or assign, subject only to reasonable limitations). Accordingly, if Landlord does not elect to terminate this Lease on account of any Event of Default by Tenant, Landlord may, from time to time, without terminating this Lease, enforce all of its rights and remedies under this Lease, including the right to recover all rent as it becomes due.

19.2.3 Landlord shall at all times have the rights and remedies (which shall be cumulative with each other and cumulative and in addition to those rights and remedies available under Sections 19.2.1 and 19.2.2, above, or any law or other provision of this Lease), without prior demand or notice except as required by Applicable Law, to seek any declaratory, injunctive or other equitable relief, and specifically enforce this Lease, or restrain or enjoin a violation or breach of any provision hereof.

19.3 **Subleases of Tenant**. If Landlord elects to terminate this Lease on account of any Event of Default by Tenant, as set forth in this Article 19, Landlord shall have the right to terminate any and all subleases, licenses, concessions or other consensual arrangements for possession entered into by Tenant and affecting the Premises or may, in Landlord's sole discretion, succeed to Tenant's interest in such subleases, licenses, concessions or arrangements. In the event of Landlord's election to succeed to Tenant's interest in any such subleases, licenses, concessions or arrangements, Tenant shall, as of the date of notice by Landlord of such election, have no further right to or interest in the rent or other consideration receivable thereunder.

19.4 **Efforts to Relet**. No re-entry or repossession, repairs, maintenance, changes, alterations and additions, reletting, appointment of a receiver to protect Landlord's interests hereunder, or any other action or omission by Landlord shall be construed as an election by Landlord to terminate this Lease or Tenant's right to possession, or to accept a surrender of the Premises, nor shall same operate to release Tenant in whole or in part from any of Tenant's obligations hereunder, unless express written notice of such intention is sent by Landlord to Tenant. Tenant hereby irrevocably waives any right otherwise available under any law to redeem or reinstate this Lease.

19.5 **Landlord Default**.

19.5.1 **In General**. Landlord shall be in default under this Lease if Landlord fails to perform any of its obligations hereunder following the Lease Commencement Date and such failure continues for thirty (30) days after Tenant delivers to Landlord written notice specifying such failure; however, if such failure cannot reasonably be cured within such 30-day period, but Landlord commences to cure such failure within such 30-day period and thereafter diligently pursues the curing thereof to completion, then Landlord shall not be in default hereunder or liable for damages therefor. Except where the provisions of this Lease grant Tenant an express, exclusive remedy, or expressly deny Tenant a remedy, Tenant's exclusive remedy for Landlord's failure to perform its obligations under this Lease shall be limited to damages, injunctive relief, or specific performance; in each case, Landlord's liability or obligations with respect to any such remedy shall be limited as provided in Section 29.13.

19.5.2 **Abatement of Rent**. In the event that Tenant is prevented from using, and does not use, the Premises or any portion thereof, as a result of (i) any repair, maintenance or alteration performed by Landlord, or which Landlord failed to perform, after the Lease Commencement Date and required by this Lease, which substantially interferes with Tenant's use of the Premises, or (ii) any failure to provide services, utilities or access to the Premises to the extent required by this Lease, each as a direct result of Landlord's negligence or willful misconduct (and except to the extent such failure is caused in whole or in part by the action or inaction of Tenant) (either such set of circumstances as set forth in items (i) or (ii), above, to be known as an "**Abatement Event**"), then Tenant shall give Landlord notice of such Abatement Event, and if such Abatement Event continues for seven (7) consecutive business days after Landlord's receipt of any such notice (the "**Eligibility Period**"), then the Base Rent and Tenant's Share of Direct Expenses shall be abated or reduced, as the case may be, after expiration of the Eligibility Period for such time that Tenant continues to be so prevented from using, and does not use for the normal conduct of Tenant's business, the Premises or a portion thereof, in the proportion that the rentable area of the portion of the Premises that Tenant is prevented from using, and does not use, bears to the total rentable area of the Premises; provided, however, in the event that Tenant is prevented from using, and does not use, a portion of the Premises for a period of time in excess of the Eligibility Period and the remaining portion of the Premises is not sufficient to allow Tenant to effectively conduct its business therein, and if Tenant does not conduct its business from such remaining portion, then for such time after expiration of the Eligibility Period during which Tenant is so prevented from effectively conducting its business therein, the Base Rent and Tenant's Share of Direct Expenses for the entire Premises shall be abated for such time as Tenant continues to be so prevented from using, and does not use, the Premises. If, however, Tenant reoccupies any portion of the Premises for the Permitted Use during such period, the Rent allocable to such reoccupied portion, based on the proportion that the rentable area of such reoccupied portion of the Premises bears to the total rentable area of the Premises, shall be payable by Tenant from the date Tenant reoccupies such portion of the Premises. To the extent an Abatement Event is caused by an event covered by Articles 11 or 13 of this Lease, then Tenant's right to abate rent and/or terminate this Lease shall be governed by the terms of such Article 11 or 13, as applicable, and the Eligibility Period shall not be applicable thereto. Such right to abate Base Rent and Tenant's Share of Direct Expenses shall be Tenant's sole and exclusive remedy for rent abatement at law or in equity for an Abatement Event. Except as provided in this Section 19.5.2, nothing contained herein shall be interpreted to mean that Tenant is excused from paying Rent due hereunder.

20. COVENANT OF QUIET ENJOYMENT Landlord covenants that Tenant, on paying the Rent, charges for services and other payments herein reserved and on keeping, observing and performing all the other terms, covenants, conditions, provisions and agreements herein contained on the part of Tenant to be kept, observed and performed, shall, during the Lease Term, peaceably and quietly have, hold and enjoy the Premises subject to the terms, covenants, conditions, provisions and agreements hereof without interference by any persons lawfully claiming by or through Landlord. The foregoing covenant is in lieu of any other covenant express or implied.

21. LETTER OF CREDIT

21.1 **Delivery of Letter or Credit**. within ten (10 business days following Tenant's execution of this Lease, Tenant shall deliver to Landlord an unconditional, clean, irrevocable letter of credit (the "**L-C**") in the amount set forth in Section 8 of the Summary (the "**L-C Amount**") which L-C shall be issued by a money-center, solvent and nationally recognized bank (a bank which accepts deposits, maintains accounts, has a local San Francisco Bay Area office which will negotiate a letter of credit, and whose deposits are insured by the FDIC) reasonably acceptable to Landlord (such approved, issuing bank being referred to herein as the "**Bank**"), which Bank must have a rating from Standard and Poor's Corporation of A- or better (or any equivalent rating thereto from any successor or substitute rating service selected by Lessor) and a letter of credit issuer rating from Moody's

Investor Service of A3 or better (or any equivalent rating thereto from any successor rating agency thereto) (collectively, the "**Bank's Credit Rating Threshold**"), and which L-C shall be substantially in the form of **Exhibit F**, attached hereto (with such commercially reasonable modifications as may be required by Tenant's Bank). Tenant shall pay all expenses, points and/or fees incurred by Tenant in obtaining the L-C. The L-C shall (i) be "callable" at sight, irrevocable and unconditional, (ii) be maintained in effect (subject to the provisions of Section 21.7), whether through renewal or extension, for the period commencing on the date of this Lease and continuing until the date (the "**L-C Expiration Date**") that is no less than sixty (60) days after the expiration of the Lease Term as the same may be extended**,** and Tenant shall deliver a new L-C or certificate of renewal or extension to Landlord at least thirty (30) days prior to the expiration of the L-C then held by Landlord, without any action whatsoever on the part of Landlord, (iii) be fully assignable by Landlord, its successors and assigns, (iv) permit partial draws and multiple presentations and drawings, and (v) be otherwise subject to the International Standby Practices-ISP 98, International Chamber of Commerce Publication #590. Landlord, or its then managing agent, shall have the right to draw down an amount up to the face amount of the L-C if any of the following shall have occurred or be applicable: (A) such amount is due to Landlord under the terms and conditions of this Lease, and has not been paid within applicable notice and cure periods, or (B) Tenant has filed a voluntary petition under the U. S. Bankruptcy Code or any state bankruptcy code (collectively, "**Bankruptcy Code**"), or (C) an involuntary petition has been filed against Tenant under the Bankruptcy Code that is not dismissed within thirty (30) days, or (D) the Bank has notified Landlord that the L-C will not be renewed or extended through the L-C Expiration Date, and Tenant has not provided a replacement L-C that satisfies the requirements of this Lease at least thirty (30) days prior to such expiration, or (E) Tenant is placed into receivership or conservatorship, or becomes subject to similar proceedings under Federal or State law, or (F) Tenant executes an assignment for the benefit of creditors, or (G) if (1) any of the Bank's Fitch Ratings (or other comparable ratings to the extent the Fitch Ratings are no longer available) have been reduced below the Bank's Credit Rating Threshold, or (2) there is otherwise a material adverse change in the financial condition of the Bank, and Tenant has failed to provide Landlord with a replacement letter of credit, conforming in all respects to the requirements of this Article 21 (including, but not limited to, the requirements placed on the issuing Bank more particularly set forth in this Section 21.1 above), in the amount of the applicable L-C Amount, within ten (10) days following Landlord's written demand therefor (with no other notice or cure or grace period being applicable thereto, notwithstanding anything in this Lease to the contrary) (each of the foregoing being an "**L-C Draw Event**"). The L-C shall be honored by the Bank regardless of whether Tenant disputes Landlord's right to draw upon the L-C. In addition, in the event the Bank is placed into receivership or conservatorship by the Federal Deposit Insurance Corporation or any successor or similar entity, then, effective as of the date such receivership or conservatorship occurs, said L-C shall be deemed to fail to meet the requirements of this Article 21, and, within ten (10) days following Landlord's notice to Tenant of such receivership or conservatorship (the "**L-C FDIC Replacement Notice**"), Tenant shall replace such L-C with a substitute letter of credit from a different issuer (which issuer shall meet or exceed the Bank's Credit Rating Threshold and shall otherwise be acceptable to Landlord in its reasonable discretion) and that complies in all respects with the requirements of this Article 21. If Tenant fails to replace such L-C with such conforming, substitute letter of credit pursuant to the terms and conditions of this Section 21.1, then, notwithstanding anything in this Lease to the contrary, Landlord shall have the right to declare Tenant in default of this Lease for which there shall be no notice or grace or cure periods being applicable thereto (other than the aforesaid ten (10) day period). Tenant shall be responsible for the payment of any and all Tenant's and Bank's costs incurred with the review of any replacement L-C, which replacement is required pursuant to this Section or is otherwise requested by Tenant.

21.2 **Application of L-C**. Tenant hereby acknowledges and agrees that Landlord is entering into this Lease in material reliance upon the ability of Landlord to draw upon the L-C upon the occurrence of any L-C Draw Event. In the event of any L-C Draw Event, Landlord may, but without obligation to do so, and without notice to Tenant, draw upon the L-C, in part or in whole, in the amount necessary to cure any such L-C Draw Event and/or to compensate Landlord for any and all damages of any kind or nature sustained or which Landlord reasonably estimates that it will sustain resulting from Tenant's breach or default of the Lease or other L-C Draw Event and/or to compensate Landlord for any and all damages arising out of, or incurred in connection with, the termination of this Lease, including, without limitation, those specifically identified in Section 1951.2 of the California Civil Code. The use, application or retention of the L-C, or any portion thereof, by Landlord shall not prevent Landlord from exercising any other right or remedy provided by this Lease or by any applicable law, it being intended that Landlord shall not first be required to proceed against the L-C, and such L-C shall not operate as a limitation on any recovery to which Landlord may otherwise be entitled. Tenant agrees not to interfere in any way with payment to Landlord of the proceeds of the L-C, either prior to or following a "draw" by Landlord of any portion of the L-C, regardless of whether any dispute exists between Tenant and Landlord as to Landlord's right to draw upon the L-C. No condition or term of this Lease shall be deemed to render the L-C conditional to justify the issuer of the L-C in failing to honor a drawing upon such L-C in a timely manner. Tenant agrees and acknowledges that (i) the L-C constitutes a separate and independent contract between Landlord and the Bank, (ii) Tenant is not a third party beneficiary of such contract, (iii) Tenant has no property interest whatsoever in the L-C or the proceeds thereof, and (iv) in the event Tenant becomes a debtor under any chapter of the Bankruptcy Code, Tenant is placed into receivership or conservatorship, and/or there is an event of a receivership, conservatorship or a bankruptcy filing by,

or on behalf of, Tenant, neither Tenant, any trustee, nor Tenant's bankruptcy estate shall have any right to restrict or limit Landlord's claim and/or rights to the L-C and/or the proceeds thereof by application of Section 502(b)(6) of the U. S. Bankruptcy Code or otherwise. In the event of an assignment by Tenant of its interest in this Lease (and irrespective of whether Landlord's consent is required for such assignment), the acceptance of any replacement or substitute L-C by Landlord from the assignee shall be subject to Landlord's prior written approval, in Landlord's reasonable discretion, and the actual and reasonable attorney's fees incurred by Landlord in connection with such determination shall be payable by Tenant to Landlord within ten (10) days of billing.

21.3 **L-C Amount; Maintenance of L-C by Tenant.** If, as a result of any drawing by Landlord of all or any portion of the L-C, the amount of the L-C shall be less than the L-C Amount, Tenant shall, within ten (10) business days after written notice form Landlord, provide Landlord with additional letter(s) of credit in an amount equal to the deficiency, and any such additional letter(s) of credit shall comply with all of the provisions of this Article 21. Tenant further covenants and warrants that it will neither assign nor encumber the L-C or any part thereof and that neither Landlord nor its successors or assigns will be bound by any such assignment, encumbrance, attempted assignment or attempted encumbrance. Without limiting the generality of the foregoing, if the L-C expires earlier than the L-C Expiration Date, Landlord will accept a renewal thereof (such renewal letter of credit to be in effect and delivered to Landlord, as applicable, not later than thirty (30) days prior to the expiration of the L-C), which shall be irrevocable and automatically renewable as above provided through the L-C Expiration Date upon the same terms as the expiring L-C or such other terms as may be acceptable to Landlord in its sole discretion. However, if the L-C is not timely renewed, or if Tenant fails to maintain the L-C in the amount and in accordance with the terms set forth in this Article 21, Landlord shall have the right to either present the L-C to the Bank in accordance with the terms of this Article 21, and the proceeds of the L-C may be applied by Landlord against any Rent payable by Tenant under this Lease that is not paid when due and/or to pay for all losses and damages that Landlord has suffered or that Landlord reasonably estimates that it will suffer as a result of any breach or default by Tenant under this Lease. In the event Landlord elects to exercise its rights under the foregoing, (I) any unused proceeds shall constitute the property of Landlord (and not Tenant’s property or, in the event of a receivership, conservatorship, or a bankruptcy filing by Tenant, property of such receivership, conservatorship or Tenant’s bankruptcy estate) and need not be segregated from Landlord’s other assets, and (II) Landlord agrees to pay to Tenant within thirty (30) days after the L-C Expiration Date the amount of any proceeds of the L-C received by Landlord and not applied against any Rent payable by Tenant under this Lease that was not paid when due or used to pay for any losses and/or damages suffered by Landlord (or reasonably estimated by Landlord that it will suffer) as a result of any breach or default by Tenant under this Lease; provided, however, that if prior to the L-C Expiration Date a voluntary petition is filed by Tenant, or an involuntary petition is filed against Tenant by any of Tenant’s creditors, under the Bankruptcy Code, then Landlord shall not be obligated to make such payment in the amount of the unused L-C proceeds until either all preference issues relating to payments under this Lease have been resolved in such bankruptcy or reorganization case or such bankruptcy or reorganization case has been dismissed. Notwithstanding anything to the contrary herein, if Landlord draws on the L-C due to Tenant's violation of this Lease beyond applicable notice and cure periods, such draw shall be in the amount required to cure such default. In addition, if Landlord draws on the L-C due to Tenant's failure to timely renew or provide a replacement L-C, such failure shall not be considered a default under this Lease and Landlord shall return such cash proceeds upon Tenant's presentation of a replacement L-C that satisfies the requirements of this Lease, subject to reasonable satisfaction of any preference risk to Landlord.

21.4 **Transfer and Encumbrance**. The L-C shall also provide that Landlord may, at any time and without notice to Tenant and without first obtaining Tenant's consent thereto, transfer (one or more times) all or any portion of its interest in and to the L-C to another party, person or entity, but only to the extent such transfer is part of the assignment by Landlord of its rights and interests in and to this Lease. In the event of a transfer of Landlord's interest in under this Lease, Landlord shall transfer the L-C, in whole or in part, to the transferee and thereupon Landlord shall, without any further agreement between the parties, be released by Tenant from all liability therefor, and it is agreed that the provisions hereof shall apply to every transfer or assignment of the whole of said L-C to a new landlord. In connection with any such transfer of the L-C by Landlord, Tenant shall, at Tenant's sole cost and expense, execute and submit to the Bank such applications, documents and instruments as may be necessary to effectuate such transfer and, Tenant shall be responsible for paying the Bank's transfer and processing fees in connection therewith.

21.5 **L-C Not a Security Deposit**. Landlord and Tenant (1) acknowledge and agree that in no event or circumstance shall the L C or any renewal thereof or substitute therefor or any proceeds thereof be deemed to be or treated as a "security deposit" under any law applicable to security deposits in the commercial context, including, but not limited to, Section 1950.7 of the California Civil Code, as such Section now exists or as it may be hereafter amended or succeeded (the "**Security Deposit Laws**"), (2) acknowledge and agree that the L C (including any renewal thereof or substitute therefor or any proceeds thereof) is not intended to serve as a security deposit, and the Security Deposit Laws shall have no applicability or relevancy thereto, and (c) waive any and all rights, duties and obligations that any such party may now, or in the future will, have relating to or arising from the Security Deposit Laws. Tenant hereby irrevocably waives and relinquishes the provisions of Section 1950.7 of the California Civil Code and any successor statue, and all other provisions of law, now or hereafter in effect, which (x) establish the time frame by which a landlord must refund a security deposit under a lease, and/or (y) provide that a landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of rent, to repair damage caused by a tenant or to clean the premises, it being agreed that Landlord may, in addition, claim those sums specified in this Article 21 and/or those sums reasonably necessary to (a) compensate Landlord for any loss or damage caused by Tenant's breach of this Lease, including any damages Landlord suffers following termination of this Lease, and/or (b) compensate Landlord for any and all damages arising out of, or incurred in connection with, the termination of this Lease, including, without limitation, those specifically identified in Section 1951.2 of the California Civil Code.

21.6 **Non-Interference by Tenant**. Tenant agrees not to interfere in any way with any payment to Landlord of the proceeds of the L-C, either prior to or following a "draw" by Landlord of all or any portion of the L-C, regardless of whether any dispute exists between Tenant and Landlord as to Landlord's right to draw down all or any portion of the L-C. No condition or term of this Lease shall be deemed to render the L C conditional and thereby afford the Bank a justification for failing to honor a drawing upon such L-C in a timely manner. Tenant's sole remedy in connection with the improper presentment or payment of sight drafts drawn under any L C shall be the right to obtain from Landlord a refund of the amount of any sight draft(s) that were improperly presented or the proceeds of which were misapplied and reasonable actual out-of-pocket attorneys' fees, provided that at the time of such refund, Tenant increases the amount of such L C to the amount (if any) then required under the applicable provisions of this Lease. Tenant acknowledges that the presentment of sight drafts drawn under any L C, or the Bank's payment of sight drafts drawn under such L C, could not under any circumstances cause Tenant injury that could not be remedied by an award of money damages, and that the recovery of money damages would be an adequate remedy therefor. In the event Tenant shall be entitled to a refund as aforesaid and Landlord shall fail to make such payment within ten (10) business days after demand, Tenant shall have the right to deduct the amount thereof from the next installment(s) of Base Rent.

22. COMMUNICATIONS AND COMPUTER LINE Tenant may install, maintain, replace, remove or use any communications or computer wires and cables serving the Premises (collectively, the "**Lines**"), provided that Tenant shall obtain Landlord's prior written consent (which shall not be unreasonably withheld), use an experienced and qualified contractor approved in writing by Landlord, and comply with all of the other provisions of Articles 7 and 8 of this Lease. Tenant shall pay all costs in connection therewith. Landlord reserves the right, upon notice to Tenant prior to the expiration or earlier termination of this Lease, to require that Tenant, at Tenant's sole cost and expense, remove any Lines located in or serving the Premises prior to the expiration or earlier termination of this Lease.

23. SIGNS

23.1 **Exterior Signage**. Provided all signs are in keeping with the quality, design and style of the Building and Project, Tenant, at no additional cost, may retain the existing signage on the Building throughout the Lease Term, which consists of: two (2) Building top signs, one (1) entrance monument sign and one (1) exterior column sign (collectively, "**Tenant Signage**"); provided, however, in no event shall Tenant's Signage include an "Objectionable Name," as that term is defined in Section 23.3, of this Lease. All such signage shall be subject to Tenant's obtaining all required governmental approvals. All permitted signs shall be maintained by Tenant at its expense in a first-class and safe condition and appearance. Upon the expiration or earlier termination of this Lease, Tenant shall remove all of its signs at Tenant's sole cost and expense. The graphics, materials, color, design, lettering, lighting, size, illumination, specifications and exact location of Tenant's Signage (collectively, the "**Sign Specifications**") shall be subject to the prior written approval of Landlord, which approval shall not be unreasonably withheld, conditioned or delayed, and shall be consistent and compatible with the quality and nature of the Project. Tenant hereby acknowledges that, notwithstanding Landlord's approval of Tenant's Signage, Landlord has made no representation or warranty to Tenant with respect to the probability of obtaining all necessary governmental

approvals and permits for Tenant's Signage. In the event Tenant does not receive the necessary governmental approvals and permits for Tenant's Signage, Tenant's and Landlord's rights and obligations under the remaining TCCs of this Lease shall be unaffected.

23.2 **Objectionable Name**. Tenant's Signage shall not include a name or logo which relates to an entity which is of a character or reputation, or is associated with a political faction or orientation, which is inconsistent with the quality of the Project, or which would otherwise reasonably offend a landlord of the Comparable Buildings (an "**Objectionable Name**"). The parties hereby agree that the following name, or any reasonable derivation thereof, shall be deemed not to constitute an Objectionable Name: "NGM Biopharmaceuticals."

23.3 **Prohibited Signage and Other Items**. Any signs, notices, logos, pictures, names or advertisements which are installed and that have not been separately approved by Landlord may be removed without notice by Landlord at the sole expense of Tenant. Any signs, window coverings, or blinds (even if the same are located behind the Landlord-approved window coverings for the Building), or other items visible from the exterior of the Premises or Building, shall be subject to the prior approval of Landlord, in its sole discretion.

23.4 **Termination of Right to Tenant's Signage**. The rights contained in this Article 23 with respect to monument and rooftop signage shall be personal to Original Tenant and its Permitted Assignee and any other assignee, sublessee or other transferee of more than 50% of Original Tenant's or its Permitted Assignee's interest in this Lease, and may only be exercised and maintained by such parties (and not any other assignee, sublessee or other transferee of the Original Tenant's interest in this Lease) to the extent (*x*) they are not in default under this Lease (beyond any applicable notice and cure period) *and* (y) if they occupy more than 50% of the entire Premises.

24. COMPLIANCE WITH LAW Landlord shall comply with all "Applicable Laws" (defined below) relating to the Base Building and Common Areas, provided that compliance with such Applicable Laws is not the responsibility of Tenant under this Lease, and provided further that, as between Landlord and Tenant, Landlord shall not be deemed to be in default of the Lease as a result of the failure to comply with any Applicable Laws unless Landlord's failure to comply therewith would prohibit Tenant from obtaining or maintaining a certificate of occupancy for the Premises, would materially affect the safety of Tenant's employees or create a material health hazard for Tenant's employees, or would otherwise result in any material cost or liability to Tenant. Tenant shall not do anything or suffer anything to be done in or about the Premises or the Project which will in any way conflict with any law, statute, ordinance or other rule, directive, order, regulation, guideline or requirement of any governmental entity or governmental agency (the "**Applicable Laws**") now in force or which may hereafter be enacted or promulgated. At its sole cost and expense, Tenant shall promptly comply with all such governmental measures (except to the extent such are Landlord's responsibility) (including the making of any alterations to the Premises required by such governmental measures) which relate to (i) Tenant's use of the Premises, (ii) the Alterations or the Tenant Improvements in the Premises, or (iii) the "Base Building" (which shall include the Building Structure, and the public restrooms, elevators, exit stairwells and the Building systems located in the internal core of the Buildings on the floor or floors on which the Premises is located), but, as to the Base Building, only to the extent such obligations are triggered by Tenant's Alterations, the Tenant Improvements, or Tenant's particular use of the Premises. Should any standard or regulation now or hereafter be imposed on Landlord or Tenant by a state, federal or local governmental body charged with the establishment, regulation and enforcement of occupational, health or safety standards for employers, employees, landlords or tenants, then Tenant agrees, at its sole cost and expense, to comply promptly with such standards or regulations. Tenant shall be responsible, at its sole cost and expense, to make all alterations to the Building and Premises as are required to comply with the governmental rules, regulations, requirements or standards described in this Article 24. The judgment of any court of competent jurisdiction or the admission of Tenant in any judicial action, regardless of whether Landlord is a party thereto, that Tenant has violated any of said governmental measures, shall be conclusive of that fact as between Landlord and Tenant. For purposes of Section 1938 of the California Civil Code, Landlord hereby discloses to Tenant, and Tenant hereby acknowledges, that the Project, Building and Premises have not undergone inspection by a Certified Access Specialist (CASp). As required by Section 1938(e) of the California Civil Code, Landlord hereby states as follows: "A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises." In furtherance of the foregoing, Landlord and Tenant hereby agree as follows: (a) any CASp

inspection requested by Tenant shall be conducted, at Tenant's sole cost and expense, by a CASp approved in advance by Landlord; and (b) pursuant to Article 24 below, Tenant, at its cost, is responsible for making any repairs within the Premises to correct violations of construction-related accessibility standards; and, if anything done by or for Tenant in its use or occupancy of the Premises shall require repairs to the Building (outside the Premises) to correct violations of construction-related accessibility standards, then Tenant shall, at Landlord's option, either perform such repairs at Tenant's sole cost and expense or reimburse Landlord upon demand, as Additional Rent, for the cost to Landlord of performing such repairs.

25. LATE CHARGES If any installment of Rent or any other sum due from Tenant shall not be received by Landlord or Landlord's designee within five (5) business days after Tenant's receipt of written notice from Landlord that said amount is due, then Tenant shall pay to Landlord a late charge equal to five percent (5%) of the overdue amount plus any reasonable attorneys' fees incurred by Landlord by reason of Tenant's failure to pay Rent and/or other charges when due hereunder; provided, however, with regard to the first such failure in any twelve (12) month period, Landlord will waive such late charge to the extent Tenant cures such failure within five (5) business days following Tenant's receipt of written notice from Landlord that the same was not received when due. The late charge shall be deemed Additional Rent and the right to require it shall be in addition to all of Landlord's other rights and remedies hereunder or at law and shall not be construed as liquidated damages or as limiting Landlord's remedies in any manner. In addition to the late charge described above, any Rent or other amounts owing hereunder which are not paid within ten (10) days after the date they are due shall bear interest from the date when due until paid at a rate per annum equal to the lesser of (i) the annual "Bank Prime Loan" rate cited in the Federal Reserve Statistical Release Publication G.13(415), published on the first Tuesday of each calendar month (or such other comparable index as Landlord and Tenant shall reasonably agree upon if such rate ceases to be published) plus four (4) percentage points, and (ii) the highest rate permitted by Applicable Law.

26. LANDLORD'S RIGHT TO CURE DEFAULT; PAYMENTS BY TENANT

26.1 **Landlord's Cure**. All covenants and agreements to be kept or performed by Tenant under this Lease shall be performed by Tenant at Tenant's sole cost and expense and without any reduction of Rent, except to the extent, if any, otherwise expressly provided herein. If Tenant shall fail to perform any obligation under this Lease, and such failure shall continue in excess of the time allowed under Section 19.1.2, above, unless a specific time period is otherwise stated in this Lease, Landlord may, but shall not be obligated to, make any such payment or perform any such act on Tenant's part without waiving its rights based upon any default of Tenant and without releasing Tenant from any obligations hereunder.

26.2 **Tenant's Reimbursement**. Except as may be specifically provided to the contrary in this Lease, Tenant shall pay to Landlord, upon delivery by Landlord to Tenant of statements therefor: (i) sums equal to expenditures reasonably made and obligations incurred by Landlord in connection with the remedying by Landlord of Tenant's defaults pursuant to the provisions of Section 26.1; (ii) sums equal to all losses, costs, liabilities, damages and expenses referred to in Article 10 of this Lease; and (iii) sums equal to all expenditures made and obligations incurred by Landlord in collecting or attempting to collect the Rent or in enforcing or attempting to enforce any rights of Landlord under this Lease or pursuant to law, including, without limitation, all reasonable legal fees and other amounts so expended. Tenant's obligations under this Section 26.2 shall survive the expiration or sooner termination of the Lease Term.

27. ENTRY BY LANDLORD Landlord reserves the right at all reasonable times and upon reasonable notice to Tenant (except in the case of an emergency) to enter the Premises to (i) inspect them; (ii) show the Premises to prospective purchasers, or to current or prospective mortgagees, ground or underlying lessors or insurers or, during the last nine (9) months of the Lease Term, to prospective tenants; (iii) post notices of non-responsibility (to the extent applicable pursuant to then Applicable Law); or (iv) alter, improve or repair the Premises or the Building, or for structural alterations, repairs or improvements to the Building or the Building's systems and equipment. Landlord may make any such entries without the abatement of Rent, except as otherwise provided in this Lease, and may take such reasonable steps as required to accomplish the stated purposes. In an emergency, Landlord shall have the right to use any means that Landlord may deem proper to open the doors in and to the Premises. Any entry into the Premises by Landlord in the manner hereinbefore described shall not be deemed to be a forcible or unlawful entry into, or a detainer of, the Premises, or an actual or constructive eviction of Tenant from any portion of the Premises.

28. TENANT PARKING Tenant, at no additional charge or expense to Tenant, shall have the right to use the amount of parking set forth in Section 9 of the Summary, in the on-site and/or off-site, as the case may be, parking facility (or facilities) which serve the Project. Tenant shall abide by all reasonable rules and regulations which are prescribed from time to time for the orderly operation and use of the parking facility where the parking passes are located (including any sticker or other identification system established by Landlord and the prohibition of vehicle repair and maintenance activities in the parking facilities), and shall cooperate in seeing that Tenant's employees and visitors also comply with such rules and regulations. Tenant's use of the Project parking facility shall be at Tenant's sole risk and Tenant acknowledges and agrees that Landlord shall have no liability whatsoever for damage to the vehicles of Tenant, its employees and/or visitors, or for other personal injury or property damage or theft relating to or connected with the parking rights granted herein or any of Tenant's, its employees' and/or visitors' use of the parking facilities. Tenant shall have the right, at Tenant's sole cost and expense, to install up to five (5) electric car chargers, subject to Landlord's review of the specifications therefor and compliance with the terms in Article 8 above and/or **Exhibit B**, as applicable, in spots adjacent to the Premises (reasonably and mutually agreed upon by Landlord and Tenant) for the exclusive use of Tenant and its employees, contractors and visitors and to mark such spaces as being reserved (which spaces shall deducted from the number of spaces that Tenant is entitled to use under Section 9 of the Summary) (the "**Tenant EV Spaces**"). Any such Tenant EV Spaces shall be used by Tenant in accordance with the applicable terms of this Lease, and the terms of the indemnification and insurance provisions hereof shall apply to Tenant's use thereof. Tenant shall maintain the Tenant EV Spaces and all associated equipment in good operating order and safe condition, in compliance with all Applicable Laws, at Tenant's sole cost and expense.

29. MISCELLANEOUS PROVISIONS

29.1 **Terms; Captions**. The words "**Landlord**" and "**Tenant**" as used herein shall include the plural as well as the singular. The necessary grammatical changes required to make the provisions hereof apply either to corporations or partnerships or individuals, men or women, as the case may require, shall in all cases be assumed as though in each case fully expressed. The captions of Articles and Sections are for convenience only and shall not be deemed to limit, construe, affect or alter the meaning of such Articles and Sections.

29.2 **Binding Effect**. Subject to all other provisions of this Lease, each of the covenants, conditions and provisions of this Lease shall extend to and shall, as the case may require, bind or inure to the benefit not only of Landlord and of Tenant, but also of their respective heirs, personal representatives, successors or assigns, provided this clause shall not permit any assignment by Tenant contrary to the provisions of Article 14 of this Lease.

29.3 **No Air Rights**. No rights to any view or to light or air over any property, whether belonging to Landlord or any other person, are granted to Tenant by this Lease. If at any time any windows of the Premises are temporarily darkened or the light or view therefrom is obstructed by reason of any repairs, improvements, maintenance or cleaning in or about the Project, the same shall be without liability to Landlord and without any reduction or diminution of Tenant's obligations under this Lease.

29.4 **Modification of Lease**. Should any current or prospective mortgagee or ground lessor for the Building or Project require a modification of this Lease, which modification will not cause an increased cost or expense to Tenant or in any other way materially and adversely change the rights and obligations of Tenant hereunder, then and in such event, Tenant agrees that this Lease may be so modified and agrees to execute whatever documents are reasonably required therefor and to deliver the same to Landlord within ten (10) business days following a request therefor. At the request of Landlord or any mortgagee or ground lessor, Tenant agrees to execute a short form of Lease and deliver the same to Landlord within ten (10) business days following the request therefor.

29.5 **Transfer of Landlord's Interest**. Tenant acknowledges that Landlord has the right to transfer all or any portion of its interest in the Project or Building and in this Lease, and Tenant agrees that in the event of any such transfer, Landlord shall automatically be released from all liability under this Lease and Tenant agrees to look solely to such transferee for the performance of Landlord's obligations hereunder after the date of transfer and such transferee shall be deemed to have fully assumed and be liable for all obligations of this Lease to be performed by Landlord, including the return of any Security Deposit, and Tenant shall attorn to such transferee.

29.6 **Prohibition Against Recording**. Except as provided in Section 29.4 of this Lease, neither this Lease, nor any memorandum, affidavit or other writing with respect thereto, shall be recorded by Tenant or by anyone acting through, under or on behalf of Tenant.

29.7 **Landlord's Title**. Landlord's title is and always shall be paramount to the title of Tenant. Nothing herein contained shall empower Tenant to do any act which can, shall or may encumber the title of Landlord.

29.8 **Relationship of Parties**. Nothing contained in this Lease shall be deemed or construed by the parties hereto or by any third party to create the relationship of principal and agent, partnership, joint venturer or any association between Landlord and Tenant.

29.9 **Application of Payments**. Landlord shall have the right to apply payments received from Tenant pursuant to this Lease, regardless of Tenant's designation of such payments, to satisfy any obligations of Tenant hereunder, in such order and amounts as Landlord, in its sole discretion, may elect.

29.10 **Time of Essence**. Time is of the essence with respect to the performance of every provision of this Lease in which time of performance is a factor.

29.11 **Partial Invalidity**. If any term, provision or condition contained in this Lease shall, to any extent, be invalid or unenforceable, the remainder of this Lease, or the application of such term, provision or condition to persons or circumstances other than those with respect to which it is invalid or unenforceable, shall not be affected thereby, and each and every other term, provision and condition of this Lease shall be valid and enforceable to the fullest extent possible permitted by law.

29.12 **No Warranty**. In executing and delivering this Lease, Tenant has not relied on any representations, including, but not limited to, any representation as to the amount of any item comprising Additional Rent or the amount of the Additional Rent in the aggregate or that Landlord is furnishing the same services to other tenants, at all, on the same level or on the same basis, or any warranty or any statement of Landlord which is not set forth herein or in one or more of the exhibits attached hereto.

29.13 **Landlord Exculpation**. The liability of Landlord or the Landlord Parties to Tenant for any default by Landlord under this Lease or arising in connection herewith or with Landlord's operation, management, leasing, repair, renovation, alteration or any other matter relating to the Project or the Premises shall be limited solely and exclusively to an amount which is equal to the lesser of (a) the interest of Landlord in the Building or (b) the equity interest Landlord would have in the Building if the Building were encumbered by third-party debt in an amount equal to eighty percent (80%) of the value of the Building (as such value is determined by Landlord), provided that in no event shall such liability extend to any sales or insurance proceeds received by Landlord or the Landlord Parties in connection with the Project, Building or Premises. Neither Landlord, nor any of the Landlord Parties shall have any personal liability therefor, and Tenant hereby expressly waives and releases such personal liability on behalf of itself and all persons claiming by, through or under Tenant. The limitations of liability contained in this Section 29.13 shall inure to the benefit of Landlord's and the Landlord Parties' present and future partners, beneficiaries, officers, directors, trustees, shareholders, agents and employees, and their respective partners, heirs, successors and assigns. Under no circumstances shall any present or future partner of Landlord (if Landlord is a partnership), or trustee or beneficiary (if Landlord or any partner of Landlord is a trust), have any liability for the performance of Landlord's obligations under this Lease. Notwithstanding any contrary provision herein, neither Landlord nor the Landlord Parties shall be liable under any circumstances for injury or damage to, or interference with, Tenant's business, including but not limited to, loss of profits, loss of rents or other revenues, loss of business

opportunity, loss of goodwill or loss of use, in each case, however occurring, or loss to inventory, scientific research, scientific experiments, laboratory animals, products, specimens, samples, and/or scientific, business, accounting and other records of every kind and description kept at the premises and any and all income derived or derivable therefrom.

29.14 **Entire Agreement**. It is understood and acknowledged that there are no oral agreements between the parties hereto affecting this Lease and this Lease constitutes the parties' entire agreement with respect to the leasing of the Premises and supersedes and cancels any and all previous negotiations, arrangements, brochures, agreements and understandings, if any, between the parties hereto or displayed by Landlord to Tenant with respect to the subject matter thereof, and none thereof shall be used to interpret or construe this Lease. None of the terms, covenants, conditions or provisions of this Lease can be modified, deleted or added to except in writing signed by the parties hereto.

29.15 **Right to Lease**. Landlord reserves the absolute right to effect such other tenancies in the Project as Landlord in the exercise of its sole business judgment shall determine to best promote the interests of the Building or Project. Tenant does not rely on the fact, nor does Landlord represent, that any specific tenant or type or number of tenants shall, during the Lease Term, occupy any space in the Building or Project.

29.16 **Force Majeure**. Notwithstanding anything to the contrary contained in this Lease, any prevention, delay or stoppage due to strikes, lockouts, labor disputes, acts of God, acts of war, terrorist acts, inability to obtain services, labor, or materials or reasonable substitutes therefor, governmental actions, civil commotions, Casualty, actual or threatened public health emergency (including, without limitation, epidemic, pandemic, famine, disease, plague, quarantine, and other significant public health risk), governmental edicts, actions, declarations or quarantines by a governmental entity or health organization (including, without limitation, any shelter-in-place orders, stay at home orders or any restrictions on travel related thereto that preclude Tenant, its agents, contractors or its employees from accessing the Premises, national or regional emergency), breaches in cybersecurity, and other causes beyond the reasonable control of the party obligated to perform, regardless of whether such other causes are (i) foreseeable or unforeseeable or (ii) related to the specifically enumerated events in this paragraph (collectively, a "**Force Majeure**"), shall excuse the performance of such party for a period equal to any such prevention, delay or stoppage. If this Lease specifies a time period for performance of an obligation of either party, that time period shall be extended by the period of any delay in such party's performance caused by a Force Majeure. Notwithstanding anything to the contrary in this Lease, no event of Force Majeure shall (i) excuse Tenant's obligations to pay Rent and other charges due pursuant to this Lease, (ii) be grounds for Tenant to abate any portion of Rent due pursuant to this Lease, or entitle either party to terminate this Lease, except as allowed pursuant to Articles 11 and 13 of this Lease, (iii) excuse Tenant's obligations under Articles 5 and 24 of this Lease, or (iv) extend the occurrence of the Lease Commencement Date.

29.17 **Waiver of Redemption by Tenant**. Tenant hereby waives, for Tenant and for all those claiming under Tenant, any and all rights now or hereafter existing to redeem by order or judgment of any court or by any legal process or writ, Tenant's right of occupancy of the Premises after any termination of this Lease.

29.18 **Notices**. All notices, demands, statements, designations, approvals or other communications (collectively, "**Notices**") given or required to be given by either party to the other hereunder or by law shall be in writing, shall be (A) sent by United States certified or registered mail, postage prepaid, return receipt requested ("**Mail**"), (B) transmitted by telecopy, if such telecopy is promptly followed by a Notice sent by Mail, (C) delivered by a nationally recognized overnight courier, or (D) delivered personally. Any Notice shall be sent, transmitted, or delivered, as the case may be, to Tenant at the appropriate address set forth in Section 10 of the Summary, or to such other place as Tenant may from time to time designate in a Notice to Landlord, or to Landlord at the addresses set forth below, or to such other places as Landlord may from time to time designate in a Notice to Tenant. Any Notice will be deemed given (i) three (3) days after the date it is posted if sent by Mail, (ii) the date the telecopy is transmitted, (iii) the date the overnight courier delivery is made, or (iv) the date personal delivery is made. As of the date of this Lease, any Notices to Landlord must be sent, transmitted, or delivered, as the case may be, to the following addresses:

HCP BTC, LLC
c/o Healthpeak Properties, Inc.
5050 S Syracuse St. #800
Denver, CO 80237
Attn: Legal Department

with a copy to:

Healthpeak Properties, Inc.
2000 Sierra Point Parkway, Suite 100
Brisbane, CA 94005
Attention: Scott Bohn

and

Allen Matkins Leck Gamble Mallory & Natsis LLP
1901 Avenue of the Stars, Suite 1800
Los Angeles, California 90067
Attention: Anton N. Natsis, Esq.

29.19 **Joint and Several**. If there is more than one tenant, the obligations imposed upon Tenant under this Lease shall be joint and several.

29.20 **Authority**. If Tenant is a corporation, trust or partnership, each individual executing this Lease on behalf of Tenant hereby represents and warrants that Tenant is a duly formed and existing entity qualified to do business in the State of California and that Tenant has full right and authority to execute and deliver this Lease and that each person signing on behalf of Tenant is authorized to do so. In such event, Tenant shall, within ten (10) days after execution of this Lease, deliver to Landlord satisfactory evidence of such authority and, if a corporation, upon demand by Landlord, also deliver to Landlord satisfactory evidence of (i) good standing in Tenant's state of incorporation and (ii) qualification to do business in the State of California.

29.21 **Attorneys' Fees**. In the event that either Landlord or Tenant should bring suit for the possession of the Premises, for the recovery of any sum due under this Lease, or because of the breach of any provision of this Lease or for any other relief against the other, then all costs and expenses, including reasonable attorneys' fees, incurred by the prevailing party therein shall be paid by the other party, which obligation on the part of the other party shall be deemed to have accrued on the date of the commencement of such action and shall be enforceable whether or not the action is prosecuted to judgment.

29.22 **Governing Law; WAIVER OF TRIAL BY JURY; JUDICIAL REFERENCE**. This Lease shall be construed and enforced in accordance with the laws of the State of California. In any action or proceeding arising herefrom, landlord and tenant hereby consent to (i) the jurisdiction of any competent court within the State of California, (ii) service of process by any means authorized by California law, AND (III) IN THE INTEREST OF SAVING TIME AND EXPENSE, TRIAL WITHOUT A JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER OF THE PARTIES HERETO AGAINST THE OTHER OR THEIR SUCCESSORS IN RESPECT OF ANY MATTER ARISING OUT OF OR IN CONNECTION WITH THIS LEASE, THE RELATIONSHIP OF LANDLORD AND TENANT, TENANT'S USE OR OCCUPANCY OF THE PREMISES, AND/OR ANY CLAIM FOR INJURY OR DAMAGE, OR ANY EMERGENCY OR STATUTORY REMEDY. IN THE EVENT LANDLORD COMMENCES ANY SUMMARY PROCEEDINGS OR ACTION FOR NONPAYMENT OF BASE RENT OR ADDITIONAL RENT, TENANT SHALL NOT INTERPOSE ANY COUNTERCLAIM OF ANY NATURE OR DESCRIPTION (UNLESS SUCH COUNTERCLAIM SHALL BE MANDATORY) IN ANY SUCH PROCEEDING OR ACTION, BUT SHALL BE RELEGATED TO AN INDEPENDENT ACTION AT LAW. IF THE JURY WAIVER PROVISIONS OF THIS SECTION 29.22 ARE NOT ENFORCEABLE UNDER CALIFORNIA LAW, THEN THE FOLLOWING PROVISIONS SHALL APPLY. IT IS THE DESIRE AND INTENTION OF THE PARTIES TO AGREE UPON A MECHANISM AND PROCEDURE UNDER WHICH CONTROVERSIES AND DISPUTES ARISING OUT OF THIS LEASE OR RELATED TO THE PREMISES WILL BE RESOLVED IN A PROMPT AND EXPEDITIOUS MANNER. ACCORDINGLY, EXCEPT WITH RESPECT TO ACTIONS FOR UNLAWFUL OR FORCIBLE DETAINER OR WITH RESPECT TO THE PREJUDGMENT REMEDY OF ATTACHMENT, ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER PARTY HERETO AGAINST THE OTHER (AND/OR AGAINST ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR SUBSIDIARIES OR AFFILIATED ENTITIES) ON ANY MATTERS WHATSOEVER ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS LEASE, TENANT'S USE OR OCCUPANCY OF THE PREMISES AND/OR ANY CLAIM OF INJURY OR DAMAGE, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE, SHALL BE HEARD AND RESOLVED BY A REFEREE UNDER THE PROVISIONS OF THE CALIFORNIA CODE OF CIVIL PROCEDURE, SECTIONS 638 — 645.1, INCLUSIVE (AS SAME MAY BE AMENDED, OR ANY SUCCESSOR STATUTE(S) THERETO) (THE "**REFEREE SECTIONS**"). ANY FEE TO INITIATE THE JUDICIAL REFERENCE PROCEEDINGS AND ALL FEES CHARGED AND COSTS INCURRED BY THE REFEREE SHALL BE PAID BY THE PARTY INITIATING SUCH PROCEDURE (EXCEPT THAT IF A REPORTER IS REQUESTED BY EITHER PARTY, THEN A REPORTER SHALL BE PRESENT AT ALL PROCEEDINGS WHERE REQUESTED AND THE FEES

OF SUCH REPORTER – EXCEPT FOR COPIES ORDERED BY THE OTHER PARTIES – SHALL BE BORNE BY THE PARTY REQUESTING THE REPORTER); PROVIDED HOWEVER, THAT ALLOCATION OF THE COSTS AND FEES, INCLUDING ANY INITIATION FEE, OF SUCH PROCEEDING SHALL BE ULTIMATELY DETERMINED IN ACCORDANCE WITH SECTION 29.21 ABOVE. THE VENUE OF THE PROCEEDINGS SHALL BE IN THE COUNTY IN WHICH THE PREMISES ARE LOCATED. WITHIN TEN (10) DAYS OF RECEIPT BY ANY PARTY OF A WRITTEN REQUEST TO RESOLVE ANY DISPUTE OR CONTROVERSY PURSUANT TO THIS SECTION 29.22, THE PARTIES SHALL AGREE UPON A SINGLE REFEREE WHO SHALL TRY ALL ISSUES, WHETHER OF FACT OR LAW, AND REPORT A FINDING AND JUDGMENT ON SUCH ISSUES AS REQUIRED BY THE REFEREE SECTIONS. IF THE PARTIES ARE UNABLE TO AGREE UPON A REFEREE WITHIN SUCH TEN (10) DAY PERIOD, THEN ANY PARTY MAY THEREAFTER FILE A LAWSUIT IN THE COUNTY IN WHICH THE PREMISES ARE LOCATED FOR THE PURPOSE OF APPOINTMENT OF A REFEREE UNDER THE REFEREE SECTIONS. IF THE REFEREE IS APPOINTED BY THE COURT, THE REFEREE SHALL BE A NEUTRAL AND IMPARTIAL RETIRED JUDGE WITH SUBSTANTIAL EXPERIENCE IN THE RELEVANT MATTERS TO BE DETERMINED, FROM JAMS, THE AMERICAN ARBITRATION ASSOCIATION OR SIMILAR MEDIATION/ARBITRATION ENTITY. THE PROPOSED REFEREE MAY BE CHALLENGED BY ANY PARTY FOR ANY OF THE GROUNDS LISTED IN THE REFEREE SECTIONS. THE REFEREE SHALL HAVE THE POWER TO DECIDE ALL ISSUES OF FACT AND LAW AND REPORT HIS OR HER DECISION ON SUCH ISSUES, AND TO ISSUE ALL RECOGNIZED REMEDIES AVAILABLE AT LAW OR IN EQUITY FOR ANY CAUSE OF ACTION THAT IS BEFORE THE REFEREE, INCLUDING AN AWARD OF ATTORNEYS' FEES AND COSTS IN ACCORDANCE WITH THIS LEASE. THE REFEREE SHALL NOT, HOWEVER, HAVE THE POWER TO AWARD PUNITIVE DAMAGES, NOR ANY OTHER DAMAGES WHICH ARE NOT PERMITTED BY THE EXPRESS PROVISIONS OF THIS LEASE, AND THE PARTIES HEREBY WAIVE ANY RIGHT TO RECOVER ANY SUCH DAMAGES. THE PARTIES SHALL BE ENTITLED TO CONDUCT ALL DISCOVERY AS PROVIDED IN THE CALIFORNIA CODE OF CIVIL PROCEDURE, AND THE REFEREE SHALL OVERSEE DISCOVERY AND MAY ENFORCE ALL DISCOVERY ORDERS IN THE SAME MANNER AS ANY TRIAL COURT JUDGE, WITH RIGHTS TO REGULATE DISCOVERY AND TO ISSUE AND ENFORCE SUBPOENAS, PROTECTIVE ORDERS AND OTHER LIMITATIONS ON DISCOVERY AVAILABLE UNDER CALIFORNIA LAW. THE REFERENCE PROCEEDING SHALL BE CONDUCTED IN ACCORDANCE WITH CALIFORNIA LAW (INCLUDING THE RULES OF EVIDENCE), AND IN ALL REGARDS, THE REFEREE SHALL FOLLOW CALIFORNIA LAW APPLICABLE AT THE TIME OF THE REFERENCE PROCEEDING. THE PARTIES SHALL PROMPTLY AND DILIGENTLY COOPERATE WITH ONE ANOTHER AND THE REFEREE, AND SHALL PERFORM SUCH ACTS AS MAY BE NECESSARY TO OBTAIN A PROMPT AND EXPEDITIOUS RESOLUTION OF THE DISPUTE OR CONTROVERSY IN ACCORDANCE WITH THE TERMS OF THIS SECTION 29.22. IN THIS REGARD, THE PARTIES AGREE THAT THE PARTIES AND THE REFEREE SHALL USE BEST EFFORTS TO ENSURE THAT (A) DISCOVERY BE CONDUCTED FOR A PERIOD NO LONGER THAN SIX (6) MONTHS FROM THE DATE THE REFEREE IS APPOINTED, EXCLUDING MOTIONS REGARDING DISCOVERY, AND (B) A TRIAL DATE BE SET WITHIN NINE (9) MONTHS OF THE DATE THE REFEREE IS APPOINTED. IN ACCORDANCE WITH SECTION 644 OF THE CALIFORNIA CODE OF CIVIL PROCEDURE, THE DECISION OF THE REFEREE UPON THE WHOLE ISSUE MUST STAND AS THE DECISION OF THE COURT, AND UPON THE FILING OF THE STATEMENT OF DECISION WITH THE CLERK OF THE COURT, OR WITH THE JUDGE IF THERE IS NO CLERK, JUDGMENT MAY BE ENTERED THEREON IN THE SAME MANNER AS IF THE ACTION HAD BEEN TRIED BY THE COURT. ANY DECISION OF THE REFEREE AND/OR JUDGMENT OR OTHER ORDER ENTERED THEREON SHALL BE APPEALABLE TO THE SAME EXTENT AND IN THE SAME MANNER THAT SUCH DECISION, JUDGMENT, OR ORDER WOULD BE APPEALABLE IF RENDERED BY A JUDGE OF THE SUPERIOR COURT IN WHICH VENUE IS PROPER HEREUNDER. THE REFEREE SHALL IN HIS/HER STATEMENT OF DECISION SET FORTH HIS/HER FINDINGS OF FACT AND CONCLUSIONS OF LAW. THE PARTIES INTEND THIS GENERAL REFERENCE AGREEMENT TO BE SPECIFICALLY ENFORCEABLE IN ACCORDANCE WITH THE CODE OF CIVIL PROCEDURE. NOTHING IN THIS SECTION 29.22 SHALL PREJUDICE THE RIGHT OF ANY PARTY TO OBTAIN PROVISIONAL RELIEF OR OTHER EQUITABLE REMEDIES FROM A COURT OF COMPETENT JURISDICTION AS SHALL OTHERWISE BE AVAILABLE UNDER THE CODE OF CIVIL PROCEDURE AND/OR APPLICABLE COURT RULES.

29.23 **Submission of Lease**. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of, option for or option to lease, and it is not effective as a lease or otherwise until execution and delivery by both Landlord and Tenant.

29.24 **Brokers**. Landlord and Tenant hereby warrant to each other that they have had no dealings with any real estate broker or agent in connection with the negotiation of this Lease, excepting only the real estate brokers or agents specified in Section 12 of the Summary (the "**Brokers**"), and that they know of no other real estate broker or agent who is entitled to a commission in connection with this Lease. Each party agrees to indemnify and defend the other party against and hold the other party harmless from any and all claims, demands, losses, liabilities, lawsuits, judgments, costs and expenses (including without limitation reasonable attorneys' fees) with respect to any leasing commission or equivalent compensation alleged to be owing on account of any dealings with any real estate broker or agent, other than the Brokers, occurring by, through, or under the indemnifying party. The terms of this Section 29.24 shall survive the expiration or earlier termination of the Lease Term.

29.25 **Independent Covenants**. This Lease shall be construed as though the covenants herein between Landlord and Tenant are independent and not dependent and Tenant hereby expressly waives the benefit of any statute to the contrary and agrees that if Landlord fails to perform its obligations set forth herein, Tenant shall not be entitled to make any repairs or perform any acts hereunder at Landlord's expense or to any setoff of the Rent or other amounts owing hereunder against Landlord.

29.26 **Project or Building Name, Address and Signage**. Landlord shall have the right at any time to change the name and/or address of the Project or Building and to install, affix and maintain any and all signs on the exterior and on the interior of the Project or Building as Landlord may, in Landlord's sole discretion, desire. Tenant shall not use the name of the Project or Building or use pictures or illustrations of the Project or Building in advertising or other publicity or for any purpose other than as the address of the business to be conducted by Tenant in the Premises, without the prior written consent of Landlord.

29.27 **Counterparts**. This Lease may be executed in counterparts with the same effect as if both parties hereto had executed the same document. Both counterparts shall be construed together and shall constitute a single lease.

29.28 **Intentionally Omitted**.

29.29 **Development of the Project**.

29.29.1 **Subdivision**. Landlord reserves the right to subdivide all or a portion of the buildings and Common Areas, so long as the same does not interfere with Tenant's use of or access to the Premises or Tenant's parking rights. Tenant agrees to execute and deliver, upon demand by Landlord and in the form requested by Landlord, any additional documents needed to conform this Lease to the circumstances resulting from a subdivision and any all maps in connection therewith, so long as the same does not interfere with Tenant's use of or access to the Premises or Tenant's parking rights. Notwithstanding anything to the contrary set forth in this Lease, the separate ownership of any buildings and/or Common Areas by an entity other than Landlord shall not affect the calculation of Direct Expenses or Tenant's payment of Tenant's Share of Direct Expenses.

29.29.2 **Construction of Property and Other Improvements**. Tenant acknowledges that portions of the Project may be under construction following Tenant's occupancy of the Premises, and that such construction may result in levels of noise, dust, obstruction of access, etc. which are in excess of that present in a fully constructed project. Tenant hereby waives any and all rent offsets or claims of constructive eviction which may arise in connection with such construction, so long as the same does not interfere with Tenant's use of or access to the Premises or Tenant's parking rights. Landlord shall use commercially reasonable efforts to minimize and mitigate noise and vibrations in connection with any such construction.

29.30 **No Violation**. Tenant hereby warrants and represents that neither its execution of nor performance under this Lease shall cause Tenant to be in violation of any agreement, instrument, contract, law, rule or regulation by which Tenant is bound, and Tenant shall protect, defend, indemnify and hold Landlord harmless against any claims, demands, losses, damages, liabilities, costs and expenses, including, without limitation, reasonable attorneys' fees and costs, arising from Tenant's breach of this warranty and representation.

29.31 **Transportation Management**. Tenant shall fully comply with all present or future programs intended to manage parking, transportation or traffic in and around the Project and/or the Building, and in connection therewith, Tenant shall take responsible action for the transportation planning and management of all employees located at the Premises by working directly with Landlord, any governmental transportation management organization or any other transportation-related committees or entities. Such programs may include, without limitation: (i) restrictions on the number of peak-hour vehicle trips generated by Tenant; (ii) increased vehicle occupancy; (iii) implementation of an in-house ridesharing program and an employee transportation coordinator; (iv) working with employees and any Project, Building or area-wide ridesharing program manager; (v) instituting employer-sponsored incentives (financial or in-kind) to encourage employees to rideshare; and (vi) utilizing flexible work shifts for employees.

29.32 **Signatures**. The parties hereto consent and agree that this Lease may be signed and/or transmitted by facsimile, e-mail of a .pdf document or using electronic signature technology (e.g., via DocuSign or similar electronic signature technology), and that such signed electronic record shall be valid and as effective to bind the party so signing as a paper copy bearing such party's handwritten signature. The parties further consent and agree that (1) to the extent a party signs this Lease using electronic signature technology, by clicking "SIGN", such party is signing this Lease electronically, and (2) the electronic signatures appearing on this Lease shall be treated, for purposes of validity, enforceability and admissibility, the same as handwritten signatures.

29.33 **Roof Rights**. Tenant shall have the right to use the roof of the Building (the "**Roof**") for the purpose of installing and servicing twenty-four (24) hours per day, seven (7) days per week, satellite or wireless communications, telecommunication and fiber optic lines, supplemental HVAC, or other equipment or infrastructure supporting Tenant's operations, free of charge for the Lease Term (including any extension thereof) (collectively, the "**Rooftop Equipment**"). Tenant shall be permitted to use the Roof to install, operate and service the Rooftop Equipment for Tenant's own use, subject to the terms of this Section 29.33. Before making any installation of the Rooftop Equipment or commencing any work related to the Rooftop Equipment, Tenant shall (i) provide Landlord and Tenant with Tenant's plans and specifications for any such installation, and (ii) obtain Landlord and Tenant's prior written consent to such installation, such consent not to be unreasonably withheld, conditioned or delayed. Landlord hereby consents to any Rooftop Equipment installed by Tenant during Tenant's occupancy of the Premises under the Sublease. Tenant shall install all Rooftop Equipment at the sole cost, expense, and shall do so in a good, workmanlike manner and in compliance with all Applicable Laws and the terms of this Lease. Tenant, at its sole cost and expense, shall obtain any permits, licenses, variances, or other governmental approvals required with respect to the installation or operation of the Rooftop Equipment to be installed by Tenant or to the operations to be performed by Tenant. Tenant shall deliver copies thereof to Landlord prior to commencing any installations or alterations. Tenant shall ensure that any contractors or subcontractors performing work with respect to the Rooftop Equipment shall carry policies of insurance in types and amounts reasonably acceptable to Landlord, with carriers licensed in the State of California, and that such policies shall name Landlord and Tenant as additional insureds. Tenant's indemnity obligations pursuant to Article 10 shall apply to any damages caused by the Rooftop Equipment. Landlord makes no representation or warranty that any location available for installation of the Rooftop Equipment will be sufficient for Tenant's purposes, and Landlord will not be responsible for any interference with the signal to such Rooftop Equipment.

29.34 **Waiver of Claims**. As a material inducement to Landlord to enter into this Lease, Tenant hereby releases Landlord from, and hereby waives, any and all losses, costs, damages, expenses, liabilities, claims and causes of action (collectively, the "**Released Claims**") arising from or related to Tenant's inability or limitation to conduct operations from the Premises as a result of any "shelter in place" orders or similar governmental directives, including, without limitation, any claims for, and/or rights of, termination of this Lease and/or abatement, offset and/or deferral of Rent under this Lease, at law and/or in equity related to the inability of Tenant to conduct operations from the Premises as a result of any "shelter in place" orders or similar governmental directives related thereto. With respect to the Released Claims, Tenant acknowledges that Tenant has either been advised by legal counsel or has made itself familiar with the provisions of California Civil Code section 1542, which provides as follows: **A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE**

MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY. Tenant, being aware of the foregoing code section, hereby expressly waives any rights Tenant may have thereunder, as well as under any other statutes or common-law principles of similar effect, pertaining to the Released Claims.

IN WITNESS WHEREOF, Landlord and Tenant have caused this Lease to be executed the day and date first above written.

LANDLORD:

HCP BTC, LLC,
a Delaware limited liability company

By: /s/ Scott R. Bohn

Name: Scott R. Bohn

Title: Executive Vice President

TENANT:

NGM BIOPHARMACEUTICALS, INC.,
a Delaware corporation

By: /s/ Siobhan Nolan Mangini

Name: Siobhan Nolan Mangini

Title: CFO

EXHIBIT A

BRITANNIA OYSTER POINT

OUTLINE OF PREMISES

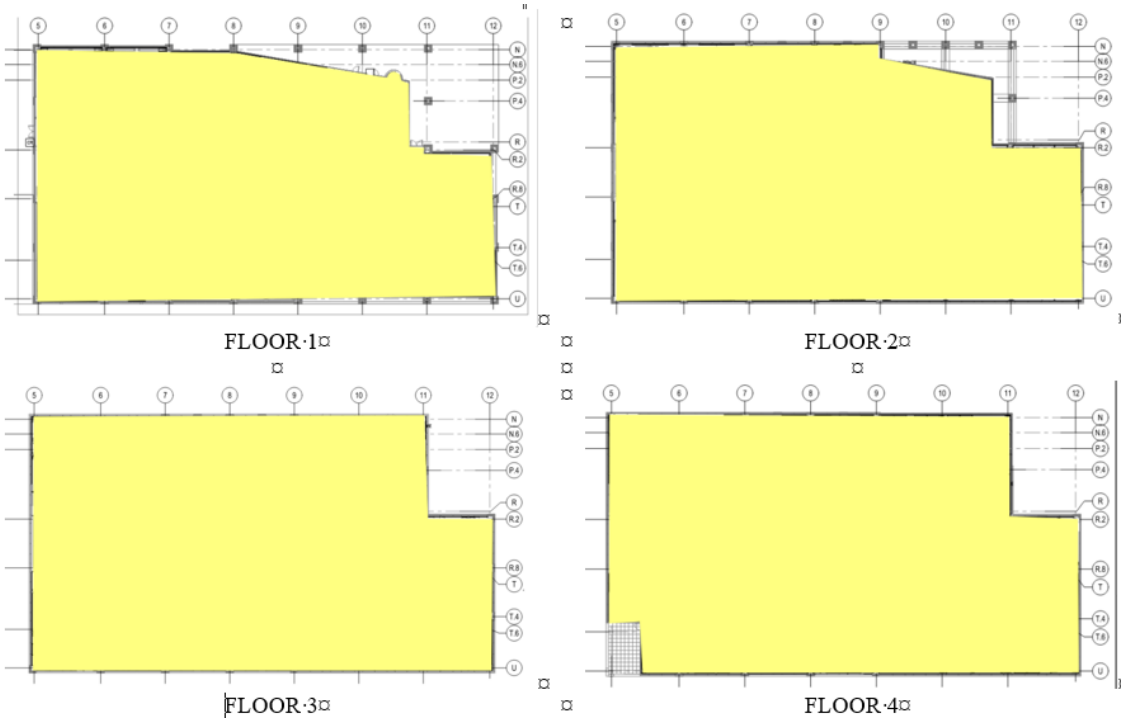

EXHIBIT A-1

BRITANNIA OYSTER POINT

PROJECT SITE PLAN

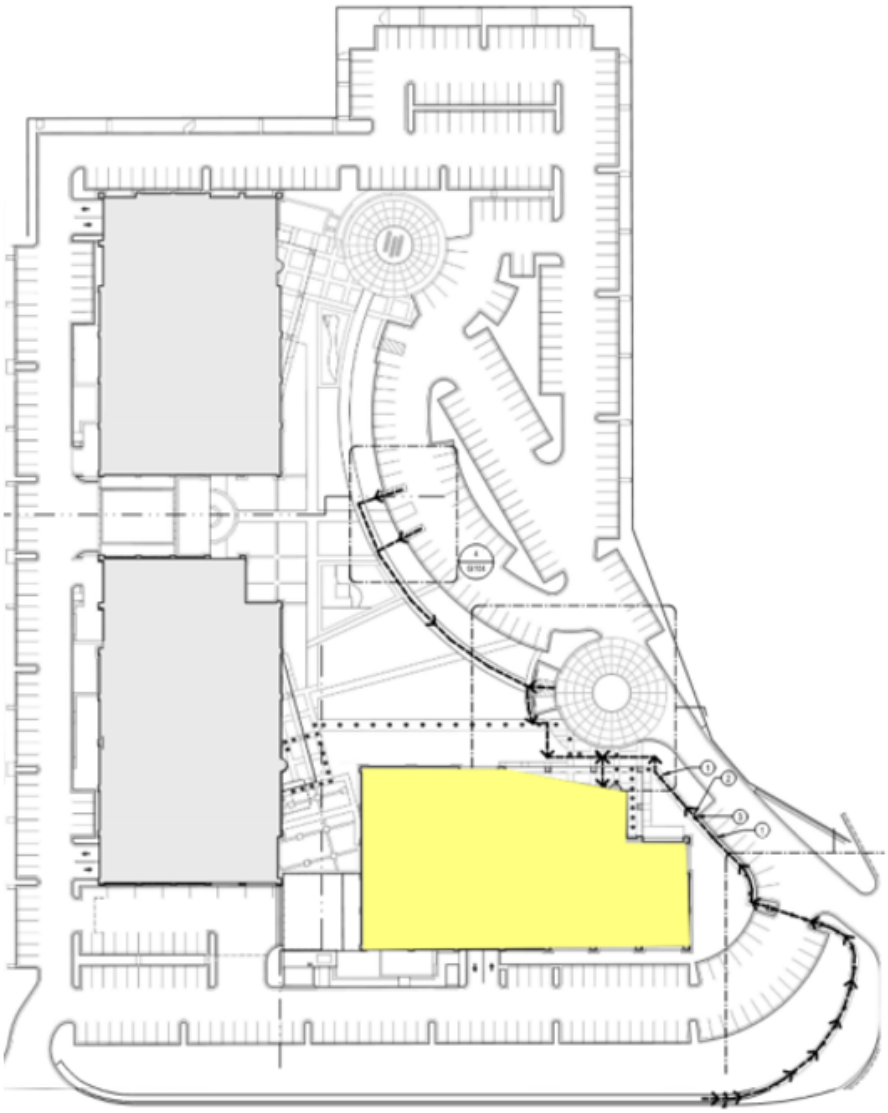

EXHIBIT B

BRITANNIA OYSTER POINT

TENANT WORK LETTER

This Tenant Work Letter shall set forth the terms and conditions relating to the initial improvement of the Premises for Tenant following the date of this Lease. This Tenant Work Letter is essentially organized chronologically and addresses the issues of construction, in sequence, as such issues will arise during construction in the Premises.

SECTION 1

POSSESSION OF THE PREMISES

Tenant acknowledges that Tenant has been in occupancy of the Premises pursuant to the Sublease, and Tenant shall continue to accept the Premises in its presently existing, "as-is" condition. Except for the payment of the Tenant Improvement Allowance as provided in Section 2, below and performance of the Landlord Work as provided in this Section 1 below, Landlord shall have no obligation to make or pay for any improvements to the Premises.

Notwithstanding anything set forth in this Tenant Work Letter to the contrary, Landlord shall, at Landlord's sole cost and expense (not to be deducted from the Tenant Improvement Allowance) and utilizing Landlord's Building standard methods, materials, components and finishes, perform any work necessary to cause the elevator and boiler serving the Premises to be in good working order ("**Landlord's Work**"). Landlord shall use commercially reasonable efforts to perform such Landlord Work following the execution of this Lease and prior to the Lease Commencement Date, but agrees that Landlord shall perform such Landlord Work on or before the date that is six (6) months following the Lease Commencement Date. Tenant hereby acknowledges that Landlord shall be permitted to perform the Landlord's Work concurrently with Tenant's construction of the Tenant Improvements and Landlord and Tenant shall cooperate (and shall cause their respective contractors, subcontractors and agents to cooperate) with each other in good faith in order that the work being performed by each party may be completed without material interference with the completion of the work being completed by the other party and without increase in cost to the other party.

SECTION 2

TENANT IMPROVEMENTS

2.1 **Tenant Improvement Allowance**. Commencing on the Effective Date, Tenant shall be entitled to use the "Tenant Improvement Allowance", as defined in Section 5 of the Summary to this Lease, for the costs relating to the initial design and construction of Tenant's improvements, which are permanently affixed to the Premises or which are "Tenant Improvement Allowance Items," as that term is defined in Section 2.2.1, below (collectively, the "**Tenant Improvements**"). In no event shall Landlord be obligated to make disbursements pursuant to this Tenant Work Letter or otherwise in connection with Tenant's construction of the Tenant Improvements or any Tenant Improvement Allowance Items, as defined below, in a total amount which exceeds the sum of the Tenant Improvement Allowance. All Tenant Improvements for which the Tenant Improvement Allowance has been made available shall be deemed Landlord's property under the terms of the Lease; provided, however, Landlord may, by written notice to Tenant given concurrently with Landlord's approval of the "Final Working Drawings", as that term is defined in Section 3.3, below, require Tenant, prior to the end of the Lease Term, or given following any earlier termination of this Lease, at Tenant's expense, to remove any Tenant Improvements which are deemed Specialty Improvements and to repair any damage to the Premises and Building caused by such removal and return the affected portion of the Premises to a Building standard general office condition. Any portion of the Tenant Improvement Allowance that is not disbursed or allocated for disbursement by December 31, 2024, shall revert to Landlord and Tenant shall have no further rights with respect thereto.

2.2 **Disbursement of the Tenant Improvement Allowance**.

2.2.1 **Tenant Improvement Allowance Items**. Except as otherwise set forth in this Tenant Work Letter, the Tenant Improvement Allowance and Additional Improvement Allowance shall be disbursed by Landlord only for the following items and costs (collectively the "**Tenant Improvement Allowance Items**"):

2.2.1.1 Payment of all reasonable fees of the "Architect" and the "Engineers," as those terms are defined in Section 3.1 of this Tenant Work Letter, project management fees, and payment of the fees incurred by, and the cost of documents and materials supplied by, Landlord and Landlord's consultants in connection with the preparation and review of the "Construction Drawings," as that term is defined in Section 3.2 of this Tenant Work Letter;

2.2.1.2 The payment of plan check, permit and license fees relating to construction of the Tenant Improvements;

2.2.1.3 The payment for all demolition and removal of existing improvements in the Premises;

2.2.1.4 The cost of construction of the Tenant Improvements, including, without limitation, testing and inspection costs, costs incurred for removal of existing furniture, fixtures or equipment in the Premises, hoisting and trash removal costs, costs to purchase and install in the Premises equipment customarily incorporated into laboratory improvements or laboratory utility systems, including, without limitation, UPS, DI Systems, boilers, air compressors, glass/cage washers and autoclaves, painting, and contractors' fees and general conditions and electric car chargers for the Tenant EV Spaces, as further set forth in Article 28 of this Lease;

2.2.1.5 The cost of any changes in the Base Building when such changes are required by the Construction Drawings (including if such changes are due to the fact that such work is prepared on an unoccupied basis), such cost to include all direct architectural and/or engineering fees and expenses incurred in connection therewith;

2.2.1.6 The cost of any changes to the Construction Drawings or Tenant Improvements required by all applicable building codes (the "**Code**");

2.2.1.7 Sales and use taxes;

2.2.1.8 Subject to Section 2.2, above, all other reasonable, actual out-of-pocket costs expended by Landlord in connection with the construction of the Tenant Improvements, including, without limitation, costs expended by Landlord pursuant to Section 4.1.1 of this Tenant Work Letter, below.

2.2.2 **Disbursement of Tenant Improvement Allowance**. During the construction of the Tenant Improvements, Landlord shall make monthly disbursements of the Tenant Improvement Allowance and Additional Improvement Allowance, if applicable, for Tenant Improvement Allowance Items for the benefit of Tenant and shall authorize the release of monies for the benefit of Tenant as follows.

2.2.2.1 **Monthly Disbursements**. On or before the fifth (5^{th}) day of each calendar month, during the design and construction of the Tenant Improvements (or such other date as Landlord may designate), Tenant shall deliver to Landlord: (i) a request for reimbursement of amounts paid to the "Contractor," as that term is defined in Section 4.1.1 of this Tenant Work Letter, approved by Tenant, in a form to be provided by Landlord, showing the schedule, by trade, of percentage of completion of the Tenant Improvements in the Premises, detailing the portion of the work completed and the portion not completed; (ii) invoices from all of "Tenant's Agents," as that term is defined in Section 4.1.2 of this Tenant Work Letter, for labor rendered and materials for the Premises; (iii) executed mechanic's lien releases, as applicable, from all of Tenant's Agents which shall comply with the appropriate provisions, as reasonably determined by Landlord, of California Civil Code Sections 8132, 8134, 8136 and 8138; and (iv) all other information reasonably requested by Landlord. Tenant's request for payment shall be deemed Tenant's acceptance and approval of the work furnished and/or the materials supplied as set forth in Tenant's payment request. Within forty-five (45) days thereafter, Landlord shall deliver a check to Tenant made payable to Tenant in payment of the lesser of: (A) the amounts so requested by Tenant as set forth in this Section 2.2.3.1, above (or, subject to the terms of Section 4.2.1, below, a percentage thereof), and (B) the balance of any remaining available portion of the Tenant Improvement Allowance and Additional Improvement Allowance, if applicable, provided that Landlord does not dispute any request for payment based on non-compliance of any work with the "Approved Working Drawings," as that term is defined in Section 3.5 below, or due to any substandard work. Landlord's payment of such amounts shall not be deemed Landlord's approval or acceptance of the work furnished or materials supplied as set forth in Tenant's payment request.

2.2.2.2 **Final Deliveries**. Following the completion of construction of the Tenant Improvements, Tenant shall deliver to Landlord properly executed final mechanic's lien releases in compliance with both California Civil Code Section 8134 and either Section 8136 or Section 8138 from all of Tenant's Agents, and a certificate certifying that the construction of the Tenant Improvements in the Premises has been substantially completed. Tenant shall record a valid Notice of Completion in accordance with the requirements of Section 4.3 of this Tenant Work Letter.

2.2.2.3 **Other Terms**. Landlord shall only be obligated to make disbursements from the Tenant Improvement Allowance and Additional Improvement Allowance, if applicable, to the extent costs are incurred by Tenant for Tenant Improvement Allowance Items. All Tenant Improvement Allowance Items for which the Tenant Improvement Allowance and Additional Improvement Allowance have been made available shall be deemed Landlord's property under the terms of this Lease.

2.4 **Building Standards**. The quality of Tenant Improvements shall be in keeping with the existing improvements in the Premises.

SECTION 3

CONSTRUCTION DRAWINGS

3.1 **Selection of Architect**. Tenant shall retain an architect/space planner (the "**Architect**") approved in advance by Landlord (which approval shall not be unreasonably withheld) to prepare the Final Space Plan and Final Working Drawings as provided in Section 3.2 and 3.3, below. Tenant shall retain the engineering consultants or design/build subcontractors designated by Tenant and reasonably approved in advance by Landlord (the "**Engineers**") to prepare all plans and engineering working drawings relating to the structural, mechanical, electrical, plumbing, HVAC, lifesafety, and sprinkler work in the Premises, which work is not part of the Base Building. All such plans and drawings shall comply with the drawing format and specifications reasonably determined by Landlord, and shall be subject to Landlord's reasonable approval. Tenant and Architect shall verify, in the field, the dimensions and conditions as shown on the relevant portions of the Base Building plans, and Tenant and Architect shall be solely responsible for the same, and Landlord shall have no responsibility in connection therewith. Landlord's review of any plans or drawings as set forth in this Section 3, shall be for its sole purpose and shall not imply Landlord's review of the same, or obligate Landlord to review the same, for quality, design, Code compliance or other like matters.

3.2 **Final Space Plan**. Tenant shall supply Landlord with four (4) copies signed by Tenant of its final space plan for the Premises before any architectural working drawings or engineering drawings have been commenced. The final space plan (the "**Final Space Plan**") shall include a layout and designation of all offices, labs, rooms and other partitioning, their intended use, and equipment to be contained therein. Landlord may request clarification or more specific drawings for special use items not included in the Final Space Plan. Landlord shall advise Tenant within five (5) business days after Landlord's receipt of the Final Space Plan for the Premises if the same is unsatisfactory or incomplete in any respect. If Tenant is so advised, Tenant shall promptly cause the Final Space Plan to be revised to correct any deficiencies or other matters Landlord may reasonably require.

3.3 **Final Working Drawings**. After the Final Space Plan has been approved by Landlord, Tenant shall supply the Engineers with a complete listing of standard and non-standard equipment and specifications, including, without limitation, Title 24 calculations, electrical requirements and special electrical receptacle requirements for the Premises, to enable the Engineers and the Architect to complete the "Final Working Drawings" (as that term is defined below) in the manner as set forth below. Upon the approval of the Final Space Plan by Landlord and Tenant, Tenant shall promptly cause the Architect and the Engineers to complete the architectural and engineering drawings for the Premises, and Architect shall compile a fully coordinated set of architectural, structural, mechanical, electrical and plumbing working drawings in a form which is sufficiently complete to allow all of Tenant's Agents to bid on the work and to obtain all applicable permits (collectively, the "**Final Working Drawings**") and shall submit the same to Landlord for Landlord's approval, which shall not be unreasonably withheld, conditioned, or delayed. Tenant shall supply Landlord with four (4) copies signed by Tenant of such Final Working Drawings. Landlord shall advise Tenant within ten (10) business days after Landlord's receipt of the Final Working Drawings for the Premises if the same is unsatisfactory or incomplete in any respect. If Tenant is so advised, Tenant shall promptly cause the Final Working Drawings to be revised in accordance with such review and any disapproval of Landlord in connection therewith.

3.5 **Approved Working Drawings**. The Final Working Drawings shall be approved by Landlord (the "**Approved Working Drawings**") prior to the commencement of construction of the Premises by Tenant. Concurrently with Tenant's delivery of the Final Working Drawings to Landlord for Landlord's approval, Tenant may submit the same to the appropriate municipal authorities for all applicable building permits. Tenant hereby agrees that neither Landlord nor Landlord's consultants shall be responsible for obtaining any building permit or certificate of occupancy for the Premises and that obtaining the same shall be Tenant's responsibility; provided, however, that Landlord shall cooperate with Tenant in executing permit applications and performing other ministerial acts reasonably necessary to enable Tenant to obtain any such permit or certificate of occupancy. No changes, modifications or alterations in the Approved Working Drawings may be made without the prior written consent of Landlord, which shall not be unreasonably withheld, conditioned, or delayed.

SECTION 4

CONSTRUCTION OF THE TENANT IMPROVEMENTS

4.1 **Tenant's Selection of Contractors**.

4.1.1 **The Contractor; Landlord's Project Manager**. Tenant shall retain a licensed general contractor, approved in advance by Landlord, to construct the Tenant Improvements ("**Contractor**"). Landlord's approval of the Contractor shall not be unreasonably withheld. Landlord shall retain Project Management Advisors, Inc. ("**PMA**") as a third-party project manager for construction oversight of the Tenant Improvements on behalf of Landlord, and Tenant shall pay a fee to Landlord with respect to the PMA services equal to $1.83 per rentable square foot of the Premises.

4.1.2 **Tenant's Agents**. All subcontractors, laborers, materialmen, and suppliers used by Tenant (such subcontractors, laborers, materialmen, and suppliers, and the Contractor to be known collectively as "**Tenant's Agents**"). The subcontractors used by Tenant, but not any laborers, materialmen, and suppliers, must be approved in writing by Landlord, which approval shall not be unreasonably withheld, conditioned, or delayed; provided, however, Landlord may nevertheless designate and require the use of particular mechanical, engineering, plumbing, fire life-safety and other Base Building subcontractors. If Landlord does not approve any of Tenant's proposed subcontractors, Tenant shall submit other proposed subcontractors for Landlord's written approval.

4.2 **Construction of Tenant Improvements by Tenant's Agents**.

4.2.1 **Construction Contract; Cost Budget**. Tenant shall engage the Contractor under a commercially reasonable and customary construction contract (collectively, the "**Contract**"). Prior to the commencement of the construction of any Phase of the Tenant Improvements, and after Tenant has accepted all bids for the Tenant Improvements, Tenant shall provide Landlord with a detailed breakdown, by trade, of the final costs to be incurred or which have been incurred in connection with the design and construction of the relevant Phase of the Tenant Improvements to be performed by or at the direction of Tenant or the Contractor, which costs form a basis for the estimated total costs of the work of the relevant Phase of the Tenant Improvements (each, a "**Final Budget**"). Any costs of design and construction of the Tenant Improvements in excess of the Tenant Improvement Allowance shall be paid by Tenant out of its own funds once the Tenant Improvement Allowance is exhausted, but Tenant shall continue to provide Landlord with the documents described in Sections 2.2.2.1(i), (ii), (iii) and (iv) of this Tenant Work Letter, above, for Landlord's approval, prior to Tenant paying such costs.

4.2.2 **Tenant's Agents**.

4.2.2.1 **Compliance with Drawings and Schedule**. Tenant's and Tenant's Agent's construction of the Tenant Improvements shall comply with the following: (i) the Tenant Improvements shall be constructed in strict accordance with the Approved Working Drawings; and (ii) Tenant's Agents shall submit schedules of all work relating to the Tenant's Improvements to Contractor and Contractor shall, within five (5) business days of receipt thereof, inform Tenant's Agents of any changes which are necessary thereto, and Tenant's Agents shall adhere to such corrected schedule.

4.2.2.2 **Indemnity**. Tenant's indemnity of Landlord as set forth in this Lease shall also apply with respect to any and all costs, losses, damages, injuries and liabilities related in any way to any act or omission of Tenant or Tenant's Agents, or anyone directly or indirectly employed by any of them, or in connection with Tenant's non-payment of any amount arising out of the Tenant Improvements and/or Tenant's disapproval of all or any portion of any request for payment. Such indemnity by Tenant, as set forth in this Lease, shall also apply with respect to any and all costs, losses, damages, injuries and liabilities related in any way to Landlord's performance of any ministerial acts reasonably necessary (i) to permit Tenant to complete the Tenant Improvements, and (ii) to enable Tenant to obtain any building permit or certificate of occupancy for the Premises. The foregoing indemnity shall not apply to claims caused by the gross negligence or willful misconduct of Landlord, its member partners, shareholders, officers, directors, agents, employees, and/or contractors.

4.2.2.2 **Requirements of Tenant's Agents**. Each of Tenant's Agents shall guarantee to Tenant and for the benefit of Landlord that the portion of the Tenant Improvements for which it is responsible shall be free from any defects in workmanship and materials for a period of not less than one (1) year from the date of substantial completion of the work under the Contract ("**Substantial Completion**"). Each of Tenant's Agents shall be responsible for the replacement or repair, without additional charge, of all work done or furnished in accordance with its contract that shall become defective within one (1) year after Substantial Completion. The correction of such work shall include, without additional charge, all additional expenses and damages incurred in connection with such removal or replacement of all or any part of the Tenant Improvements, and/or the Building and/or common areas that may be damaged or disturbed thereby. All such warranties or guarantees as to materials or workmanship of or with respect to the Tenant Improvements shall be contained in the Contract or subcontract and shall be written such that such guarantees or warranties shall inure to the benefit of both Landlord and Tenant, as their respective interests may appear, and can be directly enforced by either. Tenant covenants to give to Landlord any assignment or other assurances which may be necessary to effect such right of direct enforcement.

4.2.2.4 **Insurance Requirements**.

4.2.2.4.1 **General Coverages**. All of Tenant's Agents shall carry the following insurance with insurers having a minimum A.M. best rating of A- VIII or better (i) worker's compensation insurance covering all of Tenant's Agents' respective employees with a waiver of subrogation in favor of Landlord and the property manager, (ii) general liability insurance with a limit of not less than $1,000,000 per occurrence and $2,000,000 general aggregate, including products/completed operations and contractual coverage, and shall name Landlord, its subsidiaries and affiliates, its property manager (if any) and any other party the Landlord so specifies, as an additional insured or loss payee, as applicable, including Landlord's managing agent, if any, and (ii) if the cost of such Tenant Improvements exceeds $100,000 in the aggregate, then Builders Risk insurance covering the construction of the Tenant Improvements, and such policy shall include Landlord as an additional insured.

4.2.2.4.2 **Intentionally Omitted**.

4.2.2.4.3 **General Terms**. Certificates for all insurance carried pursuant to this Section 4.2.2.4 shall be delivered to Landlord before the commencement of construction of the Expansion Tenant Improvements and before the Contractor's equipment is moved onto the site. All such policies of insurance must contain a provision that the company writing said policy will endeavor to give Landlord thirty (30) days prior written notice of any cancellation or lapse of the effective date or any reduction in the amounts of such insurance. In the event that the Expansion Tenant Improvements are damaged by any cause during the course of the construction thereof, Tenant shall immediately repair the same at Tenant's sole cost and expense. Tenant's Agents shall maintain all of the foregoing insurance coverage in force until the Expansion Tenant Improvements are fully completed, except for any Products and Completed Operation Coverage insurance required by Landlord, which is to be maintained for ten (10) years following completion of the work. Such insurance shall provide that it is primary insurance as respects the owner and that any other insurance maintained by owner is excess and noncontributing with the insurance required hereunder. The requirements for the foregoing insurance shall not derogate from the provisions for indemnification of Landlord by Tenant under Section 4.2.2.2 of this Tenant Work Letter.

4.2.2 **Governmental Compliance**. The Tenant Improvements shall comply in all respects with the following: (i) all state, federal, city or quasi-governmental laws, codes, ordinances and regulations, as each may apply according to the rulings of the controlling public official, agent or other person; (ii) applicable standards of the American Insurance Association (formerly, the National Board of Fire Underwriters) and the National Electrical Code; and (iii) building material manufacturer's specifications.

4.2.4 **Inspection by Landlord**. Landlord shall have the right to inspect the Tenant Improvements at all times, provided however, that Landlord's failure to inspect the Tenant Improvements shall in no event constitute a waiver of any of Landlord's rights hereunder nor shall Landlord's inspection of the Tenant Improvements constitute Landlord's approval of the same. Should Landlord reasonably disapprove any portion of the Tenant Improvements, on the grounds that the construction is defective or fails to comply with the Approved Working Drawings, Landlord shall notify Tenant in writing of such disapproval and shall specify the items disapproved. Any such defects or deviations shall be rectified by Tenant at no expense to Landlord, provided however, that in the event Landlord determines that a defect or deviation exists that might adversely affect the mechanical, electrical, plumbing, heating, ventilating and air conditioning or life-safety systems of the Building, the structure or exterior appearance of the Building or any other tenant's use of such other tenant's leased premises, Landlord may, take such action as Landlord reasonably deems necessary, at Tenant's expense and without incurring any liability on Landlord's part, to correct any such defect, deviation and/or matter, including, without limitation, causing the cessation of performance of the construction of the Tenant Improvements until such time as the defect, deviation and/or matter is corrected to Landlord's reasonable satisfaction.

4.2.5 **Meetings**. Commencing upon the execution of this Lease, Tenant shall hold weekly meetings at a reasonable time, with the Architect and the Contractor regarding the progress of the preparation of Construction Drawings and the construction of the Tenant Improvements, and Landlord and/or its agents shall receive prior notice of, and shall have the right to attend, all such meetings, and, upon Landlord's request, certain of Tenant's Agents shall attend such meetings. In addition, minutes shall be taken at all such meetings, a copy of which minutes shall be promptly delivered to Landlord. One such meeting each month shall include the review of Contractor's current request for payment.

4.3 **Notice of Completion; Copy of Record Set of Plans**. Within ten (10) days after completion of construction of the Tenant Improvements, Tenant shall cause a valid Notice of Completion to be recorded in the office of the Recorder of the county in which the Building is located in accordance with Section 8182 of the Civil Code of the State of California or any successor statute, and shall furnish a copy thereof to Landlord upon such recordation. If Tenant fails to do so, Landlord may execute and file the same on behalf of Tenant as Tenant's agent for such purpose, at Tenant's sole cost and expense. At the conclusion of construction, (i) Tenant shall cause the Architect and Contractor (*x*) to update the Approved Working Drawings as necessary to reflect all changes made to the Approved Working Drawings during the course of construction, (*y*) to certify to the best of their knowledge that the "record-set" of as-built drawings are true and correct, which certification shall survive the expiration or termination of this Lease, and (*z*) to deliver to Landlord two (2) sets of copies of such record set of drawings (hard copy and CAD files) within ninety (90) days following issuance of a certificate of occupancy for the Premises, and (ii) Tenant shall deliver to Landlord a copy of all warranties, guaranties, and operating manuals and information relating to the improvements, equipment, and systems in the Premises. Within fifteen (15) days after request by Tenant following the Substantial Completion of the Tenant Improvements, Landlord will acknowledge its approval of the Tenant Improvements (provided that such approval has been granted) by placing its signature on a Contractor's Certificate of Substantial Completion fully executed by the Architect, Contractor and Tenant. Landlord's approval shall not create any contingent liabilities for Landlord with respect to any latent quality, design, Code compliance or other like matters that may arise subsequent to Landlord's approval.

SECTION 5

MISCELLANEOUS

5.1 **Tenant's Entry Into the Premises Prior to Substantial Completion**. Provided that Tenant and its agents do not interfere with Contractor's work in the Building and the Premises, Contractor shall allow Tenant access to the Premises prior to the Substantial Completion of the Premises for the purpose of Tenant installing over-standard equipment or fixtures (including Tenant's data and telephone equipment) in the Premises. Prior to Tenant's entry into the Premises as permitted by the terms of this Section 5.1, Tenant shall submit a schedule to Landlord and Contractor, for their approval, which schedule shall detail the timing and purpose of Tenant's entry. Tenant shall hold Landlord harmless from and indemnify, protect and defend Landlord against any loss or damage to the Building or Premises and against injury to any persons caused by Tenant's actions pursuant to this Section 5.1

5.2 **Tenant's Representative**. Tenant has designated Derrick Dickens as its sole representatives with respect to the matters set forth in this Tenant Work Letter, who shall each have full authority and responsibility to act on behalf of the Tenant as required in this Tenant Work Letter.

5.3 **Landlord's Representative**. Landlord has designated Bernie Baker with PMA, as its sole representatives with respect to the matters set forth in this Tenant Work Letter, who, until further notice to Tenant, shall have full authority and responsibility to act on behalf of the Landlord as required in this Tenant Work Letter.

5.4 **Time is of the Essence in This Tenant Work Letter**. Unless otherwise indicated, all references herein to a "number of days" shall mean and refer to calendar days. If any item requiring approval is timely disapproved by Landlord, the procedure for preparation of the document and approval thereof shall be repeated until the document is approved by Landlord.

5.5 **Tenant's Lease Default**. Notwithstanding any provision to the contrary contained in the Lease or this Tenant Work Letter, upon any Event of Default by Tenant under the Lease or this Tenant Work Letter (including, without limitation, any failure by Tenant to fund any portion of the Over-Allowance Amount) occurs at any time on or before the substantial completion of the Tenant Improvements and such default remains uncured ten (10) days following Landlord's written notice of such default to Tenant, then in addition to all other rights and remedies granted to Landlord pursuant to the Lease, Landlord shall have the right to withhold payment of all or any portion of the Tenant Improvement Allowance and/or Landlord may, without any liability whatsoever, cause the cessation of construction of the Tenant Improvements and cessation of any work required to be performed by Landlord pursuant to this Tenant Work Letter (in which case, Tenant shall be responsible for any delay and any costs occasioned thereby).

EXHIBIT C

BRITANNIA OYSTER POINT

NOTICE OF LEASE TERM DATES

To: _____
_____
_____
_____

Re: Lease dated _____, 20__ between _____, a _____ ("**Landlord**"), and _____, a _____ ("**Tenant**") concerning Suite _____ on floor(s) _____ of the building located at _____, California.

Gentlemen:

In accordance with the Lease (the "**Lease**"), we wish to advise you and/or confirm as follows:

1. The Lease Term shall commence on or has commenced on _____ for a term of _____ ending on _____.

2. Rent commenced to accrue on _____, in the amount of _____.

3. If the Lease Commencement Date is other than the first day of the month, the first billing will contain a pro rata adjustment. Each billing thereafter, with the exception of the final billing, shall be for the full amount of the monthly installment as provided for in the Lease.

4. Your rent checks should be made payable to _____ at _____.

5. The exact number of rentable/usable square feet within the Premises is _____ square feet.

6. Tenant's Share as adjusted based upon the exact number of usable square feet within the Premises is _____%.

"Landlord":

_____,
a _____
By: _____
Its: _____

Agreed to and Accepted as
of _____, 20___.
"Tenant":

_____

a _____

By: _____

Its: _____

EXHIBIT D

BRITANNIA OYSTER POINT

FORM OF TENANT'S ESTOPPEL CERTIFICATE

The undersigned as Tenant under that certain Lease (the "**Lease**") made and entered into as of _____, 20___ by and between _____ as Landlord, and the undersigned as Tenant, for Premises consisting of the entire office building located at _____, California, certifies as follows:

1. Attached hereto as **Exhibit A** is a true and correct copy of the Lease and all amendments and modifications thereto. The documents contained in **Exhibit A** represent the entire agreement between the parties as to the Premises.

2. The undersigned currently occupies the Premises described in the Lease, the Lease Term commenced on _____, and the Lease Term expires on _____, and the undersigned has no option to terminate or cancel the Lease or to purchase all or any part of the Premises, the Building and/or the Project.

3. Base Rent became payable on _____.

4. The Lease is in full force and effect and has not been modified, supplemented or amended in any way except as provided in **Exhibit A**.

5. Tenant has not transferred, assigned, or sublet any portion of the Premises nor entered into any license or concession agreements with respect thereto except as follows:

6. Tenant shall not modify the documents contained in **Exhibit A** without the prior written consent of Landlord's mortgagee.

7. All monthly installments of Base Rent, all Additional Rent and all monthly installments of estimated Additional Rent have been paid when due through _____. The current monthly installment of Base Rent is $_____.

8. All conditions of the Lease to be performed by Landlord necessary to the enforceability of the Lease have been satisfied and Landlord is not in default thereunder. In addition, the undersigned has not delivered any notice to Landlord regarding a default by Landlord thereunder. The Lease does not require Landlord to provide any rental concessions or to pay any leasing brokerage commissions.

9. No rental has been paid more than thirty (30) days in advance and no security has been deposited with Landlord except as provided in the Lease. Neither Landlord, nor its successors or assigns, shall in any event be liable or responsible for, or with respect to, the retention, application and/or return to Tenant of any security deposit paid to any prior landlord of the Premises, whether or not still held by any such prior landlord, unless and until the party from whom the security deposit is being sought, whether it be a lender, or any of its successors or assigns, has actually received for its own account, as landlord, the full amount of such security deposit.

10. As of the date hereof, there are no existing defenses or offsets, or, to the undersigned's knowledge, claims or any basis for a claim, that the undersigned has against Landlord.

11. If Tenant is a corporation or partnership, each individual executing this Estoppel Certificate on behalf of Tenant hereby represents and warrants that Tenant is a duly formed and existing entity qualified to do business in California and that Tenant has full right and authority to execute and deliver this Estoppel Certificate and that each person signing on behalf of Tenant is authorized to do so.

12. There are no actions pending against the undersigned under the bankruptcy or similar laws of the United States or any state.

13. Tenant is in full compliance with all federal, state and local laws, ordinances, rules and regulations affecting its use of the Premises, including, but not limited to, those laws, ordinances, rules or regulations relating to hazardous or toxic materials. Tenant has never permitted or suffered, nor does Tenant have any knowledge of, the generation, manufacture, treatment, use, storage, disposal or discharge of any hazardous, toxic or dangerous waste, substance or material in, on, under or about the Project or the Premises or any adjacent premises or property in violation of any federal, state or local law, ordinance, rule or regulation.

14. To the undersigned's knowledge, all tenant improvement work to be performed by Landlord under the Lease has been completed in accordance with the Lease and has been accepted by the undersigned and all reimbursements and allowances due to the undersigned under the Lease in connection with any tenant improvement work have been paid in full. All work (if any) in the common areas required by the Lease to be completed by Landlord has been completed and all parking spaces required by the Lease have been furnished and/or all parking ratios required by the Lease have been met.

The undersigned acknowledges that this Estoppel Certificate may be delivered to Landlord or to a prospective mortgagee or prospective purchaser, and acknowledges that said prospective mortgagee or prospective purchaser will be relying upon the statements contained herein in making the loan or acquiring the property of which the Premises are a part and that receipt by it of this certificate is a condition of making such loan or acquiring such property.

Executed at _____ on the ____ day of _____, 200_.

"Tenant":

_____

a _____

By: _____
Its: _____

By: _____
Its: _____

EXHIBIT E

BRITANNIA OYSTER POINT

ENVIRONMENTAL QUESTIONNAIRE

ENVIRONMENTAL QUESTIONNAIRE
FOR COMMERCIAL AND INDUSTRIAL PROPERTIES

Tenant Name:

Lease Address:

Lease Type (check correct box – *right click to properties*): ☐ **Primary Lease/Lessee**

☐ **Sublease from:**

Instructions: The following questionnaire is to be completed by the Lessee representative with knowledge of the planned operations for the specified building/location. Please print clearly and attach additional sheets as necessary.

1.0 PROCESS INFORMATION

Describe planned site use, including a brief description of manufacturing processes and/or pilot plants planned for this site, if any.

2.0 HAZARDOUS MATERIALS – OTHER THAN WASTE

Will (or are) non-waste hazardous materials be/being used or stored at this site? If so, continue with the next question. If not, go to Section 3.0.

2.1 Are any of the following materials handled on the Property? ☐ Yes ☐ No

[*A material is handled if it is used, generated, processed, produced, packaged, treated, stored, emitted, discharged, or disposed.]* If YES, check *(right click to properties)* the applicable correct Fire Code hazard categories below.

☐	Combustible dusts/fibers	☐	Explosives	☐	Flammable liquids
☐	Combustible liquids (e.g., oils)	☐	Compressed gas - inert	☐	Flammable solids/pyrophorics
☐	Cryogenic liquids - inert	☐	Compressed gas - flammable/pyrophoric	☐	Organic peroxides
☐	Cryogenic liquids - flammable	☐	Compressed gas - oxidizing	☐	Oxidizers - solid or liquid
☐	Cryogenic liquids - oxidizing	☐	Compressed gas - toxic	☐	Reactives - unstable or water reactive
☐	Corrosives - solid or liquid	☐	Compressed gas - corrosive	☐	Toxics - solid or liquid

2-2. For all materials checked in Section 2.1 above, please list the specific material(s), use(s), and quantities of each used or stored on the site in the table below; or attach a separate inventory. *NOTE: If proprietary, the constituents need not be named but the hazard information and volumes are required.*

Material/ Chemical	Physical State (Solid, Liquid, or Gas)	Container Size	Number of Containers Used & Stored	Total Quantity	Units (pounds for solids, gallons or liters for liquids, & cubic feet for gases)

2-3. Describe the planned storage area location(s) for the materials in Section 2-2 above. Include site maps and drawings as appropriate.

2-4. Other hazardous materials. Check below (*right click to properties)* if applicable. *NOTE: If either of the latter two are checked (BSL-3 and/or radioisotope/radiation), be advised that not all lease locations/cities*

or lease agreements allow these hazards; and if either of these hazards are planned, additional information will be required with copies of oversight agency authorizations/licenses as they become available.

☐	Risk Group 2/Biosafety Level-2 Biohazards	☐	Risk Group 3/Biosafety Level-3 Biohazards	☐	Radioisotopes/Radiation

3.0 HAZARDOUS WASTE (i.e., REGULATED CHEMICAL WASTE)

Are (or will) hazardous wastes (be) generated? ☐ Yes ☐ No

If YES, continue with the next question. If not, skip this section and go to section 4.0.

3.1 Are or will any of the following hazardous (CHEMICAL) wastes generated, handled, or disposed of (where applicable and allowed) on the property?

☐	Liquids	☐	Process sludges	☐	PCBs
☐	Solids	☐	Metals	☐	wastewater

3-2. List and estimate the quantities of hazardous waste identified in Question 3-1 above.

HAZRDOUS (CHEMICAL) WASTE GENERATED	SOURCE	WASTE TYPE		APPROX. MONTHLY QUANTITY with units	DISPOSITION [e.g., off-site landfill, incineration, fuel blending scrap metal; wastewater neutralization (onsite or off-site)]
		RCRA listed (federal)	Non-RCRA (Calif-ornia ONLY or recycle)		
		☐	☐		
		☐	☐		
		☐	☐		
		☐	☐		
		☐	☐		

3-3. Waste characterization by: Process knowledge ☐ EPA lab analysis ☐ Both ☐

3-4. Please include name, location, and permit number (e.g. EPA ID No.) for transporter and disposal facility if applicable. Attach separate pages as necessary. *If not yet known, write "TBD."*

Hazardous Waste Transporter/Disposal Facility Name	Facility Location	Transporter (T) or Disposal (D) Facility	Permit Number

3-5. Are pollution controls or monitoring employed in the process to prevent or minimize the release of wastes into the environment? *NOTE: This does NOT mean fume hoods; examples include air scrubbers, cyclones, carbon or HEPA filters at building exhaust fans, sedimentation tanks, pH neutralization systems for wastewater, etc.*

☐ Yes ☐ No

If YES, please list/describe:

4.0 OTHER REGULATED WASTE (i.e., REGULATED BIOLOGICAL WASTE, referred to as "Medical Waste" in California)

4-1. Will (or do) you generate medical waste? ☐ Yes ☐ No If NO, skip to Section 5.0.

4-2. Check the types of waste that will be generated, all of which fall under the California Medical Waste Act:

☐	Contaminated sharps (i.e., if contaminated with ≥ Risk Group 2 materials)	☐	Animal carcasses	☐	Pathology waste known or suspected to be contaminated with ≥ Risk Group 2 pathogens)
☐	Red bag biohazardous waste (i.e., with ≥ Risk Group 2 materials) for autoclaving	☐	Human or non-human primate blood, tissues, etc. (e.g., clinical specimens)	☐	Trace Chemotherapeutic Waste and/or Pharmaceutical waste NOT otherwise regulated as RCRA chemical waste

4-3. What vendor will be used for off-site autoclaving and/or incineration?

4-5. Do you have a Medical Waste Permit for this site? ☐ Yes ☐ No, not required.
☐ No, but an application will be submitted.

5.0 UNDERGROUND STORAGE TANKS (USTS) & ABOVEGROUND STORAGE TANKS (ASTS)

5-1. Are underground storage tanks (USTs), aboveground storage tanks (ASTs), or associated pipelines used for the storage of petroleum products, chemicals, or liquid wastes present on site (lease renewals) or required for planned operations (new tenants)? ☐ Yes ☐ No

NOTE: If you will have your own diesel emergency power generator, then you will have at least one AST! [NOTE: If a backup generator services multiple tenants, then the landlord usually handles the permits.]

If NO, skip to section 6.0. If YES, please describe capacity, contents, age, type of the USTs or ASTs, as well any associated leak detection/spill prevention measures. Please attach additional pages if necessary.

UST or AST	Capacity (gallons)	Contents	Year Installed	Type (Steel, Fiberglass, etc.)	Associated Leak Detection / Spill Prevention Measures*

*NOTE: The following are examples of leak detection / spill prevention measures: integrity testing, inventory reconciliation, leak detection system, overfill spill protection, secondary containment, cathodic protection.

5-2. Please provide copies of written tank integrity test results and/or monitoring documentation, if available.

5-3. Is the UST/AST registered and permitted with the appropriate regulatory agencies? ☐ Yes ☐ No, not yet

If YES, please attach a copy of the required permit(s). *See Section 7-1 for the oversight agencies that issue permits, with the exception of those for diesel emergency power generators which are permitted by the local Air Quality District (Bay Area Air Quality Management District = BAAQMD; or San Diego Air Pollution Control District = San Diego APCD).*

5-4. If this Questionnaire is being completed for a lease renewal, and if any of the USTs/ASTs have leaked, please state the substance released, the media(s) impacted (e.g., soil, water, asphalt, etc.), the actions taken, and all remedial responses to the incident.

5-5. If this Questionnaire is being completed for a lease renewal, have USTs/ASTs been removed from the Property?

☐ Yes ☐ No

If YES, please provide any official closure letters or reports and supporting documentation (e.g., analytical test results, remediation report results, etc.).

5-6. For Lease renewals, are there any above or below ground pipelines on site used to transfer chemicals or wastes?

☐ Yes ☐ No

For new tenants, are installations of this type required for the planned operations? ☐ Yes ☐ No

If YES to either question in this section 5-6, please describe.

6.0 ASBESTOS CONTAINING BUILDING MATERIALS

Please be advised that an asbestos survey may have been performed at the Property. If provided, please review the information that identifies the locations of known asbestos containing material or presumed asbestos containing material. All personnel and appropriate subcontractors should be notified of the presence of these materials, and informed not to disturb these materials. Any activity that involves the disturbance or removal of these materials must be done by an appropriately trained individual/contractor.

7.0 OTHER REGULATORY PERMITS/REQUIREMENTS

7-1. Does the operation have or require an industrial wastewater permit to discharge into the local National Pollutant Discharge Elimination System (NPDES)? *[Example: This applies when wastewater from equipment cleaning is routed through a pH neutralization system prior to discharge into the sanitary or lab sewer for certain pharmaceutical manufacturing wastewater; etc.]* Permits are obtained from the regional sanitation district that is treating wastewater.

☐ Yes ☐ No ☐ No, but one will be prepared and submitted to the Landlord property management company.

If so, please attach a copy of this permit or provide it later when it has been prepared.

7-2. Has a Hazardous Materials Business Plan (HMBP) been developed for the site and submitted via the State of California Electronic Reporting System (CERS)? *[NOTE: The trigger limits for having to do this are ≥ 200 cubic feet if any one type of compressed gas (except for carbon dioxide and inert simple asphyxiant gases, which have a higher trigger limit of ≥ 1,000 cubic feet); ≥ 55 gallons if any one type of hazardous chemical liquid; and ≥500 pounds of any one type of hazardous chemical solid. So a full-size gas cylinder and a 260-liter of liquid nitrogen are triggers! Don't forget the diesel fuel in a backup emergency generator if the diesel tank size is ≥ 55 gallons and it is permitted under the tenant (rather than under the landlord).]* NOTE: Each local Certified Unified Program Agency (CUPA) in California governs the HMBP process so start there. Examples: the CUPA for cities in San Mateo County is the County Environmental Health Department; the CUPA for the City of Hayward, CA is the Hayward Fire Department; the CUPA for Mountain View is the Mountain View Fire Department; and, the CUPA for San Diego is the County of San Diego Hazardous Materials Division (HMD),

☐ Yes ☐ No, not required. ☐ No, but one will be prepared and submitted, and a copy will be provided to the landlord property management company.

If one has been completed, please attach a copy. Continue to provide updated versions as they are completed. This is a legal requirement in that State law requires that the owner/operator of a business located on leased or rented real property shall notify, in writing, the owner of the property that the business is subject to and is in compliance with the Hazardous Materials Business Plan requirements (Health and Safety Code Chapter 6.95 Section 25505.1).

7-3. NOTE: Please be advised that if you are involved in any tenant improvements that require a construction permit, you will be asked to provide the local city with a Hazardous Materials Inventory Statement (HMIS) to ensure that your hazardous chemicals fall within the applicable Fire Code fire control area limits for the applicable construction occupancy of the particular building. The HMIS will include much of the information listed in Section 2-2. Neither the landlord nor the landlord's property management company expressly warrants that the inventory provided in Section 2-2 will necessarily meet the applicable California Fire Code fire control area limits for building occupancy, especially in shared tenant occupancy situations. It is the responsibility of the tenant to ensure that a facility and site can legally handle the intended operations and hazardous materials desired/ needed for its operations, but the landlord is happy to assist in this determination when possible.

CERTIFICATION

I am familiar with the real property described in this questionnaire. By signing below, I represent and warrant that the answers to the above questions are complete and accurate to the best of my knowledge. I also understand that Lessor will rely on the completeness and accuracy of my answers in assessing any environmental liability risks associated with the property.

Signature:

Name:

Title:

Date:

Telephone:

EXHIBIT F

FORM OF LETTER OF CREDIT

L/C DRAFT LANGUAGE

IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER _____

ISSUE DATE: _____

ISSUING BANK:
SILICON VALLEY BANK
3003 TASMAN DRIVE
2ND FLOOR, MAIL SORT HF210
SANTA CLARA, CALIFORNIA 95054

BENEFICIARY:
HCP BTC, LLC C/O HEATHPEAK PROPERTIES, INC.
5050 S SYRACUSE ST. #800
DENVER, CO 80237
ATTN: LEGAL DEPARTMENT

APPLICANT:
NGM BIOPHARMACEUTICALS, INC.
333 OYSTER POINT BOULEVARD
SOUTH SAN FRANCISCO, CA 94114

AMOUNT: US$2,454,917.20 (TWO MILLION FOUR HUNDRED FIFTY-FOUR THOUSAND NINE HUNDRED SEVENTEEN AND 20/100 U.S. DOLLARS)

EXPIRATION DATE: SVB WILL PUT A SPECIFIC DATE HERE THAT'S 1 YEAR FROM ISSUANCE

PLACE OF EXPIRATION: ISSUING BANK'S COUNTERS AT ITS ABOVE ADDRESS

DEAR SIR/MADAM:

WE HEREBY ESTABLISH OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO. SVBSF _____ IN YOUR FAVOR FOR THE ACCOUNT OF NGM BIOPHARMACEUTICALS, INC.

UP TO THE AGGREGATE AMOUNT OF

US$2,454,917.20 (TWO MILLION FOUR HUNDRED FIFTY-FOUR THOUSAND NINE HUNDRED SEVENTEEN AND 20/100 U.S. DOLLARS) EFFECTIVE IMMEDIATELY AND EXPIRING ON _____(Expiration Date) AVAILABLE BY YOUR DRAFT(S) DRAWN ON US AT SIGHT IN THE FORM OF EXHIBIT "A" ATTACHED HERETO ACCOMPANIED BY THE FOLLOWING DOCUMENT(S):

BENEFICIARY’S SIGNED AND DATED STATEMENT STATING ANY OF THE FOLLOWING:

"THE UNDERSIGNED HEREBY CERTIFIES THAT THE LANDLORD, EITHER (A) UNDER THE LEASE (DEFINED BELOW), OR (B) AS A RESULT OF THE TERMINATION OF SUCH LEASE, HAS THE RIGHT TO DRAW DOWN THE AMOUNT OF USD _____ IN ACCORDANCE WITH THE TERMS OF THAT CERTAIN OFFICE LEASE DATED [INSERT LEASE DATE], AS AMENDED (COLLECTIVELY, THE "LEASE")."

OR

"THE UNDERSIGNED HEREBY CERTIFIES THAT WE HAVE RECEIVED A WRITTEN NOTICE OF SILICON VALEY BANK'S ELECTION NOT TO EXTEND ITS STANDBY LETTER OF CREDIT NO. SVBSF_____ AND HAVE NOT RECEIVED A REPLACEMENT LETTER OF CREDIT WITHIN AT LEAST THIRTY (30) DAYS PRIOR TO THE PRESENT EXPIRATION DATE."

OR

"THE UNDERSIGNED HEREBY CERTIFIES THAT BENEFICIARY IS ENTITLED TO DRAW DOWN THE FULL AMOUNT OF LETTER OF CREDIT NO. SVBSF_____ AS THE RESULT OF THE FILING OF A VOLUNTARY PETITION UNDER THE U.S. BANKRUPTCY CODE OR A STATE BANKRUPTCY CODE BY THE TENANT UNDER THAT CERTAIN OFFICE LEASE DATED [INSERT LEASE DATE], AS AMENDED (COLLECTIVELY, THE "LEASE"), WHICH FILING HAS NOT BEEN DISMISSED AT THE TIME OF THIS DRAWING. "

OR

"THE UNDERSIGNED HEREBY CERTIFIES THAT BENEFICIARY IS ENTITLED TO DRAW DOWN THE FULL AMOUNT OF LETTER OF CREDIT NO. SVBSF_____ AS THE RESULT OF AN INVOLUNTARY PETITION HAVING BEEN FILED UNDER THE U.S. BANKRUPTCY CODE OR A STATE BANKRUPTCY CODE AGAINST THE TENANT UNDER THAT CERTAIN OFFICE LEASE DATED [INSERT LEASE DATE], AS AMENDED (COLLECTIVELY, THE "LEASE"), WHICH FILING HAS NOT BEEN DISMISSED WITHIN THIRTY (30) DAYS."

OR

"THE UNDERSIGNED HEREBY CERTIFIES THAT BENEFICIARY IS ENTITLED TO DRAW DOWN THE FULL AMOUNT OF LETTER OF CREDIT NO. SVBSF_____ AS THE RESULT OF THE REJECTION, OR DEEMED REJECTION, OF THAT CERTAIN OFFICE LEASE DATED [INSERT LEASE DATE], AS AMENDED, UNDER SECTION 365 OF THE U.S. BANKRUPTCY CODE."

SPECIAL CONDITIONS:

PARTIAL DRAWINGS AND MULTIPLE PRESENTATIONS MAY BE MADE UNDER THIS STANDBY LETTER OF CREDIT, PROVIDED, HOWEVER, THAT EACH SUCH DEMAND THAT IS PAID BY US SHALL REDUCE THE AMOUNT AVAILABLE UNDER THIS STANDBY LETTER OF CREDIT.

ALL INFORMATION REQUIRED WHETHER INDICATED BY BLANKS, BRACKETS OR OTHERWISE, MUST BE COMPLETED AT THE TIME OF DRAWING.
ALL SIGNATURES MUST BE MANUALLY EXECUTED IN ORIGINALS.

ALL BANKING CHARGES ARE FOR THE APPLICANT'S ACCOUNT.

THIS LETTER OF CREDIT SHALL BE AUTOMATICALLY EXTENDED FOR AN ADDITIONAL PERIOD OF ONE YEAR, WITHOUT AMENDMENT, FROM THE PRESENT OR EACH FUTURE EXPIRATION DATE UNLESS AT LEAST 60 DAYS PRIOR TO THE THEN CURRENT EXPIRATION DATE WE SEND YOU A NOTICE BY REGISTERED MAIL OR OVERNIGHT COURIER SERVICE AT THE ABOVE ADDRESS (OR ANY OTHER ADDRESS INDICATED BY YOU, IN A WRITTEN NOTICE TO US THE RECIEPT OF WHICH WE HAVE ACKNOWLEDGED, AS THE ADDRESS TO WHICH WE SHOULD SEND SUCH NOTICE) THAT THIS LETTER OF CREDIT WILL NOT BE EXTENDED BEYOND THE CURRENT EXPIRATION DATE. IN NO EVENT SHALL THIS LETTER OF CREDIT BE AUTOMATICALLY EXTENDED BEYOND MARCH 1, 2034.

THIS LETTER OF CREDIT IS TRANSFERABLE IN WHOLE BUT NOT IN PART ONE OR MORE TIMES, BUT IN EACH INSTANCE ONLY TO A SINGLE BENEFICIARY AS TRANSFEREE AND FOR THE THEN AVAILABLE AMOUNT, ASSUMING SUCH TRANSFER TO SUCH TRANSFEREE WOULD BE IN COMPLIANCE WITH THEN APPLICABLE LAW AND REGULATION, INCLUDING BUT NOT LIMITED TO THE REGULATIONS OF THE U.S. DEPARTMENT OF TREASURY AND U.S. DEPARTMENT OF COMMERCE. AT THE TIME OF TRANSFER, THE ORIGINAL LETTER OF CREDIT AND ORIGINALS OR COPIES OF ALL AMENDMENTS, IF ANY, TO THIS LETTER OF CREDIT MUST BE SURRENDERED TO US AT OUR ADDRESS INDICATED IN THIS LETTER OF CREDIT TOGETHER WITH OUR TRANSFER FORM ATTACHED HERETO AS EXHIBIT B DULY EXECUTED. APPLICANT SHALL PAY OUR TRANSFER FEE OF ¼ OF 1% OF THE TRANSFER AMOUNT (MINIMUM US$250.00) UNDER THIS LETTER OF CREDIT. (PROVIDED THAT BENEFICIARY MAY, BUT SHALL NOT BE OBLIGATED TO, PAY SUCH FEES TO US ON BEHALF OF APPLICANT, AND SEEK REIMBURSEMENT THEREOF FROM APPLICANT) UNDER THIS LETTER OF CREDIT. IN CASE OF ANY TRANSFER UNDER THIS LETTER OF CREDIT, THE DRAFT AND ANY REQUIRED STATEMENT MUST BE EXECUTED BY THE TRANSFEREE AND WHERE THE BENEFICIARY'S NAME APPEARS WITHIN THIS STANDBY LETTER OF CREDIT, THE TRANSFEREE'S NAME IS AUTOMATICALLY SUBSTITUTED THEREFOR.

WE HEREBY AGREE WITH YOU THAT IF DRAFTS ARE PRESENTED TO SILICON VALLEY BANK UNDER THIS LETTER OF CREDIT AT OR PRIOR TO 10:00 AM, ON A BUSINESS DAY, AND PROVIDED THAT SUCH DRAFTS PRESENTED CONFORM TO THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT, PAYMENT SHALL BE INITIATED BY US IN IMMEDIATELY AVAILABLE FUNDS BY OUR CLOSE OF BUSINESS ON THE NEXT SUCCEEDING BUSINESS DAY. IF DRAFTS ARE PRESENTED TO SILICON VALLEY BANK UNDER THIS LETTER OF CREDIT AFTER 10:00 AM, ON A BUSINESS DAY, AND PROVIDED THAT SUCH DRAFTS CONFORM WITH THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT, PAYMENT SHALL BE INITIATED BY US IN IMMEDIATELY AVAILABLE FUNDS BY OUR CLOSE OF BUSINESS ON THE SECOND SUCCEEDING BUSINESS DAY. AS USED IN THIS LETTER OF CREDIT, "BUSINESS DAY" SHALL MEAN ANY DAY OTHER THAN A SATURDAY, SUNDAY OR A DAY ON WHICH BANKING INSTITUTIONS IN THE STATE OF CALIFORNIA ARE AUTHORIZED OR REQUIRED BY LAW TO CLOSE. IF THE EXPIRATION DATE FOR THIS LETTER OF CREDIT SHALL EVER FALL ON A DAY WHICH IS NOT A BUSINESS DAY THEN SUCH EXPIRATION DATE SHALL AUTOMATICALLY BE EXTENDED TO THE DATE WHICH IS THE NEXT BUSINESS DAY.

PRESENTATION OF A DRAWING UNDER THIS LETTER OF CREDIT MAY BE MADE ON OR PRIOR TO THE THEN CURRENT EXPIRATION DATE HEREOF BY HAND DELIVERY, COURIER SERVICE, OVERNIGHT MAIL, AT OUR OFFICE (THE “BANK’S OFFICE”) AT: SILICON VALLEY BANK, 3003 TASMAN DRIVE, MAIL SORT HF 210, SANTA CLARA, CA 95054, ATTENTION: GLOBAL TRADE FINANCE.

FACSIMILE PRESENTATIONS ARE ALSO PERMITTED. SHOULD BENEFICIARY WISH TO MAKE A PRESENTATION UNDER THIS LETTER OF CREDIT ENTIRELY BY FACSIMILE TRANSMISSION IT NEED NOT TRANSMIT THE ORIGINAL OF THIS LETTER OF CREDIT AND AMENDMENTS, IF ANY. EACH FACSIMILE TRANSMISSION SHALL BE MADE AT: (408) 496-2418 OR (408) 969-6510; AND UNDER CONTEMPORANEOUS TELEPHONE ADVICE TO: (408) 450-5001 OR (408) 654-7176, ATTENTION: GLOBAL TRADE FINANCE. ABSENCE OF THE AFORESAID TELEPHONE ADVICE SHALL NOT AFFECT OUR OBLIGATION TO HONOR ANY DRAW REQUEST.

WE HEREBY ENGAGE WITH YOU THAT DRAFT(S) DRAWN AND/OR DOCUMENTS PRESENTED UNDER AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT SHALL BE DULY HONORED UPON PRESENTATION TO SILICON VALLEY BANK, IF PRESENTED ON OR BEFORE THE EXPIRATION DATE OF THIS LETTER OF CREDIT.

IF THE ORIGINAL OF THIS STANDBY LETTER OF CREDIT NO. SVBSF____ IS LOST, STOLEN OR DESTROYED, WE WILL ISSUE YOU A “CERTIFIED TRUE COPY” OF THIS STANDBY LETTER OF CREDIT NO. SVBSF____ UPON OUR RECEIPT OF YOUR INDEMNITY LETTER TO SILICON VALLEY BANK WHICH WILL BE SENT TO YOU UPON OUR RECEIPT OF YOUR WRITTEN REQUEST THAT THIS STANDBY LETTER OF CREDIT NO. SVBSF_____ IS LOST, STOLEN, OR DESTROYED.

EXCEPT SO FAR AS OTHERWISE EXPRESSLY STATED HEREIN, THIS STANDBY LETTER OF CREDIT IS SUBJECT TO THE "INTERNATIONAL STANDBY PRACTICES" (ISP 98) INTERNATIONAL CHAMBER OF COMMERCE (PUBLICATION NO. 590).

IF YOU HAVE ANY QUESTIONS REGARDING THIS TRANSACTION, PLEASE CONTACT: EVELIO BARAIRO AT 408-654-3035, ALWAYS QUOTING OUR LETTER OF CREDIT NO.SVBSF_____.

(FOR BANK USE)

AUTHORIZED SIGNATURE

(FOR BANK USE)

AUTHORIZED SIGNATURE

EXHIBIT "A"

DATE: _____ REF. NO. _____

AT SIGHT OF THIS DRAFT

PAY TO THE ORDER OF _____US$_____

USDOLLARS _____

_____

DRAWN UNDER SILICON VALLEY BANK, SANTA CLARA, CALIFORNIA, STANDBY LETTER OF CREDIT NUMBER NO. _____ DATED _____

TO: SILICON VALLEY BANK
2ND FLOOR, MAIL SORT HF210
3003 TASMAN DRIVE
SANTA CLARA, CA 95054
ATTENTION: GLOBAL TRADE FINANCE
STANDBY LETTERS OF CREDIT

_____
(BENEFICIARY'S NAME)

_____
Authorized Signature

GUIDELINES TO PREPARE THE DRAFT

1. DATE: ISSUANCE DATE OF DRAFT.
2. REF. NO.: BENEFICIARY'S REFERENCE NUMBER, IF ANY.
3. PAY TO THE ORDER OF: NAME OF BENEFICIARY AS INDICATED IN THE L/C
4. US$: AMOUNT OF DRAWING IN FIGURES.
5. USDOLLARS: AMOUNT OF DRAWING IN WORDS.
6. LETTER OF CREDIT NUMBER: SILICON VALLEY BANK'S STANDBY L/C NUMBER THAT PERTAINS TO THE DRAWING.
7. DATED: ISSUANCE DATE OF THE STANDBY L/C.
8. BENEFICIARY'S NAME: NAME OF BENEFICIARY AS INDICATED IN THE L/C.
9. AUTHORIZED SIGNATURE: SIGNED BY AN AUTHORIZED SIGNER OF BENEFICIARY.

IF YOU NEED FURTHER ASSISTANCE IN COMPLETING THIS DRAFT, PLEASE CALL OUR L/C PAYMENT SECTION AT 408-450-5001 OR 408-654-7176 OR 408-450-5411

EXHIBIT B

FORM OF TRANSFER

DATE: _____

TO: SILICON VALLEY BANK
3003 TASMAN DRIVE
SANTA CLARA, CA 95054
ATTN: GLOBAL TRADE FINANCE
STANDBY LETTERS OF CREDIT

RE: IRREVOCABLE STANDBY LETTER OF CREDIT
NO. _____ ISSUED BY
SILICON VALLEY BANK, SANTA CLARA
L/C AMOUNT: _____

GENTLEMEN:

FOR VALUE RECEIVED, THE UNDERSIGNED BENEFICIARY HEREBY IRREVOCABLY TRANSFERS TO:

_____
(NAME OF TRANSFEREE)

_____
(ADDRESS)

ALL RIGHTS OF THE UNDERSIGNED BENEFICIARY TO DRAW UNDER THE ABOVE LETTER OF CREDIT UP TO ITS AVAILABLE AMOUNT AS SHOWN ABOVE AS OF THE DATE OF THIS TRANSFER.

BY THIS TRANSFER, ALL RIGHTS OF THE UNDERSIGNED BENEFICIARY IN SUCH LETTER OF CREDIT ARE TRANSFERRED TO THE TRANSFEREE. TRANSFEREE SHALL HAVE THE SOLE RIGHTS AS BENEFICIARY THEREOF, INCLUDING SOLE RIGHTS RELATING TO ANY AMENDMENTS, WHETHER INCREASES OR EXTENSIONS OR OTHER AMENDMENTS, AND WHETHER NOW EXISTING OR HEREAFTER MADE. ALL AMENDMENTS ARE TO BE ADVISED DIRECTLY TO THE TRANSFEREE WITHOUT NECESSITY OF ANY CONSENT OF OR NOTICE TO THE UNDERSIGNED BENEFICIARY.

THE ORIGINAL OF SUCH LETTER OF CREDIT IS RETURNED HEREWITH, AND WE ASK YOU TO EITHER (1) ENDORSE THE TRANSFER ON THE REVERSE THEREOF, AND FORWARD IT DIRECTLY TO THE TRANSFEREE WITH YOUR CUSTOMARY NOTICE OF TRANSFER, OR (2) ISSUE A REPLACEMENT LETTER OF CREDIT TO THE TRANSFEREE ON SUBSTANTIALLY THE SAME TERMS AND CONDITIONS AS THE TRANSFERRED LETTER OF CREDIT (IN WHICH EVENT THE TRANSFERRED LETTER OF CREDIT SHALL HAVE NO FURTHER EFFECT).

SINCERELY,

_____
(BENEFICIARY'S NAME)

_____
(SIGNATURE OF BENEFICIARY)

_____
(NAME AND TITLE)

SIGNATURE AUTHENTICATED

The name(s), title(s), and signature(s) conform to that/those on file with us for the company and the signature(s) is/are authorized to execute this instrument.

_____
(Name of Bank)

_____
(Address of Bank)

_____
(City, State, ZIP Code)

_____
(Authorized Name and Title)

_____
(Authorized Signature)

_____
(Telephone number)

EXHIBIT G

WARRANTY SYSTEMS

No.	Unit	Manufacturer	Model Number	Serial Number
1	AC-A2	Trane	SLHJ1504	C08M11453
2	EF-2A	Greenheck	60-BISW-41-X-10-11	116685770903
3	EF-3.2	Greenheck	USF-216-10-B1-20-X	14523470
4	EF-AG1.3	Greenheck	USF-308-10-B1-10-X	14656470
5	EF-A4	Greenheck	60-BISW-41-X-10-11	11668574
6	AC-A4	Trane	SLHJ1504	C08M11455
7	AC-A3	Trane	SLHJ1504	C08M11454
8	EF-A3	Greenheck	60-BISW-41-X-10-11	11668575
9	AC-A1.2	Trane	SLHJ0904	C08M11452
10	EF-A1.2	Greenheck	49-BISW-41-X-10-11	11668578
11	EF-A1.1	Greenheck	49-BISW-41-X-10-11	11668579
12	AC-A1.1	Trane	SLHJ0904	C08M11451
13	IHWB-2	LAARS	PNCV0400NACC1BLN	C09209461
14	DHWB-A1	LAARS	PNCV0400NACC1BLN	C09209451
15	B-A1	Parker Boiler Co	59350	59350
16	A4-15	Fujitsu	ASU24RLF	KTA046216
17	FC-4	LG	ARNU543BRA4	511KCLH12F16
18	PHWP-A2	Bell & Gossett	1510 3AC 6.25BF	PH006227-B
19	PHWP-A1	Bell & Gossett	1510 3AC 6.25BF	PH006227-C
20	BA2	Parker Boiler Co	59376	59376
21	FC-1	LG	ARNU543BRA4	511KCTB12B73
22	FC-2	LG	ARNU543BRA4	511KCMR12B75
23	FC-3	LG	ARNU543BRA4	511KCGW12B7
24	Steam Boiler #5	Parker Boiler Co	9.5L	62742
25	Steam Boiler #1	Parker Boiler Co	9.5L	62745
26	Steam Boiler #2	Parker Boiler Co	9.5L	62744
27	Steam Boiler #3	Parker Boiler Co	9.5L	92749
28	Steam Boiler #4	Parker Boiler Co	9.5L	62743
29	IWHB-A1	LAARS	PNCV0400NACC1BLN	C09209460
30	SHWP-A1	Bell & Gossett	3BC 9.125BF	PH006232-C
31	SHWP-A2	Bell & Gossett	3BC 9.125BF	PH006232-D
32	Steam Boiler #6	Parker Boiler Co	9.5L	62748
33	Steam Boiler #7	Parker Boiler Co	9.5L	62741
34	Steam Boiler #8	Parker Boiler Co	9.5L	62746
35	Steam Boiler #9	Parker Boiler Co	9.5L	62747

EXHIBIT H

RULES AND REGULATIONS

These Rules & Regulations, as amended from time-to-time by Landlord, shall govern all activities which take place at the Project. As used in these Rules & Regulations, the term "Tenant" includes any person or entity that leases space in the Project from Landlord and any person or entity that subleases spaced in the Project from another occupied by a particular Tenant under that Tenant's Lease with Landlord or sublease from another Tenant. In the event of any conflict or ambiguity between these Rules & Regulations and the specific terms of the Lease, the specific terms of the Lease shall govern

1. All loading and unloading of goods shall be done only at such times, in such areas, and through such entrances as may be designated for such purposes from time-to-time by Landlord. Each Tenant shall load and unload goods only in the areas and through the entrances assigned to that Tenant by Landlord for that purpose. No Tenant shall in any way obstruct any other Tenant's designated location for loading and unloading of goods nor otherwise impede or hinder any other Tenant's ability to use its designated location for the loading and unloading of goods.

2. All garbage and refuse shall be kept in containers specified or approved by Landlord, shall be placed in the location or designation by Landlord and shall be prepared for collection in the manner and at the times and places required by the trash collection service for the Project. Tenant shall refrain from placing any of its garbage or refuse in receptacles assigned to any other Tenant or, on the ground in or around the trash enclosure. Each Tenant shall pay the cost of removal of its refuse or garbage. If Landlord shall designate a service for picking up refuse and garbage, each Tenant shall use the same at that Tenant's cost. No Tenant shall place in any trash receptacle any material, which cannot be disposed of, in the ordinary practice of trash disposal. Trash receptacles in the Project are intended solely for the disposal of refuse or debris from the respective Tenant's business activities conducted within its Premises and are not to be used for refuse or debris generated by a Tenant's off-site activities.

3. No Tenant shall, without first obtaining the written consent of Landlord, (i) erect any antenna or dish, loudspeaker, recreational equipment, or other improvement, on the roof or exterior walls of the Premises or, on the grounds of the Project, or, (ii) make any penetration in the roof or exterior walls of the Premises. Any such work or improvement that is completed without first obtaining the written consent of the Landlord may be removed without notice at any time at the sole cost of the Tenant who completed the work or improvement.

4. No Tenant shall, without first obtaining the written consent of Landlord, use any loudspeaker, television, phonograph, radio, or other similar device in such a manner that the device may be heard or seen outside of the Premises. Each Tenant shall conduct its business in a quiet and orderly manner so as to not create unreasonable noise.

5. No Tenant shall, without first obtaining the written consent of Landlord, inscribe, display, print or affix any sign, placard, picture, advertisement, name or notice on or to any part of the Project or of the Premises if that sign, placard, picture, advertisement, name or notice would be visible from the outside of the Premises. All Tenants' identification signs and lettering shall be completed in accordance with all applicable laws and restrictions. All approved signs or lettering on doors shall be printed, painted, affixed or inscribed at the expense of the respective Tenant by a person approved by the Landlord.

6. The sidewalks, driveways, passages, parking lots, exits and entrances in the Project shall not be obstructed by any Tenant or used by any Tenant for any purpose other than ingress and egress to and from the Project and parking adjacent to the Tenant's Premises. No Tenant shall in any way impede, obstruct or restrict any other Tenant's ingress or egress from that other Tenant's Premises or related facilities. The sidewalks, driveways, passages, parking lots, exits and entrances of the Project are not for the use of the general public. Landlord retains the right to control and prevent access to such areas by any and all persons whose presence, in Landlord's judgment, might be prejudicial to the safety, character, reputation, and interests of the Project and its Tenants. However, nothing contained within this paragraph shall be construed to prevent such access by any person with whom a Tenant normally deals in the ordinary course of the Tenant's business, unless such person is engaged in illegal activities, is engaged in activities not permitted by the terms of the Tenant's Lease with Landlord, or is creating a nuisance.

7. The outside areas immediately adjoining each Tenant's Premises shall be kept unobstructed and clear and free from dirt and rubbish.

8. No Tenant shall park or permit the parking of any vehicle under its control or the control of any employee, invitee, contractor or agent of that Tenant in any parking area assigned by Landlord to another Tenant. The only vehicles allowed to be parked in the parking area are automobiles, motorcycles, motor-driven or non-motor-driven bicycles or trucks. All vehicles must be parked entirely within the painted stall lines of a single parking stall. Each Tenant shall be responsible for ensuring that its employees, invitees, contractors and agents observe all parking regulations as stated by Landlord from time-to-time. Vehicles parked in violation of the foregoing Rules shall be subject to removal by Landlord at the sole cost and expense of the vehicle owner.

9. Each Tenant shall be responsible for ensuring that its employees, invitees, contractors, and agents refrain from conducting any of the following activities in the common areas: auto detailing or cleaning, oil changes, glass repair or replacement, auto mechanical or maintenance work, and vehicle storage. The above does not include towing an inoperable vehicle from the site, flat tire repair, or emergency use of jumper cables.

10. The plumbing facilities in the Project shall not be used for any other purpose other than that for which they are constructed, and no foreign substances of any kind whatsoever shall be placed therein. Each Tenant shall bear the cost of any breakage, stoppage, or damage resulting from the violation of this Rule by that Tenant or by that Tenant's employees, invitees, contractors, or agents.

11. Each Tenant shall use, at that Tenant's cost, such pest extermination contractor as Landlord may direct and at such intervals as Landlord may require.

12. No Tenant shall cause or permit any obnoxious or foul odors that disturb the public or other Tenants. If any such odors occur from time-to-time, the Tenant shall, upon written notice from Landlord, take immediate steps to remedy the problem and prevent a recurrence thereof.

13. The Premises shall not be used for the storage of merchandise by any Tenant or its employees, invitees, contractors or agents, except as such storage may be incidental to the use of the Premises authorized by the Lease between the Tenant and Landlord. In no event shall goods or materials of any kind be stored by a Tenant in any common areas of the Project or in any other location visible from the exterior of the Premises.

14. No portion of the Project shall be used for lodging, including (but not limited to) sleeping overnight in the Premises or sleeping in any vehicle parking in the parking area of the Project.

15. No Tenant, nor any Tenant's agents, servants, employees, contractors, visitors, or licensees, shall at any time bring or keep any live animal in or about the Premises or the Project.

16. No Tenant, nor any Tenant's agents, servants, employees, contractors, visitors or licensees, shall at any time bring or keep upon the Premises or in or about the Project any inflammable, combustible or explosive fluid, chemical, or substance, except such fluids, chemicals, or substances reasonably related to the use of the Premises expressly authorized in the Lease between that Tenant and Landlord, or required for use with that Tenant's office and printing equipment. Any such fluids, chemicals, or substances shall be stored only in amounts that are reasonable for such approved use, and only in compliance with all applicable federal, state, and local laws, codes, ordinances, rules, and regulations.

17. Landlord will furnish each Tenant with two (2) keys to each door lock in such Tenant's Premises free of charge. Landlord may make a reasonable charge for any additional keys made at the request of the Tenant. No Tenant shall, without prior written consent of Landlord, (i) place any additional lock, bolt, or mail slot upon any doors or windows of the Premises, nor (ii) make any change in the existing locks or mechanism of those locks. If Landlord gives its written consent to any change listed in the previous sentence, the Tenant shall furnish Landlord with a key for any such lock.

18. Each Tenant shall ensure that the doors of its Premises are closed and locked, that all water faucets, water apparatus, all equipment, lights and other utilities are shut off before the Tenant or its employees leave the Premises, so as to prevent waste or damage.

19. Employees, agents, and contractors of Landlord shall have no obligation to perform work for any Tenant or to do anything outside the scope of their regular duties for Landlord at the request of any Tenant, unless under specific written instructions from Landlord.

20. Each Tenant shall comply with all safety, fire protection, and evacuation procedures and regulations established by Landlord and any governmental agency. Each Tenant agrees that it shall comply with all fire and security regulations that may be issued from time-to-time by Landlord or by any such governmental agency, and each Tenant shall also provide Landlord with the name of a designated responsible employee to represent the Tenant in all matters pertaining to such fire or security regulations.

21. Each Tenant assumes all responsibility for protecting its Premises from theft, robbery, and pilferage, which responsibility includes keeping doors, and other means of entry to the Premises, closed and locked when the Premises are unattended.

22. Each Tenant shall comply with all federal, state, or local laws, rules, regulations, ordinances, or other enactments regarding conservation of water, electricity, or other utilities.

23. Water, electrical and, other utility connections in the common areas of the Project are for use solely by the Landlord and its agents and contractors in providing maintenance, lighting, and other services to the common areas of the Project and shall not be used by any Tenant or its employees, invitees, agents, or contractors.

24. Landlord shall not be responsible to any Tenant for the non-observance or violation of these Rules & Regulations by any other Tenant.

25. Each Tenant shall be responsible for the observance of these Rules & Regulations by that Tenant’s employees, agents, contractors, customers, invitees, visitors, and guests.

26. Landlord may waive any one or more of these Rules & Regulations for the benefit of any particular Tenant or Tenants, but no such waiver by Landlord shall be construed as a waiver of such Rules & Regulations in favor of any such other Tenant or Tenants, nor prevent Landlord from thereafter enforcing any such Rules & Regulations against any and all of the Tenants of the Properties.

27. Each Tenant shall ensure that its employees, agents, contractors, customers, invitees, visitors, and guests do not rollerblade or skateboard in any parking lots or common areas of the Project. Trespassers seen using the property for the above activities should be immediately reported to CBRE at (415) 772-0481.

28. Tenant shall be responsible for any and all financial repercussions imposed on the property including, but not limited to penalties and fines, resulting from Tenant’s failure to comply with the Rules and Regulations.

29. These Rules & Regulations are in addition to and shall not be construed to modify or amend in any way, the terms, covenants, agreements, and conditions of (i) any Lease of any Premises in the Project, and/or (ii) any Declarations of Covenants, Conditions and Restrictions, or similar documents applicable to the Project, as amended from time-to-time.

30. Landlord reserves the right to issue such other reasonable Rules & Regulations as, in its judgment, may from time-to-time be necessary or appropriate for the safety, care and cleanliness of the Project, and for the preservation of order therein.

LEASE

BRITANNIA OYSTER POINT

HCP BTC, LLC,
a Delaware limited liability company,

as Landlord,

and

NGM BIOPHARMACEUTICALS, INC.,

a Delaware corporation,

as Tenant.

TABLE OF CONTENTS

		Page
1.	PREMISES, BUILDING, PROJECT, AND COMMON AREAS	5
2.	LEASE TERM; OPTION TERM	6
3.	BASE RENT	6
4.	ADDITIONAL RENT	6
5.	USE OF PREMISES	11
6.	SERVICES AND UTILITIES	16
7.	REPAIRS	17
8.	ADDITIONS AND ALTERATIONS	17
9.	COVENANT AGAINST LIENS	19
10.	INSURANCE	19
11.	DAMAGE AND DESTRUCTION	21
12.	NONWAIVER	22
13.	CONDEMNATION	23
14.	ASSIGNMENT AND SUBLETTING	23
15.	SURRENDER OF PREMISES; OWNERSHIP AND REMOVAL OF TRADE FIXTURES	26
16.	HOLDING OVER	27
17.	ESTOPPEL CERTIFICATES	27
18.	SUBORDINATION	28
19.	DEFAULTS; REMEDIES	28
20.	COVENANT OF QUIET ENJOYMENT	30
21.	SECURITY DEPOSIT	30
22.	COMMUNICATIONS AND COMPUTER LINE	30
23.	SIGNS	30
24.	COMPLIANCE WITH LAW	31
25.	LATE CHARGES	31
26.	LANDLORD'S RIGHT TO CURE DEFAULT; PAYMENTS BY TENANT	32
27.	ENTRY BY LANDLORD	32
28.	TENANT PARKING	32
29.	MISCELLANEOUS PROVISIONS	32

EXHIBITS

A OUTLINE OF PREMISES
B TENANT WORK LETTER
C FORM OF NOTICE OF LEASE TERM DATES
D FORM OF TENANT'S ESTOPPEL CERTIFICATE
E ENVIRONMENTAL QUESTIONNAIRE
F FORM OF LETTER OF CREDIT
G WARRANTY SYSTEMS

INDEX

	Page(s)
Abatement Event	35
Accountant	14
Advocate Arbitrators	8
Alterations	22
as built	23
Base Building	39
Base Rent	9
Brokers	46
Building	4
Casualty	26
Common Areas	4
Comparable Buildings	8
Contemplated Effective Date	29
Contemplated Transfer Space	29
Direct Expenses	10
Eligibility Period	35
Emergency Generator	20
Estimate	14
Estimate Statement	14
Estimated Direct Expenses	14
Existing Hazardous Materials	17
Expense Year	10
First Offer Exercise Period	5
Force Majeure	43
Generator	21
Intention to Transfer Notice	29
Landlord	1
Landlord Lease Period	5
Landlord Parties	24
Landlord Repair Notice	26
L-C	35
L-C Amount	35
Lease	1
Lease Commencement Date	7
Lease Expiration Date	7
Lease Term	7
Lease Year	7
Lines	38
Mail	43
Net Worth	31
Neutral Arbitrator	8
Nine Month Period	29
Notices	43
Objectionable Name	39
Operating Expenses	10
Option Rent	7
Original Improvements	25
Outside Agreement Date	8
Premises	4
Project,	4

	Page(s)
Roof	47
Rooftop Equipment	47
Security Deposit Laws	38
Sign Specifications	39
Specialty Improvements	22
Statement	13
Subject Space	28
Summary	1
Superior Holders	32
Tax Expenses	13
Tenant	1
Tenant Work Letter	4
Tenant's Accountant	14
Tenant's Share	13
Transfer Notice	28
Transferee	28
Abatement Event	35
Accountant	14
Advocate Arbitrators	8
Alterations	22
as built	23
Base Building	39
Base Rent	9
Brokers	46
Building	4
Casualty	26
Common Areas	4
Comparable Buildings	8
Contemplated Effective Date	29
Contemplated Transfer Space	29
Direct Expenses	10
Eligibility Period	35
Emergency Generator	20
Estimate	14
Estimate Statement	14
Estimated Direct Expenses	14
Existing Hazardous Materials	17
Expense Year	10
First Offer Exercise Period	5
Force Majeure	43
Generator	21
Intention to Transfer Notice	29
Landlord	1
Landlord Lease Period	5
Landlord Parties	24
Landlord Repair Notice	26
L-C	35
L-C Amount	35
Lease	1
Lease Commencement Date	7
Lease Expiration Date	7
Lease Term	7

	Page(s)
Lease Year	7
Lines	38
Mail	43
Net Worth	31
Neutral Arbitrator	8
Nine Month Period	29
Notices	43
Objectionable Name	39
Operating Expenses	10
Option Rent	7
Original Improvements	25
Outside Agreement Date	8
Premises	4
Project,	4
Roof	47
Rooftop Equipment	47
Security Deposit Laws	38
Sign Specifications	39
Specialty Improvements	22
Statement	13
Subject Space	28
Summary	1
Superior Holders	32
Tax Expenses	13
Tenant	1
Tenant Work Letter	4
Tenant's Accountant	14
Tenant's Share	13
Transfer Notice	28
Transferee	28
Abatement Event	35
Accountant	14
Advocate Arbitrators	8
Alterations	22
as built	23
Base Building	39
Base Rent	9
Brokers	46
Building	4
Casualty	26
Common Areas	4
Comparable Buildings	8
Contemplated Effective Date	29
Contemplated Transfer Space	29
Direct Expenses	10
Eligibility Period	35
Emergency Generator	20
Estimate	14
Estimate Statement	14
Estimated Direct Expenses	14
Existing Hazardous Materials	17
Expense Year	10

	Page(s)
First Offer Exercise Period	5
Force Majeure	43
Generator	21
Intention to Transfer Notice	29
Landlord	1
Landlord Lease Period	5
Landlord Parties	24
Landlord Repair Notice	26
L-C	35
L-C Amount	35
Lease	1
Lease Commencement Date	7
Lease Expiration Date	7
Lease Term	7
Lease Year	7
Lines	38
Mail	43
Net Worth	31
Neutral Arbitrator	8
Nine Month Period	29
Notices	43
Objectionable Name	39
Operating Expenses	10
Option Rent	7
Original Improvements	25
Outside Agreement Date	8
Premises	4
Project,	4
Roof	47
Rooftop Equipment	47
Security Deposit Laws	38
Sign Specifications	39
Specialty Improvements	22
Statement	13
Subject Space	28
Summary	1
Superior Holders	32
Tax Expenses	13
Tenant	1
Tenant Work Letter	4
Tenant's Accountant	14
Tenant's Share	13
Transfer Notice	28
Transferee	28

Exhibit 31.1

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

I, David J. Woodhouse, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: August 4, 2022

By: /s/ David J. Woodhouse

David J. Woodhouse, Ph.D.
Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 31.2

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

I, Siobhan Nolan Mangini, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: August 4, 2022

By: /s/ Siobhan Nolan Mangini

Siobhan Nolan Mangini
President and Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

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

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. § 1350), David J. Woodhouse, Chief Executive Officer of NGM Biopharmaceuticals, Inc. (the "Company"), and Siobhan Nolan Mangini, President and Chief Financial Officer of the Company, each hereby certifies that, to the best of his or her knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended June 30, 2022, to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 4, 2022

IN WITNESS WHEREOF, the undersigned have set their hands hereto as of the 4th day of August, 2022.

/s/ David J. Woodhouse
David J. Woodhouse, Ph.D.
Chief Executive Officer and Director
(Principal Executive Officer)

/s/ Siobhan Nolan Mangini
Siobhan Nolan Mangini
President and Chief Financial Officer
(Principal Financial Officer)

This certification accompanies the Quarterly Report on Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of NGM Biopharmaceuticals, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Quarterly Report on Form 10-Q), irrespective of any general incorporation language contained in such filing.